December 12, 2019

VIA e-TARIFF FILING

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC  20426

Re: Midcontinent Independent System Operator, Inc.
Docket No. ER20-____-000
Proposed Tariff Revisions for Storage as a Transmission Only Asset

Dear Secretary Bose:


1 in the MISO Transmission Expansion Plan (“MTEP”). MISO requests the Commission accept the proposed Tariff revisions with an effective date of March 11, 2020. MISO supports a 30-day comment period for interested parties to respond to the changes proposed in this filing.

The proposed Tariff revisions reflect a fundamental first step forward for the use of storage resources to maximize the reliability and efficiency of the electric system. The proposed changes will allow a storage facility to be selected as a preferred solution to a Transmission Issue in the MTEP process similar to traditional transmission solutions, such as wires. The use of energy storage to serve multiple functions is of great interest to MISO and its stakeholders, responds to the expressed policy interests of the Commission, and will support the efficiency and reliability of the electric transmission system.

1 The acronym SATOA refers to Storage As Transmission Only Asset.

2 All capitalized terms in this filing that are not otherwise defined have the same meaning as they have under the current Tariff.
I. INTRODUCTION

MISO’s annual collaborative and transparent transmission planning process identifies in each cycle the preferred solutions to ensure grid reliability and efficiency at the lowest delivered cost to customers. This includes a mix of investments, from low-cost, near-term solutions to more substantial backbone transmission upgrades with significant lead-times, and results in $3 billion to $4 billion of approved new transmission investment annually.

The methods available to improve and maintain the reliability and efficiency of the transmission system continue to expand. The introduction of new technologies has improved MISO’s ability to optimize grid performance at reduced costs – from improved conductor and structure materials and designs, to the newest flow control and switching technologies that can increase the through-put of the grid. The Commission-sponsored workshop addressing Grid Enhancing Technologies properly considered storage among examples of such technologies. As the transmission system continues to evolve, it is imperative that MISO’s transmission planning efforts accommodate and optimize energy storage as an available and proven technology to enhance grid performance and to best serve customers.

MISO’s proposal here reflects the culmination of a multi-year effort with our stakeholders to understand how and under what parameters energy storage should be considered in the planning process as transmission assets to address various transmission needs. Since March of 2018, MISO has been working with stakeholders to develop Tariff provisions that address enabling, evaluating, and selecting a storage facility as a transmission asset when, due to its unique characteristics, the SATOA is shown to be the preferred solution to Transmission Issues identified in the planning processes. The proposed protocol outlines the considerations required to compare the SATOA to more traditional transmission assets, including aspects unique to the storage device. Those unique features include degradation of capacity over time, inverter-based impacts on reliability, and impacts on operating and interconnecting market resources.

This proposal to utilize energy storage as transmission-only assets reflects a fundamental shift in how these resources are typically added to the system. This foundational first step forward reflected in this filing will not only enable the utilization of more energy storage resources, but the utilization of more energy storage functions to further enhance the robustness of the system as a whole.

3 See generally Grid Enhancing Technologies, Docket No. AD19-19-000.

4 MISO stakeholders have expressed keen interest in providing a path for energy storage to provide value in addition to the market asset participation model of Order No. 841. A full description of the stakeholder process leading up to this effort is provided in Section II.B.

5 An example of a unique characteristic is the storage asset’s ability to rapidly inject and withdraw real or reactive power in solving transmission issues that could not otherwise be resolved if the storage asset was participating in markets. See Attachment FF, Section II.G.1.c.i.a proposed.
MISO’s proposal includes:

- A comprehensive Tariff framework for considering SATOA as transmission assets;
- The opportunity for SATOA to be evaluated in MTEP and be valued similar to a wires solution;
- Specific criteria for the evaluation of a SATOA; and
- Provisions that clarify SATOA are not subject to the Generation Interconnection Procedures (“GIP”) in MISO Tariff Attachment X.

As noted above, the proposal represents a first step in the evaluation and integration of storage facilities as transmission, enabling the review and approval of storage facilities in the MTEP planning process sooner than it will take to resolve potentially more complex policy decisions related to energy storage providing both transmission and market services.6 Accepting these proposed revisions will allow for the immediate adoption of storage facilities to serve a transmission function in MISO.7 And in early 2020, MISO and its stakeholders intend to begin the process of addressing the issues related to using storage as both transmission assets and to provide market services.

In this transmittal letter, MISO outlines the background of this proposal, MISO’s stakeholder process, the proposed Tariff revisions, and the support for why this proposal for including SATOA in the MTEP process is just and reasonable.

II. BACKGROUND

The use of storage facilities as transmission assets has been before the Commission before, notably in the Commission’s 2017 Policy Statement and the cases identified therein.8 While the Policy Statement addressed the circumstance where a storage resource may serve as

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6 The Commission has recently accepted MISO’s compliance with Order No. 841. See Midcontinent Indep. Sys. Operator, Inc., 169 FERC ¶ 61,137 (2019). Future efforts will address how electric storage resources may be used to provide both transmission and market services.

7 MISO currently has under review in MTEP19 a proposal to use a storage resource as transmission only. See MTEP19 at 191 at https://cdn.misoenergy.org//Final%20Draft%20MTEP19%20Executive%20Summary%20and%20Report398565.pdf The battery will be installed to help address multiple outage issues during certain system load conditions and will provide operational flexibility to address these limitations. The estimated cost is $8.1 million and the expected in-service date of the project is December 2021. MISO intends to move the project forward for approval if the Commission accepts the Tariff revisions proposed in this filing.

both a transmission and a market resource, the present proposal is to utilize storage facilities as transmission assets only.

As the MISO stakeholder process described in Section II.B of this transmittal letter demonstrates, the introduction and implementation of storage facilities as transmission assets raises a myriad of complex issues, and various stakeholder positions on those issues. Thus, it is prudent and necessary to adopt an incremental approach that first establishes the rules for treating storage as transmission assets to provide transmission service. This proposal reflects MISO’s and its stakeholders’ work to proactively address the issues and opportunities that these unique assets present for application as transmission assets. MISO worked with our stakeholders over nearly two years to discuss issues, present options, and refine Tariff language to move forward with this first step, creating the foundation for further development and utilization of storage resources in the MISO footprint.

A. Commission Precedent

The discussion below outlines some of the more significant orders in which the Commission addressed the issue of storage as transmission. MISO’s proposal here reflects, where applicable, the Commission’s direction and guidance.

1. Storage Policy Statement

In its Policy Statement, the Commission provided guidance on the ability of storage resources to provide both market and transmission services and thereafter seek to recover their costs through both cost- and market-based rates concurrently. The fundamental issue addressed by the Policy Statement was what to do when one asset was to serve both functions.9 The Commission stated that the following three issues would need to be addressed: (a) the potential for double recovery of costs; (b) the potential for adverse impacts on wholesale electric markets; and (c) the level of control in the operation of the storage resource by an RTO10 that could jeopardize its independence.11

The current proposal sets forth the framework for providing energy storage the option to serve as a transmission-only asset and does not provide for the SATOA to simultaneously operate as a market resource. Thus, the circumstance at issue in the Policy Statement, where an asset will be used as both a market resource and as a transmission asset, is not at issue here. The Policy Statement nonetheless provides guidance for operation of a SATOA. Regarding the first issue of double-recovery of costs, the Commission addressed crediting any market revenues back to the cost-based ratepayers and explained that the amount of this crediting would depend on how the

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9 Policy Statement at P 1.

10 In its Policy Statement, the Commission referred to an RTO/ISO. For simplicity, the reference to RTO is used here.

11 Id. at P 13.
cost-based rate recovery is structured.\textsuperscript{12} In the current proposal, MISO includes the rule that while the SATOA must charge and discharge in the market, the costs and revenues for doing so shall be reflected in transmission rates.\textsuperscript{13} Accordingly, there will be no market-based revenue to be addressed separately.

As to the second issue of adverse market impacts, the Commission stated that allowing such arrangements for storage resources would not necessarily adversely impact market competitors in a variety of circumstances.\textsuperscript{14} In this case, the SATOA will be required to serve only a transmission function, and so this filing does not involve the dual revenue stream question. As noted above, MISO and its stakeholders will begin the process of developing rules to enable storage as both transmission and to provide market services in early 2020. Tariff modifications to address these impacts and issues will be addressed in a future proceeding.

In addressing the third issue of RTO independence, the Commission stated that through coordination, the RTO and operators of storage facilities need to ensure that the necessary state of charge is maintained to provide the service compensated through cost-based rates.\textsuperscript{15} But storage resources should be permitted to deviate from this state of charge at other times of the day in order to provide market-based rate services, only if the priority need is reasonably predictable as to size and the time it will arise each day.\textsuperscript{16} The Commission further specified that the provision of market-based rate services should be under the control of the owners of the storage resource, rather than the RTO.\textsuperscript{17} In this case, the SATOA owner will be required to maintain the necessary readiness to meet the need for which it is approved in MTEP, consistent with the Commission’s guidance.\textsuperscript{18}

\textbf{2. Nevada Hydro Company, Inc.}

\textsuperscript{12} \textit{Id.} at PP 16-17. Alternatively, and while not at issue here, the Commission stated that the market-revenue offset can be used to reduce the amount of the revenue requirement to be used in the development of the cost-based rate. \textit{Id.} at P 18.

\textsuperscript{13} Tariff, Attachment FF, Section II.G.6.a and II.G.6.b proposed.

\textsuperscript{14} \textit{Id.} at P 22 (\textit{i.e.}, (a) participating generation resources getting paid a cost-based rate for providing reactive supply even as they make market-based rate sales into the wholesale markets, (b) vertically integrated public utilities recovering costs through cost-based retail rates, and (c) public utilities in restructured states that have transmission assets with cost-based recovery and generation assets with market-based revenues).

\textsuperscript{15} \textit{Id.} at P 25.

\textsuperscript{16} \textit{Id.}

\textsuperscript{17} \textit{Id.} at P 27.

\textsuperscript{18} Tariff, Attachment FF, Section II. And the SATOA may only participate in the MISO markets to the extent necessary to receive Energy from the Transmission System and to inject Energy into the Transmission System to provide the services for which it was included in the MTEP. See Tariff, Attachment FF, Section II.G.4 proposed.
In the *Nevada Hydro* case, the Commission was asked to find, among other things, that the Lake Elsinore Advanced Pump Storage (“LEAPS”) facility was a transmission asset, thus eligible for cost recovery through the CAISO’s Transmission Access Charge (“TAC”), and to require CAISO to assume operational control of the LEAPS facility.\(^1\) According to Nevada Hydro, its proposal would not compromise CAISO’s independence and distort markets because: (a) CAISO would serve its ancillary services consistently and to the extent required from the LEAPS facility, (b) Nevada Hydro would bid LEAPS facility’s stored energy into the market at zero dollars, and (c) CAISO would not be involved in operational decisions, as energy will be taken as needed by CAISO’s computerized dispatch model.\(^2\)

The Commission rejected Nevada Hydro’s proposal, holding that the LEAPS facility may not be operated and managed by CAISO or functionalized as transmission for rate recovery purposes.\(^3\) The Commission explained, in part, that it would be inappropriate to allow the costs of the LEAPS facility to be rolled-in through CAISO’s transmission rates because the purpose of CAISO’s TAC is to recover the costs of transmission facilities under the control of CAISO, not to recover the costs of bundled services;\(^4\) and (c) absent information to justify treating a LEAPS facility differently from other similarly situated generator facilities, allowing LEAPS to receive a guaranteed revenue stream through TAC would create an undue preference.\(^5\)

MISO’s proposal recognizes the Commission’s direction that cost recovery through transmission rates is for the purpose of recovering costs of transmission facilities under the control of the RTO, which is the case with a SATOA. The SATOA owner is responsible for maintaining the necessary state of charge to serve the transmission function for which it was approved in MTEP.\(^6\) MISO will exercise functional control of the SATOA for transmission purposes only.

### 3. Western Grid Development, LLC

In *Western Grid*, the Commission was asked to find, among other things, that the proposed projects were wholesale transmission facilities.\(^7\) Western Grid proposed to operate the projects

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\(^1\) *Nevada Hydro* at P 5.

\(^2\) *Id.* at P 74.

\(^3\) *Id.* at P 82.

\(^4\) *Id.* at P 83 (explaining further that because the Commission denied the request that the facility be placed under the CAISO’s control, the facility’s costs should not be recovered through the TAC).

\(^5\) *Id.*

\(^6\) Tariff, Attachment FF, Section II.G.1.a.iii *proposed.*

\(^7\) *Western Grid Dev., LLC*, 130 FERC ¶ 61,056 at P 1 (2010) (“The proposed Projects are energy storage devices to be constructed and operated at specific sites along the CAISO grid where, Western Grid states, they would provide transmission services to solve existing reliability problems at a lower cost than traditional transmission upgrades.”).
in the following ways: (a) operation of the projects by Western Grid only as wholesale transmission facilities under the direction of the CAISO, similar to how high-voltage wholesale transmission facilities are operated by Participating Transmission Owners (“PTO”);\(^\text{26}\) (b) not bid into the CAISO’s markets or be a market participant in any way;\(^\text{27}\) (c) pay retail energy prices when taking power from the grid and receive retail credit in releasing energy during a time when reliability concerns trigger such an action;\(^\text{28}\) (d) pass through any incremental market revenues to customers through a PTO tariff;\(^\text{29}\) and (e) provide transmission services to solve existing reliability problems by providing voltage support and addressing thermal overload situations at the CAISO’s instruction.\(^\text{30}\)

The Commission held that the projects were appropriately considered transmission because of the operation of the projects for the specific uses combined with the pass-through of any incidental market revenues to customers through a PTO tariff.\(^\text{31}\) The Commission noted that operation of the projects by Western Grid as transmission facilities under the direction of CAISO was consistent with the CAISO’s operating obligations with other transmission assets. That is, Western Grid would be responsible for (a) all operating functions, including maintenance, communication, and system emergencies, and (b) energizing the sodium-sulfur (NaS) batteries used in the projects.\(^\text{32}\) Thus, the independence of CAISO would be maintained as it would not be responsible for buying power to energize the projects, or physically operating the batteries when they were being charged and discharged.\(^\text{33}\)

MISO’s proposal incorporates the guidance from Western Grid. The SATOA owner is responsible for all operating functions and maintaining the asset’s readiness to serve the transmission function. MISO’s independence is maintained as MISO is not responsible for buying power to energize the projects.\(^\text{34}\) The proposed revisions also prohibit market participation by the

\(^{26}\) Id. at PP 19, 22.

\(^{27}\) Id. at P 50.

\(^{28}\) Id. at P 19.

\(^{29}\) Id. at P 46.

\(^{30}\) Id. at PP 47, 52.

\(^{31}\) Id. at PP 43, 49 (pointing out that its holding that the projects are transmission is limited to the facts presented by Western Grid in that proceeding).

\(^{32}\) Id. at P 45.

\(^{33}\) Id. at P 49. In contrast, the Commission clarified how the LEAPS facility could have jeopardized the CAISO’s independence: Because Nevada Hydro did not propose any mechanism to deal with the potential costs and revenues from CAISO’s market operation (by assuming the control of the LEAPS facility), which could have left the CAISO in the position of being a profit-seeking operator of the facility.

\(^{34}\) Tariff, Attachment FF, Section II.G.1.a.iii proposed.
SATOA\textsuperscript{35} and provide for the pass-through of costs of charging and discharging through the transmission rate, so there are no market-based revenues to be addressed separately.

4. **Order No. 841**

On November 17, 2016, the Commission issued a Notice of Proposed Rulemaking ("NOPR")\textsuperscript{36} proposing changes to participation by storage resources in markets operated by RTOs and ISOs.\textsuperscript{37} The NOPR led to Order No. 841, which requires RTOs/ISOs, like MISO, to revise their Tariffs to establish a participation model consisting of market rules that, recognizing the physical and operational characteristics of storage resources, facilitates their participation in the RTO/ISO markets.\textsuperscript{38} MISO submitted its initial compliance with Order No. 841 on December 3, 2018,\textsuperscript{39} amended its filing with additional explanations on May 1, 2019, and thereafter sought an extension of the proposal’s implementation through June 2022.\textsuperscript{40}

On November 21, 2019, the Commission acted favorably on MISO’s compliance filing on Order No. 841.\textsuperscript{41} The Commission approved most of MISO’s proposed Tariff revisions to further utilize storage energy resources in the MISO market. The Commission rejected two aspects of the proposal and directed further compliance.\textsuperscript{42} The Commission also granted MISO’s extension request.\textsuperscript{43}

The present proposal is expressly separate from the Tariff revisions on the participation of storage resources in the market in that the proposed framework here allows for a storage

\textsuperscript{35} Attachment FF, Section II.G.4 proposed.


\textsuperscript{37} Order No. 841 is specifically targeted at electric storage resource participation in the RTO markets. The proceeding did not address storage resources as transmission assets.


\textsuperscript{40} Midcontinent Indep. Sys. Operator, Inc., Request to Defer Effective Date of Compliance with Order No. 841 (Nov. 1, 2019).


\textsuperscript{42} Id. at P 268.

\textsuperscript{43} Id. The Commission also directed MISO to make annual compliance filings to report on MISO’s progress in implementing the Tariff revisions and explain whether any of the Tariff revisions can be implemented on a shorter timeframe.
facility to serve as a transmission asset only. Nonetheless, as MISO continues its stakeholder discussions, and eventually implements its compliance with Order No. 841, MISO will be reviewing the framework for how a facility approved as a transmission asset may also serve a market function. Any proposal to allow energy storage to serve both functions will be subject to a future Tariff filing.

5. MISO Compliance with Commission Precedent

As noted above, this proposal provides the opportunity to utilize the capability of storage facilities purely as transmission assets for the benefit of the grid. This opportunity is complementary to, but independent of, the Order No. 841 requirements, and follows the resolution of issues posed in Nevada Hydro and Western Grid. And the proposal here is consistent with the Commission’s intent that these resources be allowed to provide and be utilized for the services they are technically capable of providing. Accordingly, the present proposal incorporates the guidance that storage facilities can be used as transmission, as provided in Western Grid and the Policy Statement, and follows the principles articulated by the Commission in those decisions. MISO further outlines the proposed revisions and basis for each in Section III below.

B. Stakeholder Process

After the issuance of the Policy Statement, MISO began discussions regarding the treatment of storage resources through the creation of the Energy Storage Task Force (“ESTF”). The ESTF presented initial storage resource transmission planning issues at the March 28, 2018 Stakeholder Steering Committee meeting.44 The ESTF noted that MISO did not have a process to evaluate storage resources as transmission assets in the annual regional planning process leading to MTEP, and that all storage resources were required to be evaluated through the Generator Interconnection Procedures as market participating assets.45 The Planning Advisory Committee (“PAC”) began discussing the issues related to treating storage as transmission in April 2018.46

After initial discussion of the issues and process, MISO issued its June 13, 2018 Issue Paper detailing the relevant issues to be addressed and soliciting feedback from stakeholders.47 This


45 Id.


initial Issue Paper raised several threshold issues, including whether a Generator Interconnection Agreement was required for a storage facility to provide transmission service, evaluation and modeling of storage resources in the transmission planning process, costs and cost recovery of storage resources, function control and management of the state of charge, retirement of storage as transmission, and other issues.\(^{48}\) Stakeholder feedback was discussed during the August 17, 2018\(^{49}\) and September 26, 2018\(^{50}\) PAC meetings. MISO used the stakeholder feedback from the September PAC meeting to further develop the threshold issues to be discussed during the October 31, 2018 SATOA\(^{51}\) Workshop.\(^{52}\) Highlights from the October 31, 2018 Workshop and a possible phased approach to implementing SATOA were discussed during the November 14, 2018 PAC meeting.\(^{53}\)

In response to stakeholder feedback, at the January 2019 PAC meeting, MISO presented its Phase I Proposal for SATOA\(^{54}\), in which the scope of the initial policy development was narrowed to the storage-as-transmission-only concept. Development of policies for the dual

\(\text{https://cdn.misoenergy.org/20180613\%20PAC\%20Item\%2003c\%20ESF\%20as\%20Transmission\%20Reliability\%20Assets219728.pdf.}\)

\(^{48}\) Id.

\(^{49}\) See Electric Storage as a Transmission Solution in the MTEP Reliability Planning Process (August 17, 2018), Planning Advisory Committee at \(\text{https://cdn.misoenergy.org/20180817\%20PAC\%20Item\%2003a\%20Energy\%20Storage\%20as\%20Transmission\%20Reliability\%20Asset266871.pdf.}\)

\(^{50}\) See Electric Storage as a Transmission Solution in the MTEP Reliability Planning Process (September 26, 2018), Planning Advisory Committee at \(\text{https://cdn.misoenergy.org/20180926\%20PAC\%20Item\%2004e\%20Energy\%20Storage\%20as\%20Transmission\%20Reliability\%20Asset277718.pdf.}\)

\(^{51}\) These projects were referred to as “Storage as Transmission Asset,” or “SATA” in the initial meetings. As discussions progressed, it was evident that the word “Only” needed to be added to the acronym to clarify that the discussion was on storage as transmission only. For ease of reference, we refer to SATOA throughout this transmittal letter.

\(^{52}\) See Electric Storage as a Transmission Asset (SATA), MISO Workshop (October 31, 2018) at \(\text{https://cdn.misoenergy.org/20181031\%20SATA\%20Workshop\%20Item\%2002\%20Energy\%20Storage\%20as\%20Transmission\%20Reliability\%20Asset288594.pdf.}\)

\(^{53}\) See Electric Storage as a Transmission Asset (SATA), Planning Advisory Committee (November 14, 2018) at \(\text{https://cdn.misoenergy.org/20181114\%20PAC\%20Item\%2004c\%20Electric\%20Storage\%20as\%20Transmission\%20Asset\%20SATA\%20Presentation292116.pdf.}\)

revenue stream (cost-based together with market based) would be left to future development in a Phase II.\textsuperscript{55} After receiving stakeholder feedback on the proposed SATOA policy, revisions to the proposal were presented at the February 2019 PAC meeting.\textsuperscript{56}

Further development of the SATOA Phase I Policy was addressed at the March 2019 PAC meeting,\textsuperscript{57} including: (1) the broadened applicability of SATOA beyond reliability projects to all transmission project types defined under the Tariff; (2) clarification of the functional control coordination for SATOA between the Transmission Operator and MISO as Reliability Coordinator, and (3) confirmation that the GIP were not applicable to SATOA.\textsuperscript{58} Additional stakeholder discussions were held on the issues within the defined Phase I scope at the PAC meetings in April,\textsuperscript{59} May,\textsuperscript{60} June,\textsuperscript{61} August,\textsuperscript{62} and September\textsuperscript{63} of 2019. The final proposed Tariff language was presented to the PAC in October 2019.\textsuperscript{64} The MISO Market Subcommittee (“MSC”)

\textsuperscript{55} Id. at 4.


\textsuperscript{58} Id.


\textsuperscript{64} Electric Storage as a Transmission-Only Asset (SATOA) Tariff (October 16, 2019), Planning Advisory Committee at https://cdn.misoenergy.org/20191016%20PAC%20Item%2003a%20SATOA%20(PAC004)390698.pdf.
also reviewed the SATOA operational framework at its meetings in 2019, including issues related to responsibility for charging the storage resource, and how the charging and discharging costs and revenues would be handled.\textsuperscript{65} MISO’s Reliability Subcommittee also reviewed the SATOA proposal in 2019, including addressing such topics as operational control of SATOAs with their project type and that they will be operated per operating guides to assure consistency.\textsuperscript{66}

Throughout these discussions, the issues receiving the most interest from stakeholders were:

(1) whether electric storage resources seeking treatment as a transmission reliability asset should be subject to the GIP;
(2) how to evaluate electric storage resources in comparison to alternative traditional wires solutions, including modeling and cost recovery; and
(3) the treatment of net revenues associated with charging and discharging SATOA under MISO functional control for transmission purposes.

MISO moved these issues forward for discussion, and sought stakeholder feedback. These issues are discussed below.

First, stakeholders had mixed opinions on the need for storage facilities to request interconnection via the GIP queuing process in Attachment X of the Tariff. Several stakeholders raised concerns that by allowing a SATOA to interconnect without going through the queue process, energy resources that compete for the same transmission capacity could be disadvantaged. Others raised concerns that requiring storage facilities to interconnect through GIP procedures, and the processing timelines for completing the GIP, could prevent consideration of energy storage facilities to address Transmission Issues in the MTEP process.

After hearing stakeholder discussions of these competing concerns, MISO determined that a SATOA would not need to enter the generator interconnection queue because 1) a SATOA is a transmission asset, 2) the SATOA cannot compete with market-based storage resources in market operations, and 3) in resolving Transmission Issues, the SATOA will provide advantages


\textsuperscript{66} \textit{See} Electric Storage as a Transmission Asset in the MTEP Planning Process (August 1, 2019), Reliability Subcommittee at \url{https://cdn.misoenergy.org/20190801%20RSC%20Item%2005%20Storage%20As%20Transmission%20Only%20Asset%20(SATOA)368608.pdf}. 
to subsequently interconnecting market-based storage and other generation assets.\footnote{67} In addition, to address certain stakeholder concerns that the operation of a SATOA for transmission purposes could negatively impact generators pending interconnection, the proposal includes provisions for evaluating and addressing any such impacts.\footnote{68}

Second, discussions between stakeholders and MISO staff also involved the evaluation of energy storage facilities in comparison to alternative “wires” solutions. These discussions resulted in proposals to establish how comparisons will be made between SATOA as transmission solutions and traditional wires solutions. These comparisons will include life-cycle costs that consider possible degradation of life of the SATOA, assurances that the SATOA has sufficient demand and energy to effectively address the Transmission Issue, treatment of SATOA proposals with capacity in excess of what is needed, evaluation of any reliability issues associated with inverter operation and others.

Additionally, stakeholder concerns about SATOA impacts to future interconnecting generators were addressed by including provisions to test these impacts and provide for mitigations within the MTEP study process before selecting the SATOA as the preferred solution. Finally, the proposed provisions include the requirement that the storage facility must possess some unique characteristic suited to the Transmission Issue resolution that could not otherwise be provided by the asset operating as a market resource consistent with Order No. 841, before it will be considered for cost-based revenue treatment as a SATOA. In addition, some stakeholders sought an alternative framework for storage as transmission.\footnote{69} Those proposals, however, raised complex issues beyond the scope of incorporating storage into the traditional asset classes that are the focus of the SATOA provisions. While MISO intends to continue to evaluate additional frameworks for the operation of storage resources as transmission, the intention is to include storage as transmission within the existing criteria for transmission projects, and not stray beyond the issue of storage as transmission and Commission guidance on that issue.

Third, with respect to the market issues raised, although the SATOA will not participate in markets, a SATOA will use market settlement mechanisms to settle the charging and discharging functions performed under MISO functional control and direction. The SATOA owner therefore will need a registered Market Participant to receive such energy net costs, and the crediting and charging of revenues and costs will pass through the transmission rate. Reflecting stakeholder

\footnote{67} However, any SATOA that has excess capacity beyond the required capacity selected as the preferred solution and approved for inclusion in MTEP, will be required to go through the GIP if it seeks to offer that excess capacity into the market. Cost recovery under transmission rates is limited to the cost of the maximum Capacity determined to be needed to address the Transmission Issue. \textit{See} Attachment FF, Section II.G.1.a.ii \textit{proposed}.

\footnote{68} Attachment FF, Section II.G.1.d \textit{proposed}.

\footnote{69} \textit{See} April 17, 2019 Planning Advisory Committee meeting materials at \url{https://www.misoenergy.org/events/planning-advisory-committee-pac---april-17-2019/}.  

review, the proposal also states that the SATOA would be a “price-taker” and charged and credited the applicable Locational Marginal Price for its location.\footnote{See Tariff, Section 40.3.3.3.a.ii. The SATOA will not bid into the market.}

III. PROPOSED TARIFF REVISIONS

MISO developed the proposed Tariff language following the lengthy stakeholder process described above. Consistent with the framework of transparency, efficiency, and reliability that guides all planning processes, the proposed Tariff provisions will enable the implementation of storage facilities as transmission-only assets, and ensures that these assets are reviewed in the same context and with the same rigor as traditional wires solutions. Key provisions include planning analysis, comparative evaluation, and cost analysis. The rationale behind these concepts is further described below. Some of the more significant aspects of the proposal include:

- Storage resources will be evaluated for inclusion in MTEP and must meet the criteria of an existing project type;
- Energy storage facilities must exhibit unique characteristics to be included as a SATOA;
- A proposed SATOA will be evaluated with a comparison of life cycle costs for the same period as a wires solution; and
- SATOA will not be credited or compensated for excess capacity.

MISO proposes to revise the Tariff by adding a definition of a SATOA to Module A. MISO is also revising and augmenting Attachment FF to incorporate necessary provisions that address a SATOA: (a) Section I.C clarifies the “Development of the MTEP” by stating that a SATOA may be considered as a facility for transmission expansion or enhancement and thus be eligible to be included in the Transmission System; and (b) Section II.G explains in detail how a SATOA will be treated under the Tariff—\textit{i.e.}, as a solution to a Transmission Issue, subject to Operating Guides MISO will develop, as an alternative transmission asset, subject to restrictions on market participation and Transmission Service charges, and assignment of market-derived costs and revenues associated with SATOA operation. MISO also proposes modifications to Attachment X to clarify that a SATOA is not subject to the GIP.

Fundamentally, the proposal follows the guidance provided by the Policy Statement and \textit{Western Grid} by ensuring that the SATOA is operated in a manner that preserves RTO independence, that any revenues received from the resource are properly credited back to the transmission function, and that to be a SATOA, the project must be identified as the preferred solution to a Transmission Issue. Below, MISO describes these sections, and the basis for accepting the revisions for inclusion in the Tariff as just and reasonable.
A. Module A Definition of SATOA

MISO proposes to include a definition of SATOA in Module A of the Tariff as follows:

An Electric Facility connected to or to be connected to the Transmission System and approved for inclusion in Appendix A of the MTEP, as a transmission facility that is part of the Transmission System, that is capable of receiving Energy from the Transmission System and storing Energy for injection to the Transmission System, and is operated only to support the Transmission System. The SATOA shall not participate in the Transmission Provider’s markets except to the extent necessary to receive Energy from the Transmission System and to inject Energy into the Transmission System to provide the services for which the SATOA was included in the MTEP.\(^1\)

The definition makes clear that a SATOA is approved to operate for a transmission purpose only and may not participate in the market for purposes other than receiving and injecting Energy needed to perform the required transmission function.\(^2\)

B. Attachment FF, Section I.C

Section I.C of Attachment FF sets forth the basic framework for the MISO transmission planning process. Proposed for inclusion here is the statement that a SATOA may be included in the MTEP plan, providing clarification to stakeholders or any other interested parties that a SATOA, in addition to other transmission assets, can be included in the MTEP as a facility for transmission expansions or enhancements. At the same time, this statement refers readers to Section II.G, which provides more detailed information on the inclusion of a SATOA in the MTEP.

This provision also clarifies that the SATOA will only participate in the MISO markets for purposes of providing the transmission services for which the SATOA was included in MTEP. The SATOA may not participate in the Energy and Operating Reserve Markets and/or the Planning Resource Auction unless and until the Tariff includes provisions for SATOA recovering cost-based revenues as transmission to also participate in those or other Market Activities. This important provision clarifies that the proposed SATOA framework covers service as transmission only. Any future provisions for dual transmission- and market-service operation will be supported a new Tariff proposal.

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\(^1\) Tariff, Module A, Section 1.S proposed.

\(^2\) As noted above, MISO plans to hold future stakeholder proceedings to further evaluate how energy storage can participate as both a market resource and a transmission asset. When MISO brings forward that proposal, the definition of SATOA may be modified, or a new term added (representing a new storage category), for the circumstance where the asset performs both functions. However, the capacity of the SATOA approved as the SATOA shall be required to serve its transmission function for the time period evaluated at the time of its inclusion in Appendix A of the MTEP.
C. Attachment FF, Section II.G

The framework for the evaluation of a SATOA shall be outlined in Section II.G of Attachment FF. This section includes:

- Evaluation process for the SATOA to be included in MTEP as a solution to a Transmission Issue;
- Assumptions that are applied;
- Selection as SATOA as the preferred solution in MTEP;
- Development of Operating Guides;
- Restriction on market participation;
- Non-applicability of Transmission Service charges; and
- Description on market-derived costs and revenues associated with a SATOA.

1. Section II.G.1

Section II.G.1 of Attachment FF establishes the rules for selecting SATOA as a solution to a Transmission Issue in MTEP. Under these rules, a SATOA may be any of the transmission project types outlined in Attachment FF, Sections II.A through II.D and II.F, as well as those projects designated as Other Projects consistent with Attachment FF, Section III.A.2.k.\(^{73}\)

The provision to allow a SATOA to meet the qualification requirements for any transmission project type is intended to provide the same opportunities for SATOA as is provided for the traditional wires solution—no more and no less. That is, the project may be, for example, a Baseline Reliability Project, a Market Efficiency Project, or any other project category, depending on the facts presented.\(^{74}\) This proposed framework applies the same criteria to determine whether the project is the preferred solution to a Transmission Issue as applies to a wires solution, but also recognizes the unique characteristics of the SATOA.\(^ {75}\)

The SATOA will be evaluated with the same rigor as a wires solution. That is, the SATOA will be evaluated as any of the project types currently found under Attachment FF, Section II. For example, the current criteria for a regional Market Efficiency Project include, in part, Network Upgrades with costs of $5 million or more, voltages of 345 kV or higher, with

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\(^{73}\) Early in the stakeholder process, MISO had proposed that the project could be evaluated only as a reliability project. However, after stakeholder feedback and further evaluation, it did not appear necessary to limit the SATOA to reliability-only projects. Therefore, a SATOA can be classified as any MTEP project type so long as it meets the criteria for that project type, including Other projects provided under Section III.A.2.k.

\(^{74}\) The cost allocation method for SATOA will be according to its project type. The construction obligation will similarly attach based on project type. See Transmission Owners Agreement, Appendix B, Section VI.

\(^{75}\) That is, if the SATOA could operate as a market resource to perform the same function, then it would not be eligible for inclusion as a SATOA. See Attachment FF, Section II.G.1.c.i.b proposed.
regional benefits and that are not Multi-Value Projects.\textsuperscript{76} A SATOA included as a Market Efficiency Project in MTEP must meet these criteria\textsuperscript{77} in addition to the additional requirements for SATOA. Meeting a specific project type included in the Tariff was a fundamental consideration in the stakeholder process. Rather than create a new project type, the SATOA will be evaluated as any other project type and must meet the same criteria, in addition to the qualification criteria for a SATOA. Further, the SATOA will be subject to the comparative analysis to ensure it is the preferred solution to a Transmission Issue.\textsuperscript{78}

In this case, the criteria supporting the project type definitions in the Tariff have been thoroughly vetted and developed through the stakeholder process. The Commission has accepted these provisions as just and reasonable. Accordingly, MISO proposes that if the SATOA proposed to address a Transmission Issue meets these project criteria, the SATOA will be included in Appendix A of the MTEP as that project type. Under the existing framework, projects are included in Appendix A and designated as specific project types. The description of the project includes whether it is a line, a transformer, or other facility.\textsuperscript{79} In this case, a SATOA may be included in Appendix A of the MTEP under its project classification, and the description will include that the project includes a storage resource.

In addition to providing consistency among transmission assets, project type is significant for two other reasons—obligation to construct and cost allocation. Making the existing provisions on project types applicable to a SATOA will ensure that the project, identified as the preferred solution to a Transmission Issue in MTEP, will in fact move forward to construction to resolve the Transmission Issue.\textsuperscript{80} In addition, cost allocation for any project included in MTEP must be identified at the time of inclusion. Thus, the determination of project category also resolves the issue of cost allocation for the project.

a) Section II.G.1.a

Attachment FF, Section II.G.1.a, including its subsections, outlines comparative evaluations of SATOA. This section refers to how MISO will evaluate the appropriateness of a SATOA as a solution to a Transmission Issue identified in the MTEP as compared to any other transmission solution.

\textsuperscript{76} Attachment FF, Section II.B. Note that Market Efficiency Projects that also qualify as Interregional Market Efficiency Projects under Section IX of the MISO-PJM Joint Operating Agreement have no cost threshold and a voltage threshold of 100 kV.

\textsuperscript{77} For example, a storage asset will meet the voltage criteria if it delivers service to the Transmission System at the requisite voltage.

\textsuperscript{78} See Tariff, Attachment FF, Section II.

\textsuperscript{79} See proposed MTEP19 Appendix A – Projects Recommended for Approval at https://www.misoenergy.org/planning/planning/mtep-2019/.

\textsuperscript{80} See Tariff, Attachment FF, Section V and Rate Schedule 1, Appendix B, Section VI.
First, MISO will evaluate the ability of the SATOA to address the Transmission Issue in all hours that the Transmission Issue is identified to exist, with a life-cycle cost comparable to other proposed solutions.\textsuperscript{81} This includes a comparison to other proposed solutions, including any proposed non-transmission alternatives as is the usual course with a wires solution.\textsuperscript{82} Additional considerations include:

- **The minimum and maximum Capacity required to address the Transmission Issue**\textsuperscript{83}

  This ensures that excess capacity is not treated as transmission and therefore subject to cost-based revenue recovery. The proposed revisions enforce this limit by restricting cost recovery to the cost of the maximum Capacity needed to address the Transmission Issue.\textsuperscript{84} In the event excess Capacity is installed, cost recovery will be based on the pro-rated cost of the facility needed to address the Transmission Issue.

  This provision recognizes that that a SATOA may be installed in lumpy increments, either because additional Capacity may be offered into the market at a future time as may subsequently be allowed, or for design or other purposes. This provision ensures that transmission customers do not subsidize this excess capacity.

- **Assurance of sufficient Energy or reactive Capacity for the daily hourly period identified as necessary in the planning study.**\textsuperscript{85}

  This provision ensures that the SATOA is capable of providing sufficient Energy or reactive capacity as needed to address the Transmission Issue identified.

- **Assessment of system reliability impacts applicable to inverter-based facilities on the same basis and in a manner comparable to the analysis in the GIP as applicable to storage Resources as inverter-based facilities.**\textsuperscript{86}

  This ensures comparable analysis treatment of inverter-based facilities to ensure system reliability regardless of whether they are reviewed for interconnection in the MTEP planning process as SATOA or the GIP as Electric Storage Resources.

\begin{itemize}
  \item Attachment FF, Section II.G.1.a.i \textit{proposed.}
  \item Id. \textsuperscript{82}
  \item Attachment FF, Section II.G.1.a.ii \textit{proposed.}
  \item Id. \textsuperscript{83}
  \item Attachment FF, Section II.G.1.a.iii \textit{proposed.}
  \item Id. \textsuperscript{84}
  \item Attachment FF, Section II.G.1.a.iv \textit{proposed.}
\end{itemize}
• Life-cycle based cost comparisons\textsuperscript{87}

The planning analysis will include an analysis of life-cycle cost comparisons to other potential solutions, including the factors outlined in Section II.G.1.b. This provision recognizes that the life-cycle cost of these assets may be different than a traditional wires solution. This ensures that although the technologies are different, a SATOA and a wires solution are evaluated to address the same transmission need and would also need to be reviewed with a full cost analysis for each.

• Any other additional considerations that may support comparative evaluation to other solutions to the Transmission Issues\textsuperscript{88}

This provision addresses the opportunity to take into account for SATOA the same considerations that impact the ability of the resource to meet the planned need, including time to develop, expandability, and flexibility and other factors.

b) Section II.G.1.b

Section II.G.1.b outlines cost assumptions to be considered in the comparative evaluation of a SATOA.\textsuperscript{89} This section refers to what MISO will consider regarding costs to evaluate a SATOA’s cost effectiveness to select it as the preferred solution.\textsuperscript{90} To be considered as a potential solution, the entity proposing the SATOA must provide the planning estimates of the SATOA’s:

- Direct capital cost;\textsuperscript{91}
- Expected useful life;\textsuperscript{92}
- Equipment replacement schedules, associated life-cycle costs, and other ongoing costs to maintain the SATOA at its required Capacity and Energy capability;\textsuperscript{93} and

\textsuperscript{87} Attachment FF, Section II.G.1.a.v \textit{proposed}.

\textsuperscript{88} Attachment FF, Section II.G.1.a.vi \textit{proposed}.

\textsuperscript{89} Attachment FF, Section II.G.1.b \textit{proposed}.

\textsuperscript{90} MISO will continue to evaluate whether the SATOA is the preferred solution to address a Transmission Issue. For example, although the Commission recognized the eligibility of the \textit{Western Grid} proposal for energy storage to serve as transmission and recover costs as a transmission asset, the project was not thereafter approved for inclusion in the California Transmission Planning Process because it was not the most efficient solution. \textit{See} California ISO: Storage as a Transmission Asset Issue Paper (March 30, 2018) at 6.

\textsuperscript{91} Attachment FF, Section II.G.1.b.i \textit{proposed}.

\textsuperscript{92} Attachment FF, Section II.G.1.b.ii \textit{proposed}.

\textsuperscript{93} Attachment FF, Section II.G.1.b.iii \textit{proposed}.
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• Any other cost and performance information that MISO may determine to be necessary to compare the cost and performance with other proposed solutions to the identified Transmission Issue.94

These proposed cost and evaluation criteria ensure that the SATOA will be reviewed as any other proposed solution. For example, if the SATOA were to be compared against the lifecycle cost of a wires solution with an expected life of 40 years, the costs to maintain the SATOA for 40 years, including battery replacement if applicable, will be included in the analysis.

c) Section II.G.1.c

Section II.G.1.c of Attachment FF outlines what requirements a SATOA must demonstrate to be selected for inclusion in the MTEP. Of primary significance is the fact that for a SATOA to be recommended in MTEP, it must demonstrate unique characteristics or circumstances of the SATOA that are necessary to meet the Transmission System performance requirements and that are not otherwise available at comparable costs from other proposed solutions, including speed of operation, lead-time to implement, right-of-way or other property considerations.95 In addition, there must be a demonstrated need to resolve the Transmission Issue through the SATOA functioning as a SATOA, and not as a Resource that participates in the MISO markets.96 This recognizes that a SATOA may otherwise participate as a Resource and, by doing so, could be operating in the market. Demonstrating that the need cannot be met that way is fundamental to providing the opportunity for a storage facility to earn cost-based revenue as transmission only.

The SATOA must, as a foundational requirement, also meet the criteria to be designated in the MTEP as one of the existing transmission project types consistent with Sections II.A through II.D, II.F, and III.A.2.k of Attachment FF. This ensures that all transmission in MISO is evaluated for the same transmission purposes. Using the existing project category framework as the foundation allows the projects to move forward with clarity on existing stakeholder-developed and Commission-approved eligibility and cost allocation provisions..

d) Section II.G.1.d

Section II.G.1.d of Attachment FF outlines the requirements for consideration of the SATOA’s impacts on Resources in the Interconnection Queue. This section refers to how MISO will perform the assessment upon identification of a potential impact to newly-interconnecting Generation Resources in the interconnection study process, and whether such impacts would require additional mitigation. This provision is intended to protect against unintended impacts to other resources by the addition of the SATOA. The following may be included in the assessment:

94 Attachment FF, Section II.G.1.b.iv proposed.
95 Attachment FF, Section II.G.1.c.i.a proposed.
96 Attachment FF, Section II.G.1.c.i.b proposed.
• Targeted contingency analyses applying NERC TPL;\textsuperscript{97}
• Applicable regional and local planning criteria to evaluate the incremental impact of
the proposed SATOA and to compare loading and other system performance impacts
attributable to the addition of the SATOA.\textsuperscript{98}

If the assessment demonstrates that operation of the SATOA would cause the need for
additional system mitigation, such cost will be included in the evaluation of the SATOA against
other potential solutions.\textsuperscript{99} This ensures that applicable impacts of the SATOA are accounted for
such that the SATOA can be fairly and comprehensively compared against other proposed
solutions.

2. Section II.G.2

Section II.G.2 of Attachment FF outlines Development of Operating Guides Associated
with SATOA, selected for MTEP. The proposed Tariff revisions here specifically address the
requirements for a SATOA to be included in the MTEP for transmission purposes. When planning
includes storage as a transmission asset in MTEP, MISO’s planning staff will coordinate with the
owner of the SATOA, MISO Operations, and the Transmission Operator (“TOP”) to develop an
Operating Guide that establishes conditions for which the device should be discharged and charged
to meet the anticipated planning objective. The Operating Guide will establish boundaries for
operation that will be consistent with these objectives and will reflect the unique operating
parameters of the individual SATOA.\textsuperscript{100} For example, SATOA planned as a reliability asset will
not be operated to relieve congestion. However, the storage device may be operated to avoid load
shedding in declared Emergency conditions.\textsuperscript{101}

3. Section II.G.3

Section II.G.3 of the Attachment FF provides assurances that the inclusion of SATOA as
a transmission asset solution option does not in any way conflict with existing Tariff requirements
to consider non-transmission alternatives in the planning process. Storage facilities may also be
considered under these existing provisions as non-transmission alternatives when operating as non-
transmission assets such as demand, generation or distribution assets.

\begin{footnotesize}
\begin{enumerate}
\item Attachment FF, Section II.G.1.d \textit{proposed.}
\item \textit{Id.}
\item \textit{Id.}
\item MISO would post the CEII-redacted Operating Guide on the OASIS General Information page:
\url{https://www.oasis.oati.com/woa/docs/MISO/MISODocs/Transmission_Information.html}.
\item See supra n. 66 at 6.
\end{enumerate}
\end{footnotesize}
4. **Section II.G.4**

Section II.G.4 of Attachment FF clarifies that SATOA may not participate in markets except for purposes of providing transmission service for which it was included in MTEP and maintaining its state of charge necessary to provide that service. The SATOA does not participate in the markets for any other purpose at this time.

5. **Section II.G.5**

Section II.G.5 of Attachment FF establishes that no Transmission Service will be applicable to the operation of a SATOA since its operation is under the direction of MISO for transmission purposes.

6. **Section II.G.6.a**

Section II.G.6.a of Attachment FF outlines Accounting for Energy Costs Incurred when withdrawing energy under MISO functional control as a SATOA. This section refers to how costs resulting from Market Activities of a SATOA under MISO’s functional control will be collected. This section was revised to explain that the incurred costs will be collected through transmission rates in a manner consistent with the treatment of costs associated with the transmission project type that the SATOA is included as in Appendix A of the MTEP.

7. **Section II.G.6.b**

Section II.G.6.b of Attachment FF addresses how revenues collected from Market Activities of a SATOA under MISO’s functional control will be directed. This section was revised to explain that the collected Revenues will be credited back through transmission rates in a manner consistent with the treatment of costs associated with the project category in the transmission rates.

8. **Section II.G.7**

Recognizing that any asset, a traditional wires solution or SATOA, will at times be removed from service on a permanent basis, Section II.G.7 addresses removal of the SATOA. This section provides that, as for any traditional transmission asset, any removal will be reviewed by MISO in the MTEP process. No removal shall occur without acceptance by MISO. In its review, MISO will evaluate the removal similar to the removal of a wires solution.

D. **Module C, Section 40.3.3.3 Credits for Real-Time Energy and Operating Reserve Market Sales**
MISO also proposes modifications to Module C, Section 40.3.3.3. to address how the SATOA may be credited for charging and discharging. The language largely mirrors that approved by the Commission for Market Participants for Resources other than SATOA.

These modifications are needed to reflect that the SATOA will derive revenues or incur costs when charging and discharging, but will not be eligible to serve as a market Resource. Pursuant to the proposed provisions, the Market Participants for a SATOA will be credited the applicable Real-Time Ex Post LMP for Non-Excessive Energy and will be charged for Non-Excessive Energy withdrawals. The SATOA Market Participant then must provide the net revenues back to the Transmission Owner, and those net revenues will offset the transmission revenue requirement associated with the resource. The SATOA will have its own CP Node.

Notably, the treatment of the SATOA is significantly different from the Commission’s requirements for storage resources under Order No. 841. In particular, whereas Order No. 841 requires that a resource using the participation model for storage resources be dispatchable and able to set the wholesale market clearing price as both a wholesale seller and wholesale buyer, these provisions make clear that the SATOA will *not* set the price. Rather the SATOA will be a price taker.

**E. Attachment X**

The proposed revisions to Attachment X clarify that a SATOA shall not be subject to the requirement to follow MISO’s Attachment X GIP. The simple way to make this clear is to expressly note that a Generating Facility does not include a SATOA. Thus, because it is not a Generating Facility, the SATOA will not be required to go through the MISO GIP in Attachment X.

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102 See Electric Storage as a Transmission Asset: Addressing Market Impacts (Oct. 10, 2019) at https://cdn.misoenergy.org/20191010%20MSC%20Item%202005%20Storage%20as%20a%20Transmission%20Only%20Asset%20(SATOA)%20(PAC004)389486.pdf. Under MISO’s proposal, the resource is not serving as a market resource but only as a transmission asset. Thus, the framework here was developed within the MISO transmission planning process, with limited provisions related to the market.

103 See Tariff, Module C, Section 40.3.3.3.a.i. The proposed provision for SATOA is slightly different to reflect that the SATOA will not have Day Ahead Scheduled Injections. The SATOA owner will be required to register as a Market Participant or have an Agent act on its behalf in the market.

104 Tariff, Module C, Section 40.3.3.3.a.i.A *proposed.*

105 See Attachment FF, Section II.G.6.b *proposed.*

106 Tariff, Module C, Section 40.3.3.3.a.ii *proposed.*

107 Order No. 841 at P 142.
IV. Standards of Conduct

Compliance with the standards of conduct shall be as outlined in the Commission’s regulations and Appendix A of the TOA. The standards of conduct do not need to be addressed separately or uniquely for purposes of including the SATOA in the MTEP. Rather, the standards of conduct apply independently of the SATOA’s inclusion in the Transmission System.

V. Future Evaluation

As noted at the outset, the proposal reflects a fundamental first step in the utilization of storage facilities as transmission assets. MISO has committed to an ongoing review of how future modifications to the planning process and market operations can facilitate storage participation in MISO markets and as transmission assets. The Commission recently issued its order accepting most of the MISO proposal for compliance with Order No. 841. MISO expects to submit its additional compliance requirements by January 20, 2020 as directed by the Commission. Full implementation is expected on or before June 2022.

The Commission’s approval of MISO’s Order No. 841 compliance proposal, combined with acceptance of the framework for SATOA proposed here, will provide the foundation upon which MISO and its stakeholders can evaluate what the future approach should look like to enable storage to serve both market and transmission functions. That work will be addressed with stakeholders commencing in 2020.

Based on consideration of the complexity in resolving all aspects of the comprehensive treatment of storage resources operating to provide both transmission services and market services, MISO determined to take this initial first step of utilizing storage resources as transmission only, saving additional complex questions of dual operation of market and transmission, for further development after foundational rules for using storage to provide transmission services are established. This first step allows for the consideration of electric storage facilities in the MTEP reliability planning process sooner than it will take to resolve potentially more complex policy decisions, including those related to the treatment of assets providing both transmission and market services. And, as stated above, work with MISO stakeholders is intended to begin in early 2020 to address the issues necessary to permit mixed-mode operation of providing both transmission and market services.


109 The Transmission Owners Agreement outlines rights, obligations and responsibilities of all Transmission Owner members of MISO. Accordingly, it is imperative that the owner of the SATOA be a Transmission Owner in MISO, similarly bound by these rights, obligations and responsibilities as all other Transmission Owner members.
Significantly, there currently is a storage resource (a would-be SATOA) proposal pending in MTEP19. MISO will move that project forward for inclusion in MTEP after any order accepting the proposed Tariff revisions.\textsuperscript{110} This project has been fully reviewed in the MISO planning process and found to be the preferred solution for the identified transmission need. The Commission’s acceptance of the proposed SATOA framework will provide a clear path for the project to move forward for inclusion in Appendix A of MTEP19.

VI. DOCUMENTS SUBMITTED WITH THIS FILING

In addition to this Transmittal Letter, this submission includes:

- Tab A – Red-lined Tariff sheets\textsuperscript{111}
- Tab B – Clean Tariff sheets.

VII. COMMUNICATIONS

All communications related to this filing should be directed to the following person, who also is authorized to receive service and should be added to the official service list for this

\textsuperscript{110} MTEP19 will be presented to the MISO Board of Directors at its December 2019 meetings. See Review and Recommend MTEP19, System Planning Committee (December 10, 2019) at https://cdn.misoenergy.org/20191210%20System%20Planning%20Committee%20of%20the%20BOD%20Item%2002%20Review%20and%20Recommend%20MTEP1946609.pdf and MISO Board of Directors Agenda at Item 11 (December 12, 2019) at https://cdn.misoenergy.org/20191212%20Board%20of%20Directors%20Item%2000%20Agenda406852.pdf. MISO will present the pending SATOA to the MISO Board of Directors at its March meetings following an order by the Commission accepting these proposed revisions.

\textsuperscript{111} Due to several pending changes to these Tariff sheets, language currently pending before the Commission in Docket No. ER20-359-000 is highlighted in yellow. MISO requests that the Commission treat such highlighted language as subject to the outcome of that pending proceeding. MISO also has removed pending language in Docket Nos. ER20-303-000 (proposal to revise the Competitive Transmission Process, Variance Analysis process, and Selected Developer Agreement) and ER20-305-000 (proposal to improve and clarify Tariff requirements regarding Project cost estimates included in Proposals to develop Competitive Transmission Projects) (together “CTA Proposal”), both with effective dates of February 2, 2020. Because the CTA proposal reflects a bifurcated filing where the final Tariff pages will be dependent on coordinated action on both dockets, MISO has not included those changes here. MISO commits to make a subsequent filing with the Commission to update the Tariff sheets to reflect the most up-to-date versions of the then-current Tariff provisions once all orders are received in these related dockets.

MISO also has removed language that has a future effective date of 12/31/9998 and has been accepted subject to condition by the Commission in Docket No. ER19-465-000. MISO has also removed language that has a future effective date of 12/31/9998 that is pending in Docket Nos.ER20-42-000, ER19-1823-001 and ER19-1960-000. MISO commits to make a subsequent filing with the Commission to reflect the most up-to-date versions of the then-current Tariff provisions prior to the effective date of the language accepted in Docket Nos. ER19-465-000, ER20-42-000, ER19-1823-001 and ER19-1960-000.
VIII. NOTICE AND SERVICE

MISO has served a copy of this filing electronically, including attachments, upon all Tariff Customers, MISO Members, Member representatives of Transmission Owners and Non-Transmission Owners, as well as all state commissions within the region. The filing has been posted electronically on MISO’s website at https://www.misoenergy.org/Library/FERCFilingsOrders/Pages/FERCFilings.aspx for other parties interested in this matter.

IX. CONCLUSION

The MISO collaborative planning process has as its prime objective the reliable, lowest delivered cost of energy to customers, informed by identified state and federal policy goals. This process includes opportunities for review of transmission issues that limit the achievement of that objective, and selection of solutions that both improve the efficient use of the existing grid, and provide for expansion of capacity when cost effective. The planning space includes local and regional scope; reliability, economic, and policy needs; and the entire planning horizon from near to long-term. MISO is ready to include SATOA into this planning space as a grid enhancement tool to meet the needs of customers and stakeholders.

MISO requests that the Commission accept these proposed Tariff revisions for filing, grant the proposed effective date of March 11, 2020, and grant a waiver of any Commission regulations that the Commission deems applicable to this filing.

Respectfully submitted,

Kari Valley

Attorney for the Midcontinent Independent System Operator, Inc.
**Sample Membership Agreement:** The document that establishes the rights and obligations between the Electric Generation and Transmission Cooperative (Coop) and its members.

**Scarcity Price:** The LMP and MCP price levels determined by Demand Curves when insufficient Operating Reserve cleared to meet the Operating Reserve requirement.

**Schedule 16 Costs:** The monthly charge of costs to be recovered under Schedule 16 of this Tariff shall include any deferred pre-operating costs, direct and indirect capital costs, direct and indirect operating expenses and all other costs associated with administering the Financial Transmission Rights Administrative Service under this Tariff.

**Schedule 17 Costs:** The costs to be recovered under Schedule 17 of this Tariff shall include any deferred pre-operating costs, direct and indirect capital costs, direct and indirect operating expenses and all other costs associated with administering the Energy and Operating Reserve Market Support Administrative Service under this Tariff.

**Scheduled Injections:** Energy scheduled in the Day Ahead Energy and Operating Reserve Market to be injected over an Hour of the Operating Day.

**Scheduled Withdrawals:** Energy withdrawals scheduled in the Day Ahead Energy and Operating Reserve Market over a given Hour of the Operating Day.

**Scheduling Agent:** An entity designated by a Market Participant that has the authority to conduct business in the Transmission Provider Region on behalf of the Market Participant.

**Scheduling Instructions:** Directives issued by the Transmission Provider or Local Balancing Authority to Market Participants with Load Modifying Resources indicating MW quantities to be reduced during Emergencies.
**SCUC Instructed Hours of Operation:** The period beginning when a Resource is synchronized to the Facilities within the MISO Balancing Authority Area in response to the Transmission Provider selecting the Resource in the unit commitment portion of the SCUC process and ends at the later of: (i) the time incorporating the sum of the time when the Resource is synchronized and the Resource’s Minimum Run Time and (ii) the earlier of the time the Resource is forced out of service or the time when the Transmission Provider notifies the Market Participant that the Resource is no longer needed. The SCUC Instructed Hours of Operation cannot extend beyond the Operating Day.

**Seams Operating Agreement:** An agreement between adjacent balancing authorities or transmission providers for the coordination of operations, including joint operating agreements.

**Season:** The four (4) seasons are (i) Winter – December, January, February; (ii) Spring – March, April, May; (iii) Summer – June, July, August; and (iv) Fall – September, October, November.

**SEC:** Securities and Exchange Commission.

**Second Planning Area:** The area of the Transmission Provider Region where Entergy Corporation and its Operating Companies that own and/or operate transmission facilities (i.e., located in Arkansas, Louisiana, Mississippi, or Texas) that are conveyed to the functional control of the Transmission Provider to provide Transmission Service pursuant to Module B of the Tariff. The Second Planning Area shall be formed when the first Entergy Operating Company conveys functional control of its transmission facilities to
the Transmission Provider, and may be expanded if other Entergy Operating Companies or adjacent utilities in Arkansas, Louisiana, Mississippi or Texas, join MISO later in the Second Planning Area’s Transition Period.

**Second Planning Area’s Transition Period:** The period: (i) commencing when the first Entergy Operating Company conveys functional control of its transmission facilities to the Transmission Provider to provide Transmission Service under Module B of this Tariff; (ii) consisting of at least five consecutive (5) years, plus the time needed to complete the MTEP approval cycle pending at the end of the fifth year; (iii) ending on the day after the conclusion of such MTEP approval cycle, which in no case shall be more than six years after the start of that period; and (iv) during which the Transmission Provider shall review and compare the current states of the transmission systems in the First Planning Area and the Second Planning Area and, if a lack of comparability is found, shall identify transmission projects necessary to achieve comparability. The processes for identifying transmission projects necessary to achieve comparability and allocating costs associated with the projects that are so identified during the Second Planning Area’s Transition Period are set forth in Attachment FF-6.

**Security Constrained Economic Dispatch (SCED):** An algorithm capable of clearing, dispatching, and pricing Energy, Operating Reserve, Up Ramp Capability, and Down Ramp Capability in a simultaneously co-optimized basis that minimizes Production Costs and Operating Reserve Costs while enforcing multiple security constraints. The algorithm keeps the commitment of Resources fixed in the dispatch. The model is described in Schedule 29.
Security Constrained Economic Dispatch Pricing (SCED-Pricing): An algorithm capable of clearing, dispatching, and pricing Energy, Operating Reserve, Up Ramp Capability, and Down Ramp Capability in a simultaneously co-optimized basis that minimizes Production Costs and Operating Reserve Costs while enforcing multiple security constraints. The model is described in Schedule 29A.

Security Constrained Unit Commitment (SCUC): An algorithm capable of committing Resources to supply Energy, Operating Reserve, Up Ramp Capability, and Down Ramp Capability on simultaneously co-optimized basis that minimizes Capacity costs while enforcing multiple security constraints.

Selected Developer(s): The RFP Respondent(s) identified in the Selected Proposal. Selected Developers shall not include Proposal Participants.

Selected Developer Agreement (SDA): An agreement, in the form provided in Appendix 1 of Attachment FF of the Tariff, between a Selected Developer, including existing Transmission Owners, ITCs, and Non-owner Members, and the Transmission Provider establishing the terms and conditions under which the Selected Developer will construct and implement the Competitive Transmission Facilities specified in its Selected Proposal. Among other terms, the Selected Developer Agreement shall include any binding cost control measures, including cost caps, which the Selected Developer specified in its Selected Proposal.

Selected Proposal: The Proposal selected for implementation by the Competitive Transmission Executive Committee, pursuant to Attachment FF of the Tariff.

Self Schedule: The designation by a Market Participant of a specific amount of Energy and/or
Operating Reserve and/or capacity to be supplied from a specific Resource or Planning Resource as a Price Taker.

**Self-Scheduled Resource:** A Resource that is scheduled by a Market Participant and controlled by the same Market Participant under the overall coordination of the Transmission Provider. A Self-Scheduled Resource is a Price Taker for the portion of the Resource that is Self Scheduled.

**Service Agreement:** The initial agreement and any amendments or supplements thereto entered into by the Tariff Customer and the Transmission Provider for service under this Tariff, including, without limitation, any service agreement executed pursuant to Section 27A (an HVDC Service Agreement), Module F, and Attachment KK of the Tariff.

**Service Commencement Date:** The date the Transmission Provider or ITC begins to provide service pursuant to the terms of an executed Service Agreement, or the date the Transmission Provider or ITC begins to provide service in accordance with Section 15.3 or Section 29.1 under this Tariff.

**Setpoint Instruction:** The real-time desired MW output signal calculated for a specific Resource by the Transmission Provider’s control system on a specified periodicity that is equal to the current Energy Dispatch Target plus the Regulating Reserve Deployment instruction (which may be positive or negative) plus an adjustment to the Energy Dispatch Target to account for Contingency Reserve Deployment Instructions. The Setpoint Instruction represents the desired output level of the Resource.

**Settlement:** The process of determining charges to be paid to or by a Market Participant in the Energy and Operating Reserve Markets operated by the Transmission Provider under this
Settlement Statements: Reports provided by the Transmission Provider to Market Participants containing some aggregate and some detailed charge type information and determinant data regarding financial obligations for Energy and Operating Reserve Market activities and services, allowing for the verification by the Market Participant of Settlements invoiced amounts.

Shadow Price: The marginal value of relieving a particular constraint.

Shortfall Amount: The difference between a Resource’s Contingency Resource Deployment Instruction and the actual amount of Contingency Reserve deployed by that Resource at the end of the Contingency Reserve Deployment Period.

Short-Term Firm Point-To-Point Transmission Service: Firm Point To Point Transmission Service under Module B of this Tariff with a term of less than one (1) Year.

Short-Term High-Voltage Direct Current Service: HVDC Service under Section 27A of this Tariff with a term of less than one (1) year.

Shut-Down Offer: The compensation required by a Market Participant for reducing the consumption of a Demand Response Resource Type-I.

Shut-Down Notification Time: The amount of notification time required by a Demand Response Resource-Type I prior to the initiation of demand reduction procedures.

Shut-Down Time: The time required for a Demand Response Resource Type I to reduce consumption equal to its Targeted Demand Reduction Level or the time required for a Demand Resource to reduce consumption equal to its targeted Load reduction level or firm service level.
**Significant Trade Reference:** Trade reference provided to Transmission Provider in the registration process which are of a significant nature, as determined by Transmission Provider in its sole discretion.

**Simultaneous Feasibility Test:** A test for a state in which each set of injections and withdrawals associated with receipt point-to-delivery point FTRs and ARRs, and power transfers associated with FTRs and ARRs, would not exceed any thermal, voltage, or stability limits within the Transmission Provider Region under normal operating conditions or for monitored contingencies.

**Single-Developer Proposal:** A Proposal submitted by a single RFP Respondent that would become the sole Selected Developer for the Competitive Transmission Project, should its Single-Developer Proposal be designated as the Selected Proposal by the Transmission Provider.

**Single-Directional-Down Ramp Rate Curve:** The MW/minute ramp rate curve, that may include up to ten (10) linear segments at which a Generation Resource or Demand Response Resource-Type II can respond to the Setpoint Instructions in the downward direction only.

**Single-Directional-Up Ramp Rate Curve:** The MW/minute ramp rate curve, that may include up to ten (10) linear segments, at which a Generation Resource or Demand Response Resource-Type II can respond to the Setpoint Instructions in the upward direction only.

**Sink Point:** The Commercial Pricing Node at which a Financial Schedule terminates.

**Source Point:** The Commercial Pricing Node at which a Financial Schedule originates.

**Spin Qualified Resource:** A Generation Resource, an External Asynchronous Resource, a
Demand Response Resource-Type I, a Demand Response Resource-Type II, or a Stored Energy Resource – Type II that has met the requirements to be eligible to submit Spinning Reserve Offers into the Energy and Operating Reserve Markets.

**Spinning Reserve**: A specified percentage, based on Applicable Reliability Standards, of Contingency Reserve that must be synchronized to the Transmission System and that meets all Applicable Reliability Standards, and that can be converted to Energy within the Contingency Reserve Deployment Period following a deployment instruction.

**Spinning Reserve Offer**: The price, in dollars per MW per Hour, at which a Spinning Reserve Qualified Resource has agreed to sell Spinning Reserve.

**Start-Up Notification Time**: The amount of notification time required by a Generation Resource prior to the initiation of start-up procedures or the amount of notification time required for a Demand Response Resource Type II or Stored Energy Resource – Type II prior to the initiation of demand reduction procedures, from a hot state, intermediate state and cold state.

**Start Up Offer**: The compensation required by a Market Participant for bringing an off line Generation Resource on line or for reducing consumption of a Demand Response Resource-Type II or Stored Energy Resource – Type II.

**Start-Up Time**: The number of Hours required to start a Generation Resource, Demand Response Resource-Type II, LMR, or Stored Energy Resource – Type II and synchronize with the Transmission Provider Region to Hourly Economic Minimum Limit consistent with the Applicable Reliability Standards from a hot state, intermediate state or cold state.
**State Estimator:** A software program used by the Transmission Provider to create a real time assessment of the condition of the Transmission Provider Region.

**State Estimator MWs:** The megawatts that are determined by the State Estimator to be generated at a given location for each Dispatch Interval.

**State of Charge:** The Regulating Reserve available to the Transmission Provider’s markets from a Stored Energy Resource; or the Energy, Capacity, Spinning Reserve, Supplemental Reserve and/or Regulating Reserve available to the Transmission Provider’s markets from a Stored Energy Resource – Type II.

**Statement of Support:** A document that the Transmission Provider provides to Transmission Developer Applicants for submission with a Transmission Developer Application, which:

1. is executed by an Affiliate of a Transmission Developer Applicant;
2. lists specific qualifications, capabilities, and/or competencies that the Affiliate possesses and intends to make available to the Transmission Developer Applicant in order to assist the Transmission Developer Applicant with meeting one or more of the prequalification requirements set forth in Sections VIII.B.4, VIII.B.4.1, VIII.B.4.2, VIII.B.4.3, and/or VIII.B.4.4 of Attachment FF to the Tariff; and
3. authorizes the Transmission Developer Applicant to represent during the annual prequalification and recertification processes set forth in Sections VIII.B.2 and VIII.B.3 of Attachment FF to the Tariff that such Transmission Developer Applicant will have access to the specified qualifications, capabilities, and/or competencies.

**Station Power:** The Energy used for operating the electrical equipment on the site of a Generation Resource and/or for the lighting, heating, air-conditioning and office
equipment needs of buildings located on the site of such a Generation Resource that are used in the operation, maintenance, or repair of the facility. Station Power does not include Energy (i) used for pumping at a pumped storage facility; (ii) to power synchronous condensers; (iii) in association with power system restoration or blackstart service, or (iv) used for charging a Stored Energy Resource or a Stored Energy Resource – Type II. Station Power may only be provided pursuant to Schedule 20 of this Tariff.

**Storage As Transmission Only Asset (SATOA):** An Electric Facility connected to or to be connected to the Transmission System and approved for inclusion in Appendix A of the MTEP, as a transmission facility that is part of the Transmission System, that is capable of receiving Energy from the Transmission System and storing Energy for injection to the Transmission System, and is operated only to support the Transmission System. The SATOA shall not participate in the Transmission Provider’s markets except to the extent necessary to receive Energy from the Transmission System and to inject Energy into the Transmission System to provide the services for which the SATOA was included in the MTEP.

**Stored Energy Resource:** A Resource capable of supplying Regulating Reserve, but not Energy, Contingency Reserve, Up Ramp Capability, and Down Ramp Capability through the short-term storage and discharge of electrical Energy in response to Setpoint Instructions.

**Stored Energy Resource Offer:** A Regulating Capacity Offer and a Regulating Mileage Offer submitted by a Market Participant within the MISO Balancing Authority Area for the output of a specified Stored Energy Resource to supply Regulating Reserve to the Energy and Operating Reserve Markets.
Stored Energy Resource – Type II: A Resource either behind or in front of the meter capable of supplying Energy, Capacity, Spinning Reserve, Supplemental Reserve, Regulating Reserve, Up Ramp Capability, and/or Down Ramp Capability, through the storage and discharge of electrical Energy in response to Setpoint Instructions, including but not limited to negative dispatch levels, and whose State of Charge is managed by the Market Participant operating the Resource. A Stored Energy Resource – Type II shall be registered, modeled, offered and dispatched, as well as monitored and mitigated, as a Demand Response Resource – Type II, and shall use the Offer template for a Demand Response Resource – Type II, provided, that:

(1) An SER – Type II will not be settled and compensated as a Demand Response Resource – Type II for any negative dispatch, and instead shall be treated as a regular Generation Resource for settlement purposes, except that an SER – Type II shall not be eligible for Day-Ahead Revenue Sufficiency Guarantee Payments, Real-Time Revenue Sufficiency Guarantee Credit, Real-Time Offer Revenue Sufficiency Guarantee Payment and Day-Ahead Margin Assurance Payment.

(2) Reference Levels of SER – Type II shall be determined in accordance with section 64.1.4.a.i, 64.1.4.a.ii, and 64.1.4.b.i of this Tariff.

Stored Energy Resource – Type II Offer: An Offer submitted by a Market Participant within the MISO Balancing Authority Area for the output of a specified Stored Energy Resource – Type II to supply Energy, Capacity, Spinning Reserve, Supplemental Reserve and/or Regulating Reserve to the Energy and Operating Reserve Markets.

Sub-Area: A Reserve Zone, or any other portion of the MISO Balancing Authority Area
identified by MISO as described in MISO’s emergency operating procedures, that may require the implementation of emergency actions to address a local reliability problem.

**Sub-Regional Export Constraint (SREC):** The amount of Planning Resources in megawatts modeled in the PRA within an applicable Sub-Regional Resource Zone (SRRZ) that can be cleared in excess of the total individual LRZ’s PRMR comprising the SRRZ in accordance with applicable seams agreements, coordination agreements, or transmission service agreements.

**Sub-Regional Import Constraint (SRIC):** The amount of Planning Resources in megawatts modeled in the PRA, not within an applicable Sub-Regional Resource Zone (SRRZ), that can be cleared to meet the total PRMR of the individual LRZs comprising the SRRZ in accordance with applicable seams agreements, coordination agreements, or transmission service agreements.

**Sub-Regional Power Balance Constraint:** A net Energy injection and withdrawal constraint established to manage intra-regional flows in accordance with applicable seams agreements, coordination agreements, transmission service agreements, or operating procedures.

**Sub-Regional Power Balance Constraint Demand Curve:** A demand curve used to price Sub-Regional Power Balance Constraints.

**Sub-Regional Resource Zone (SRRZ):** A zone, comprised of a LRZ or combination of two or more LRZs, established by the Transmission Provider for Resource Adequacy Requirements under Module E-1 or E-2 to administer constraints in accordance with...
applicable seams agreements, coordination agreements, or transmission service agreements.

Supervisory Control and Data Acquisition (SCADA) Data: The electric system security data that is used to monitor the electrical state of facilities, as specified in NERC Policy 4.

Supplemental Qualified Resource: A Spin Qualified Resource, or a Demand Response Resource-Type I or, a Generation Resource, Demand Response Resource Type-II, Stored Energy Resource – Type II, or an External Asynchronous Resource that is not a Spin Qualified Resource that has met the requirements to be eligible to submit Supplemental Reserve Offers into the Energy and Operating Reserve Markets.

Supplemental Reserve: Contingency Reserve that is not considered Spinning Reserve that can be converted to Energy within the Contingency Reserve Deployment Period and that meets all Applicable Reliability Standards.

Supplemental Reserve Offer: The price, in dollars per MW per Hour, at which a Demand Response Resource Type I or an External Asynchronous Resource that is a Supplemental Reserve Qualified Resource has agreed to sell Supplemental Reserve.

Suspend: The cessation of operation of a Generation Resource or an SCU for more than two (2) months commencing on a specified date that is provided to the Transmission Provider, that includes the right to rescind or modify the Attachment Y Notice for a period ending no later than thirty-six (36) months after the start date specified in an original (i.e. initial, first) Attachment Y Notice, consistent with the requirements in Section 38.2.7 and Attachment X.

Synchronous Condenser Unit (SCU): A facility that can be synchronized to the Transmission
Provider’s Transmission System without producing Energy.

**System Auction Clearing Price (System ACP):** The marginal value (“shadow price”) associated with the system-wide Demand constraint. This Demand constraint ensures that the amount cleared, in all LRZs, is at least equal to the total PRMR in all LRZs. The marginal value of this constraint provides a quantitative result of the value of obtaining the marginal MW from the non-export-constrained LRZ(s).

**System Condition:** A specified condition on the Transmission System or on a neighboring transmission system, such as a constrained transmission element or flowgate, that may trigger Curtailment of Long-Term Firm Point-To-Point Transmission Service or Long-Term Firm HVDC Service using the curtailment priority pursuant to Section 13.6 or 27A.1.5 of this Tariff, respectively. Such conditions must be identified in the Transmission Customer’s Service Agreement or HVDC Service Agreement.

**System Impact Study:** An assessment by the Transmission Provider and ITC, as applicable, of (i) the adequacy of the Transmission System to accommodate a request for either Firm Point-To-Point Transmission Service or Network Integration Transmission Service and (ii) whether any additional costs may be incurred in order to provide Transmission Service. System Impact Studies for any transmission facilities not under the operational control of the Transmission Provider or ITC shall be performed by the Transmission Owner or applicable ITC Participant or any entity the Transmission Provider designates to perform the studies.

**System Losses:** The transmission losses experienced on the Transmission System as determined by the Network Model.
**System Operating Limit (SOL):** The value (such as MW) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. Also referred to as Operating Security Limit.

**System Purchase Contracts:** Agreements for the purchase of Energy that do not specify the Resource(s) that the seller shall select to supply such Energy at any particular time; provided, however, that such agreements may identify the group of Resources from which the seller may make its selection; provided, further that this term does not include agreements with Manitoba Hydro involving the supply of Energy from resources in Canada up to or at the U.S. border.

**System Restoration Plans:** The plans developed by the individual Transmission Operators, and coordinated by the Transmission Provider acting in its capacity as the Reliability Coordinator, to enable a system restoration zone to re-energize the Transmission System following a system-wide blackout.

**System Support Resource (SSR):** Generation Resources or Synchronous Condenser Units that have been identified in Attachment Y – Notification to this Tariff and are required by the Transmission Provider for reliability purposes, to be operated in accordance with the procedures described in Section 38.2.7 of this Tariff.

**SSR Agreement:** An agreement identified as Attachment Y 1 to this Tariff that the Transmission Provider, the owner or operator of an SSR Unit executes to provide the terms and conditions under which the SSR Unit will be operated and compensated.

**SSR Notification:** The form in Attachment Y of this Tariff that the owner or operator of a Generation Resource or a Synchronous Condenser Unit must complete and send to the
Transmission Provider at least twenty-six (26) weeks prior to Retiring or Suspending any Generation Resource or Synchronous Condenser Unit located within the Transmission Provider Region, consistent with the requirements in Section 38.2.7.

**SSR Unit:** A Generation Resource or a Synchronous Condenser Unit that is operated and compensated in accordance with an SSR Agreement.
Credits for Real-Time Energy and Operating Reserve Market Sales

a. Real-Time Energy Credits

i. Non-Excessive Energy Credits. Market Participants are credited the applicable Real-Time Ex Post LMP for Non-Excessive Energy for Generation Resources, Stored Energy Resources, Stored Energy Resources – Type II, and External Asynchronous Resources for Import Schedules pursuant to Section 40.3.4, net of Real-Time Financial Schedules, that exceeds their Day-Ahead Scheduled Injections (and will be charged for Non-Excessive Energy, net of Real-Time Financial Schedules, deviations below their Day-Ahead Scheduled Injections). The applicable Real-Time Ex Post LMP is the LMP at the Commercial Pricing Node at which the injection occurs.

A. Non-Excessive Energy Credits for Storage as Transmission Only Asset. Market Participants are credited the applicable Real-Time Ex Post LMP for Non-Excessive Energy for Storage as Transmission Only Assets (and will be charged for Non-Excessive Energy withdrawals). The applicable Real-Time Ex Post LMP is the LMP at the Commercial Pricing Node at which the injection (or withdrawal) occurs.

ii. Excessive Energy Credits. Market Participants are credited the Dispatch Interval Excessive Energy Price for Excessive Energy, as calculated pursuant to Section 40.3.4, where there is Excessive Energy, Deficient Energy or any combination thereof in four (4) or more consecutive Dispatch Intervals in a specific Hour. The Dispatch Interval Excessive Energy Price for Generation Resources (except...
Dispatchable Intermittent Resources), Demand Response Resource – Type I, Demand Response Resource – Type II, External Asynchronous Resource and Stored Energy Resource – Type II is the lesser of (1) the Real-Time Ex Post LMP and (2) the greater of (a) the Energy Offer at the Dispatch Target and (b) zero.

The Dispatch Interval Excessive Energy Price for Dispatchable Intermittent Resources is the lesser of: First, the Real-Time Ex Post LMP; or Second, the product of: (1) the Real-Time Ex Post LMP and (2) maximum of (a) 1 minus the quotient of Excessive Energy divided by the Excessive Energy Tolerance and (b) zero.

Excessive Energy associated with Stored Energy Resources is settled at the Real-Time Ex Post LMP.

b. **Real-Time Operating Reserve and Regulating Mileage Credits**

i. **Real-Time Energy and Operating Reserve Market Regulating Mileage Sales Definitions.** For the purposes of calculating credits for Real-Time Energy and Operating Reserve Market Regulating Mileage Sales, the following terms are calculated as follows:

Instructed Total Mileage is calculated as the sum of the absolute values of up and down movement during a Dispatch Interval, in MW, that a resource is asked to provide in response to Setpoint Instructions using the resource’s applicable ramp rate.

Instructed Energy Mileage is calculated as the sum of the absolute values of the up and down movement during a Dispatch Interval, in MW, that a resource is
Instructed Regulating Mileage is calculated as the difference between Instructed Total Mileage and Instructed Energy Mileage for each Dispatch Interval. Regulating Mileage Target is calculated as the minimum of the Instructed Regulating Mileage and the Desired Resource Response for a Dispatch Interval. Additional Regulating Mileage is calculated as the positive difference between the Regulating Mileage Target for a Resource and the Regulating Mileage considered in the Regulating Total Cost for the Resource during a Dispatch Interval. Undeployed Regulating Mileage is calculated as the positive difference between the Regulating Mileage considered in the Regulating Total Cost for a Resource and the Regulating Mileage Target for the Resource during a Dispatch Interval. The Regulating Mileage considered in the Regulating Total Cost for a Resource during a Dispatch Interval is equal to the Regulating Reserve Dispatch Target multiplied by the Market-wide Regulating Mileage Deployment Ratio. The Transmission Provider shall update the Market-wide Regulating Deployment Ratio each month for the upcoming month to reflect changes in actual regulation deployment. The study will use data from the 15th of the previous month to the 15th of the current month to calculate the Market-wide Regulating Mileage Deployment Ratio that is effective starting the first of the upcoming month. The Market-wide Regulating Mileage Deployment Ratio is equal to the average of the ratio between the Regulating Mileage Target in a Dispatch Interval and the
Regulating Reserve Dispatch Target in that Dispatch Interval for all Resources for all Dispatch Intervals with non-zero Regulating Reserve Dispatch Targets.

ii. Regulating Reserve Credit. Market Participants are credited the Real-Time Ex Post MCP for any positive difference between the Real-Time cleared amounts for Regulating Reserve within a Dispatch Interval in an Hour and their Day-Ahead Schedule for Regulating Reserve in that Hour (and will be charged the Ex Post MCP for any negative difference between the Real-Time cleared amounts for Regulating Reserve within a Dispatch Interval in an Hour and their Day-Ahead Schedule for Regulating Reserve in that Hour). The applicable Ex Post MCP for Regulating Reserve is for the Commercial Pricing Node at which the procurement occurs. The Regulating Reserve Credit will be reduced by the product of the Ex Post MCP for Regulating Mileage and Undeployed Regulating Mileage for each Dispatch Interval in the Hour. The sum of Regulating Reserve Credits in the Hour will also be augmented by the Undeployed Regulating Mileage Revenue Sufficiency Guarantee Credit as set forth in Schedule 3.

iii. Spinning Reserve Credits. Market Participants are credited the Real-Time Ex Post MCP for any positive difference between the Real-Time cleared amounts for Spinning Reserve within the Dispatch Interval in an Hour and their Day-Ahead Schedule for Spinning Reserve in that Hour (and will be charged the Real-Time Ex Post MCP for any negative difference between the Real-Time cleared amounts for Spinning Reserve within a Dispatch Interval in an Hour and their Day-Ahead Schedule for Spinning Reserve in that Hour). The applicable Ex Post MCP for
Spinning Reserve is for the Commercial Pricing Node at which the procurement occurs.

iv. Supplemental Reserve Credits. Market Participants are credited the Real-Time Ex Post MCP for any positive difference between the Real-Time cleared amounts for Supplemental Reserve within a Dispatch Interval in an Hour and their Day-Ahead Schedule for Supplemental Reserve in that Hour (and will be charged for any negative difference between the Real-Time cleared amounts for Supplemental Reserve within a Dispatch Interval in an Hour less their Day-Ahead Schedule for Supplemental Reserve in that Hour). The applicable Real-Time Ex Post MCP for Supplemental Reserve is for the Commercial Pricing Node at which the procurement occurs.

v. Regulating Mileage Credit. Market Participants are credited the Hourly Real-Time Ex Post Regulating Mileage MCP for the sum of Additional Regulating Mileage for each Dispatch Interval in an Hour.

c. **Real-Time Revenue Sufficiency Guarantee Credit.** The Transmission Provider shall determine, on a daily basis, whether any Generation Resource or Demand Response Resource committed by the Transmission Provider in the Real-Time Energy and Operating Reserve Market did not recover the sum of the Resource’s eligible Production Cost and Operating Reserve Cost through the revenue received through the Real-Time Energy and Operating Reserve Market during the SCUC-Instructed Hours of Operation. In addition, the Transmission Provider shall determine on an hourly basis whether External Asynchronous Resources Export Schedule charges are greater than the energy
value for export, calculated as the area under the Energy Offer curve for export Energy. If there is a shortfall, the Transmission Provider shall augment the Market Participant’s revenue with a Real-Time Revenue Sufficiency Guarantee Credit, pursuant to Section 40.3.3.3.c.iii.

i. Real-Time Revenue Sufficiency Guarantee Full Payment Criteria. In order to be eligible for full payment of Real-Time Revenue Sufficiency Guarantee Credit, all Hours in the SCUC Instructed Hours of Operation for a Resource must comply with the following requirements, provided that the specified Offer data shall include any overrides entered by the Transmission Provider at the request of the Market Participant that owns or represents the Resource:

(a) The Resource must not receive an Excessive/Deficient Energy Deployment Charge, pursuant to Section 40.3.4, during an Hour. Any Resource receiving an Excessive/Deficient Energy Deployment Charge in an Hour will be subject to a Real-Time Revenue Sufficiency Guarantee Credit reduction, pursuant to Section 40.3.3.3.c.ii.b, for that Hour and all remaining contiguous Hours in the Real-Time SCUC Instructed Hours of Operation.

(b) For all Resources other than Demand Response Resource Type-I, the real-time Economic Minimum Dispatch must be less than or equal to the maximum of:

(i) the as-committed Hourly Economic Minimum Limit; (ii) the as-committed self-schedule MW for instances where the Energy Dispatch Status is self-schedule; or (iii) the as-committed Hourly Regulation Minimum for instances where the Resource is scheduled to potentially provide Regulating Reserve. For
Demand Response Resource - Type I, the real-time Dispatch Target for Energy must be less than or equal to the as committed Targeted Demand Reduction Level. This criterion will be checked for each Dispatch Interval within the Hour and for each Hour of the contiguous Real-Time SCUC Instructed Hours of Operation, sequentially. If four or more consecutive Dispatch Intervals in an Hour fail to meet this criterion, the Resource will be subject to a Real-Time Revenue Sufficiency Guarantee Credit reduction, pursuant to Section 40.3.3.3.c.ii.b, for that Hour and all remaining contiguous Hours in the Real-Time SCUC Instructed Hours of Operation.

(c) In addition, for Resources where all limits used in the Real-Time Energy and Operating Reserve Market within the Dispatch Interval have a dispatch range of greater than 1MW, the following criteria must also be satisfied:

(i) The Real-Time ramp rate utilized by the Unit Dispatch System (UDS) must be greater than 0.5 MW/minute.

(ii) The Real-Time ramp rate utilized by the Unit Dispatch System must be greater than one-half of one percent (0.5%) of the real-time Hourly Economic Maximum Limit of the Generation Resource or Demand Response Resource-Type II per minute and non-decreasing except where:

(1) Resource output is greater than or equal to ninety percent (90%) of the real-time Hourly Economic Maximum Limit as determined by the Unit Dispatch System, then real-time ramp rate utilized by the Unit Dispatch System must be greater than one-half (0.5) MW/minute.
(2) Resource output is less than or equal to the real-time Hourly Economic Minimum Limit plus ten percent (10%) of the real-time Hourly Economic Maximum Limit as determined by the Unit Dispatch System, in which case the real-time ramp rate utilized by the Unit Dispatch System must be greater than one-half (0.5) MW/minute.

(iii) These criteria will be checked for each Dispatch Interval within the Hour and for each contiguous Hour of the SCUC Instructed Hours of Operation, sequentially. If four or more consecutive Dispatch Intervals in an Hour fail to meet these criteria, the Resource will be subject to a Real-Time Revenue Sufficiency Guarantee Credit reduction, pursuant to Section 40.3.3.3.c.ii.b, for that Hour and the subsequent Hours of the Real-Time SCUC Instructed Hours of Operation.

(d) For all Resources other than Demand Response Resource Type-I, the Resource Offer Up and Down Ramp Capability Dispatch Status must be Economic. This criterion will be checked for each Dispatch Interval within the Hour and for each Hour of the contiguous Real-Time SCUC Instructed Hours of Operation, sequentially. If four or more consecutive Dispatch Intervals in an Hour fail to meet this criterion, the Resource will be subject to a Real-Time Revenue Sufficiency Guarantee Credit reduction, pursuant to Section 40.3.3.3.c.ii.b, for that Hour and all remaining contiguous Hours in the Real-Time SCUC Instructed Hours of Operation.
ii. Calculation of Real-Time Revenue Sufficiency Guarantee Credit for Real-Time SCUC Instructed Hours of Operation

(a) Revenue Sufficiency Guarantee Full Payment: Resources that satisfy the Real-Time Revenue Sufficiency Guarantee Full Payment Criteria described in Section 40.3.3.3.c.i shall receive a Real-Time Revenue Sufficiency Guarantee Credit for the Real-Time SCUC Instructed Hours of Operation in the current Operating Day, as described below.

If the sum of the Generation Resource’s or Demand Response Resource’s Production Cost (based on Non-Excessive Energy injection) and Operating Reserve Cost is greater than the revenue over each contiguous commitment period for that Resource, then the Market Participant’s Real-Time Energy and Operating Reserve Market credits shall be augmented by an additional credit called the Real-Time Revenue Sufficiency Guarantee Credit in the amount of the revenue shortfall, spread over all the Hours in that contiguous commitment period. The determination of such credit shall consider only Operating Reserve Costs associated with real-time Operating Reserves volumes that are greater than the day-ahead Operating Reserve volumes. The revenue shall be calculated as the sum of the following values:

(i) Energy Revenue. For Generation Resources and Demand Response Resources, as determined, for all Dispatch Intervals in an Hour, by the sum of the products of: (1) the Non-Excessive Energy injections; (2) the Real-Time Ex Post LMP; and (3) the duration of the Dispatch Interval expressed in Hours;
(ii) Operating Reserve Revenue. The sum of: real-time Regulating Reserve revenue as determined by the sum, for all Dispatch Intervals in an Hour, of the products of: (1) the real-time Regulating Reserve volume; (2) the real-time Regulating Reserve Ex Post MCP; and (3) the duration of the Dispatch Interval expressed in Hours; and the sum, as determined as follows, of the real-time Contingency Reserve revenue for all Dispatch Intervals in the real-time SCUC Instructed Hours of Operation, plus any applicable Minimum Down Time requirements in the current Operating Day:

(a) If the day-ahead Contingency Reserve volume is greater than zero and greater than the real-time Contingency Reserve volume, the real-time Contingency Reserve revenue is determined by the product of: (1) the real-time Contingency Reserve volume minus the day-ahead Contingency Reserve volume; (2) the real-time Contingency Reserve Ex Post MCP minus the day-ahead Contingency Reserve offer cost; and (3) the duration of such Dispatch Intervals expressed in Hours;

(b) If the day-ahead Contingency Reserve volume is greater than zero and less than or equal to the real-time Contingency Reserve volume, the real-time Contingency Reserve revenue is determined by the product of: (1) the real-time Contingency Reserve volume minus the day-ahead Contingency Reserve volume; (2) the real-time Contingency Reserve Ex Post MCP; and (3) the duration of such Dispatch Intervals expressed in Hours;

(c) If the day-ahead Contingency Reserve volume is equal to zero, the real-time Contingency Reserve revenue is determined by the product of: (1) the
real-time Contingency Reserve volume; (2) the real-time Contingency Reserve Ex Post MCP; and (3) the duration of such Dispatch Intervals expressed in Hours.

(iii) Regulating Reserve Deployment Revenue. Real-time Regulating Reserve Deployment revenue as determined, for all Dispatch Intervals in an Hour, by the sum of the product of: (1) the Regulating Reserve Deployment charge/credit determined pursuant to Section 40.3.3.1.a.vi; and (2) the duration of the Dispatch Intervals expressed in Hours.

(iv) Ramp Capability Revenue. Ramp Capability Revenue as determined for the Hour by the sum of (a) the Up Ramp Capability Credit pursuant to Section 40.3.3.1.b.i; and (b) the Down Ramp Capability Credit pursuant to Section 40.3.3.1.b.ii.

(b) Revenue Sufficiency Guarantee Credit Reduction

(i) Energy Revenue Reduction: For any Resource that fails to meet the Real-Time Revenue Sufficiency Guarantee Full Payment Criteria for an Hour during the Real-Time SCUC Instructed Hours of Operation, the Revenue Sufficiency Guarantee Full Payment calculation shall be modified such that the Production Costs and Energy Revenue will be based on the eligible MW value. For all Resources other than Demand Response Resource Type-I, the eligible MW value for a given Dispatch Interval is equal to the lesser of: (1) the Actual Energy Injection; (2) the Excessive Energy Threshold; (3) the Hourly Economic Minimum Limit used by the UDS for the Dispatch Interval; (4) the as-committed self-schedule MW for instances where the Energy Dispatch Status is self-
schedule; or (5) the Hourly Regulation Minimum Limit used by the UDS for the Dispatch Interval for instances where the Resource is scheduled to potentially provide Regulating Reserve. For Demand Response Resource Type-I, the eligible MW value is equal to the lesser of: (1) the Actual Energy Injection; or (2) the as-committed Targeted Demand Reduction Level.

(ii) Ineligible Energy Margin: In order to avoid increasing the total Real-Time Revenue Sufficiency Guarantee Credit for a Resource that fails to meet the Real-Time Revenue Sufficiency Guarantee Full Payment Criteria, the Transmission Provider shall also include any additional energy margin that results from Revenue Sufficiency Guarantee Credit Reduction. The additional energy margin is calculated as the greater of: (1) the difference between (a) the Energy Revenue associated with Actual Energy Injections between the eligible MW value and the Non-Excessive Energy injections; and (b) the Production Costs for the Energy associated with Actual Energy Injections between the eligible MW value and the Non-Excessive Energy injections; and (2) zero.

iii. External Asynchronous Resources Export Schedule Real-Time Revenue Sufficiency Guarantee Credit. The hourly basis External Asynchronous Resources Export Schedule credit is the product of 1) the net positive difference between (a) the Real-Time Hourly Export Energy value, and (b) the Day-Ahead Hourly Export Energy value, and 2) the Real-Time Hourly LMP at the External Asynchronous Resources Commercial Pricing Node. The hourly basis for the External Asynchronous Resources Export energy value is the area under the
iv. Cost Allocation. This credit shall be supported through revenue collected from the Real-Time Revenue Sufficiency Guarantee Charge.

d. Applicability of Excessive/Deficient Energy Deployment Charges and Contingency Reserve Deployment Failure Charges

The provisions of Section 40.3.4 related to Excessive/Deficient Energy Deployment Charges and Contingency Reserve Deployment Failure Charges shall apply to Resources irrespective of the provisions of this Section.
ATTACHMENT X

GENERATOR INTERCONNECTION PROCEDURES (GIP)

SECTION 1. DEFINITIONS.

10 kW Inverter Process shall mean the procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the screen set forth in Section 14.

Adverse System Impact shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

Affected System shall mean an electric transmission or distribution system or the electric system associated with an Existing Generating Facility or of a higher queued Generating Facility, which is an electric system other than the Transmission Owner’s Transmission System that is affected by the Interconnection Request. An Affected System may or may not be subject to FERC jurisdiction.

Affected System Operator shall mean the entity that operates an Affected System.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Ancillary Services shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission System in accordance with Good Utility Practice.
Applicable Laws and Regulations shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.

Applicable Reliability Council shall mean the Regional Entity of NERC applicable to the Local Balancing Authority of the Transmission System to which the Generating Facility is directly interconnected.

Applicable Reliability Standards shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under section 215 of the Federal Power Act, as applicable.

Base Case shall mean the base case power flow, short circuit, and stability databases used for the Interconnection Studies by Transmission Provider or Interconnection Customer.

Breach shall mean the failure of a Party to perform or observe any material term or condition of the Generator Interconnection Agreement.

Breaching Party shall mean a Party that is in Breach of the Generator Interconnection Agreement.

Business Day shall mean Monday through Friday, excluding Federal Holidays.

Calendar Day shall mean any day including Saturday, Sunday or a Federal Holiday.

Commercial Operation shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.
Commercial Operation Date (COD) of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed by the Parties pursuant to Appendix E to the Generator Interconnection Agreement.

Common Use Upgrade shall mean an Interconnection Facility, Network Upgrade, System Protection Facility, or any other classified addition, alteration, or improvement on the Transmission System or the transmission system of an Affected System, not classified under Attachment FF as a Baseline Reliability Project, Market Efficiency Project, or Multi-Value Project, that is needed for the interconnection of multiple Interconnection Customers’ Generating Facilities and which is the shared responsibility of such Interconnection Customers.

Confidential Information shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 22 of the GIA, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.

Connection Facilities shall mean the Transmission Owner’s Connection Facilities and the MHVDC Connection Customer’s Connection Facilities, as defined in the MHCP.

Default shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Generator Interconnection Agreement.

Definitive Planning Phase shall mean the Generator Interconnection Procedures process which leads to a Generator Interconnection Agreement. The Definitive Planning Phase consists of three distinct phases (Definitive Planning Phases I, II, and III) pursuant to Section 7 of the Generator Interconnection Procedures.
**Definitive Planning Phase Queue Position** shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, in the Definitive Planning Phase. The Definitive Planning Phase Queue Position is established based upon the date Interconnection Customer satisfies all of the requirements of Section 7.2 of the Generator Interconnection Procedures to enter the Definitive Planning Phase.

**Demonstrated Capability** shall mean the continuous net real power output that the Generating Facility is required to demonstrate in compliance with Applicable Reliability Standards.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between or among the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Transmission Owner’s facilities and equipment, or the Distribution System of another party that is interconnected with Transmission Owner’s Transmission System, if any, connected to the Transmission System, over which facilities Transmission Service or Wholesale Distribution Service under the Tariff is available at the time Interconnection Customer has requested interconnection of a Generating Facility for the purpose of either transmitting electric energy in interstate commerce or selling electric energy at wholesale in interstate commerce and which are used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among Local Balancing Authorities and other entities owning distribution facilities interconnected to the Transmission System.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the delivery service necessary to affect Interconnection Customer’s wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.
Effective Date shall mean the date on which the Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.

Emergency Condition shall mean a condition or situation: (1) that in the reasonable judgment of the Party making the claim is imminently likely to endanger, or is contributing to the endangerment of, life, property, or public health and safety; or (2) that, in the case of either Transmission Provider or Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, Transmission Owner’s Interconnection Facilities or the electric systems of others to which the Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer’s Interconnection Facilities. System restoration and blackstart shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the Generator Interconnection Agreement to possess blackstart capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one of the enumerated conditions or situations identified in this definition also exists.

Energy Displacement Agreement shall mean an agreement between an Interconnection Customer with an Existing Generating Facility on the Transmission Provider’s Transmission System and an Interconnection Customer with a proposed Generating Facility seeking to interconnect with Net Zero Interconnection Service. The Energy Displacement Agreement specifies the term of operation, the Generating Facility Interconnection Service limit, and the mode of operation for energy production (common or singular operation).

Energy Resource Interconnection Service (ER Interconnection Service) shall mean an Interconnection Service that allows Interconnection Customer to connect its Generating
Facility to the Transmission System or Distribution System, as applicable, to be eligible to deliver the Generating Facility’s electric output using the existing firm or non-firm capacity of the Transmission System on an as available basis. Energy Resource Interconnection Service does not convey transmission service.

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Existing Generating Facility** shall mean a Generating Facility that is either under construction or is in service, and has an unsuspended interconnection agreement with its host transmission provider.

**Facilities Construction Agreement (FCA)** shall mean the form of facilities construction agreement, set forth in Appendix 8 to these Generator Interconnection Procedures. The FCA shall be used when an Interconnection Customer causes the need for the construction of Network Upgrades or System Protection Facilities on the transmission system of an Affected System.

**Fast Track Process** shall mean the procedure for evaluating an Interconnection Request for a certified Small Generating Facility no larger than five MW that includes the screen set forth in Section 14, customer options meeting, and optional supplemental review.

**Federal Holiday** shall mean a Federal Reserve Bank holiday for a Party that has its principal place of business in the United States and a Canadian Federal or Provincial banking holiday for a Party that has its principal place of business located in Canada.

**FERC** shall mean the Federal Energy Regulatory Commission, also known as Commission, or its successor.

**Final System Impact Study** shall mean the System Impact Study performed during Definitive Planning Phase III.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure event does not include an act of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer’s device(s) for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer’s Interconnection Facilities and shall not include a SATOA as defined in Module A. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.

**Generating Facility Capacity** shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

**Generating Facility Modification** shall mean modification to an Existing Generating Facility, including comparable replacement of only a portion of the equipment at the Existing Generating Facility.
Generating Facility Replacement shall mean replacement of one or more generating units and/or storage devices at an Existing Generating Facility with one or more new generating units or storage devices at the same electrical Point of Interconnection as those being decommissioned and electrically disconnected.

Generator Interconnection Agreement (GIA) shall mean the form of interconnection agreement, set forth in Appendix 6 to these Generator Interconnection Procedures.

Generator Interconnection Procedures (GIP) shall mean the interconnection procedures set forth herein.

Generator Upgrades shall mean the additions, modifications, and upgrades to the electric system of an Existing Generating Facility or of a higher queued Generating Facility at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the Transmission Service necessary to affect Interconnection Customer’s wholesale sale of electricity in interstate commerce.

Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

Governmental Authority shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental
authority having jurisdiction over the Parties, their respective facilities, or the respective services
they provide, and exercising or entitled to exercise any administrative, executive, police, or
taxing authority or power; provided, however, that such term does not include Interconnection
Customer, Transmission Provider, Transmission Owner, or any Affiliate thereof.

**Group Study(ies)** shall mean the process whereby more than one Interconnection
Request is studied together, instead of serially, for the purpose of conducting one or more of the
required Interconnection Studies.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or
included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,”
hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,”
toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or
words of similar meaning and regulatory effect under any applicable Environmental Law, or any
other chemical, material or substance, exposure to which is prohibited, limited or regulated by
any applicable Environmental Law.

**HVDC Facilities** shall mean the high voltage direct current transmission facilities,
including associated alternating current facilities, if any, that are subject to Section 27A of the
Tariff and that are specifically identified in (i) any Agency Agreement pertaining to such
facilities between Transmission Provider and Transmission Owner that owns or operates such
facilities, or (ii) in any other arrangement that permits or will permit Transmission Provider to
provide HVDC Service over such facilities as set forth in Section 27A of the Tariff.

**HVDC Service** shall mean Firm and Non-Firm Point-To-Point Transmission Service
provided by Transmission Provider on HVDC Facilities pursuant to Section 27A of the Tariff.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is
initially synchronized and upon which Trial Operation begins.
**Injection Rights** shall mean the Transmission Provider’s pre-certification of the Transmission System’s capability to receive capacity and energy from the MHVDC Transmission Line at the requested Point of Connection, and in the specified MW quantity, without degrading the reliability of the Transmission System, as described in Section 16 of the GIP and Section 3.2.3 of the MHCP.

**In-Service Date (ISD)** shall mean the date upon which Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Owner’s Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean any entity, including Transmission Provider, Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with the Transmission System.

**Interconnection Customer Decision Point I** shall mean the time period beginning when the Interconnection Customer is provided the Preliminary System Impact Study results including cost estimates for upgrades and concludes after fifteen (15) Business Days.

**Interconnection Customer Decision Point II** shall mean the time period beginning when the Interconnection Customer is provided the Revised System Impact Study results including cost estimates for upgrades and the Affected Systems analysis results including cost estimates for upgrades on the Affected System and concludes after fifteen (15) Business Days.

**Interconnection Customer’s Interconnection Facilities (ICIF)** shall mean all facilities and equipment, as identified in Appendix A of the Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission System or Distribution System, as applicable. Interconnection Customer’s Interconnection Facilities are sole use facilities.
**Interconnection Facilities** shall mean the Transmission Owner’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission System. Interconnection Facilities shall not include Distribution Upgrades, Generator Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by Transmission Provider, or its agent, for Interconnection Customer(s) to determine a list of facilities (including Interconnection Customer’s Interconnection Facilities, Transmission Owner’s Interconnection Facilities, System Protection Facilities, and if such upgrades have been determined, Network Upgrades, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and upgrades on Affected Systems, as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the Transmission System.

**Interconnection Request** shall mean (1) an Interconnection Customer’s request, in the form of Appendix 1 to the Generator Interconnection Procedures, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an Existing Generating Facility that is interconnected with the Transmission System, or to interconnect an Existing Generating Facility that is external to the Transmission System, or to change Energy Resource Interconnection Service to Network Resource Interconnection Service for an Existing Generating Facility; or (2) an MHVDC Connection Customer’s request, in the form of Appendix 1 to the Generator Interconnection Procedures, to obtain Injection Rights.

**Interconnection Service** shall mean the service provided by Transmission Provider associated with interconnecting the Generating Facility to the Transmission System, or external
host transmission provider if applicable, and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection pursuant to the terms of the Generator Interconnection Agreement or Point of Delivery as set forth in Service Agreement for Network Resource Interconnection Service for an External Generating Facility and, if applicable, the Tariff.

**Interconnection Study (or Study)** shall mean any of the following studies: the Replacement Impact Study, the Reliability Assessment Study, the Optional Study, the Interconnection System Impact Study, and the Interconnection Facilities Study, or the Restudy of any of the above, described in the Generator Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Generator Interconnection Procedures.

**Interconnection Study Agreement** shall mean the forms of agreement contained in Attachment B to Appendix 1 of the Generator Interconnection Procedures for conducting all studies required by the Generator Interconnection Procedures.

**IRS** shall mean the Internal Revenue Service.

**Local Balancing Authority** shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) provided in the Balancing Authority Agreement.
**Loss** shall mean any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party’s performance, or non-performance of its obligations under the Generator Interconnection Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified party.

**Material Modification** shall mean: (1) modification to an Interconnection Request in the queue that has a material adverse impact on the cost or timing of any other Interconnection Request with a later queue priority date; or (2) planned modification to an Existing Generating Facility that is undergoing evaluation for a Generating Facility Modification or Generating Facility Replacement, and has a material adverse impact on the Transmission System with respect to: i) steady-state thermal or voltage limits, ii) dynamic system stability and response, or iii) short-circuit capability limit; compared to the impacts of the Existing Generating Facility prior to the modification or replacement.

**Merchant HVDC Connection Customer (MHVDC Connection Customer)** shall mean any entity that proposes to interconnect an MHVDC Transmission Line with the Transmission System, as set forth in the MHCP.

**Merchant HVDC Connection Procedures (MHCP)** shall mean the connection procedures set forth in Attachment GGG to the Tariff.

**Merchant HVDC Transmission Connection Request (MHVDC Transmission Connection Request)** shall mean an MHVDC Connection Customer’s request, in the form of Appendix 1 to the MHCP to interconnect a new MHVDC Transmission Line, increase the capacity of an existing MHVDC Transmission Line, or make a substantial modification to the operating characteristics of an existing MHVDC Transmission Line.

Effective On: March 11, 2020
Merchant HVDC Transmission Connection Agreement (Transmission Connection Agreement or TCA) shall mean the form of the transmission connection agreement for merchant HVDC transmission facilities set forth in Appendix 2 to the MHCP.

Merchant HVDC Transmission Line (MHVDC Transmission Line) shall mean the merchant high voltage direct current transmission line external to the Transmission System that is proposed for connection to the Transmission System, as defined in the MHCP.

Metering Equipment shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

Monitoring and Consent Agreement shall mean an agreement that defines the terms and conditions applicable to a Generating Facility acquiring Net Zero Interconnection Service. The Monitoring and Consent Agreement will list the roles and responsibilities of an Interconnection Customer seeking to interconnect with Net Zero Interconnection Service and Transmission Owner to maintain the total output of the Generating Facility inside the parameters delineated in the GIA.

Multi-Party Facilities Construction Agreement (MPFCA) shall mean the form of facilities construction agreement, set forth in Appendix 9 to these Generator Interconnection Procedures. The MPFCA shall be used when multiple Interconnection Requests cause the need for the construction of Common Use Upgrades on the Transmission System or the transmission system of an Affected System and share cost responsibility for such Common Use Upgrades.

NERC shall mean the North American Electric Reliability Corporation or its successor organization.
Net Zero Interconnection Service shall mean a form of ER Interconnection Service that allows an Interconnection Customer to alter the characteristics of an Existing Generating Facility, with the consent of the Existing Generating Facility, at the same POI such that the Interconnection Service limit remains the same.

Network Customer shall have that meaning as provided in the Tariff.

Network Resource shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer’s Network Load on a non-interruptible basis.

Network Resource Interconnection Service (NR Interconnection Service) shall mean an Interconnection Service that allows Interconnection Customer to integrate its Generating Facility with the Transmission System in the same manner as for any Generating Facility being designated as a Network Resource. Network Resource Interconnection Service does not convey transmission service. Network Resource Interconnection Service shall include any network resource interconnection service established under an agreement with, or the tariff of, a Transmission Owner prior to integration into MISO, that is determined to be deliverable through the integration deliverability study process.

Network Upgrades shall mean the additions, modifications, and upgrades to the Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission System or Distribution System, as applicable, to accommodate the interconnection of the Generating Facility(ies) to the Transmission System. Network Upgrades shall not include any HVDC Facility Upgrades.

Notice of Dispute shall mean a written notice of a dispute or claim that arises out of or in connection with the Generator Interconnection Agreement or its performance.

Effective On: March 11, 2020
Operating Horizon Study shall mean an Interconnection System Impact Study that includes in service transmission and generation for an identified timeframe to determine either the available injection capacity of an Interconnection Request or Interconnection Facilities and/or Transmission System changes required for the requested Interconnection Service.

Optional Interconnection Study shall mean a sensitivity analysis based on assumptions specified by Interconnection Customer in the Optional Interconnection Study Agreement.

Optional Interconnection Study Agreement shall mean the form of agreement contained in Appendix 5 of the Generator Interconnection Procedures for conducting the Optional Interconnection Study.

Party or Parties shall mean Transmission Provider, Transmission Owner, Interconnection Customer, or any combination of the above.

Planning Horizon Study shall mean an Interconnection System Impact Study that includes a future year study to determine either the available injection capacity of an Interconnection Request or Interconnection Facilities and/or Transmission System changes required for the requested Interconnection Service.

Point of Change of Ownership (PCO) shall mean the point, as set forth in Appendix A to the Generator Interconnection Agreement, where the Interconnection Customer’s Interconnection Facilities connect to the Transmission Owner’s Interconnection Facilities.

Point of Connection shall mean the point, as set forth in an MHVDC Transmission Connection Request, where the MHVDC Transmission Line connects to the Transmission System.
Point of Interconnection (POI) shall mean the point, as set forth in Appendix A of the GIA, where the Interconnection Facilities connect to the Transmission System.

Preliminary System Impact Study shall mean the System Impact Study performed during Definitive Planning Phase I.

Pre-Queue Phase shall mean Interconnection Customer outreach and education effort undertaken prior to the submission of the Interconnection Request.

Provisional Interconnection Study shall mean an engineering study, performed at Interconnection Customer’s request, as a condition to entering into a provisional GIA, that evaluates the impact of the proposed interconnection on the safety and reliability of the Transmission System and, if applicable, any Affected System. The study shall identify and detail the impacts on the Transmission System and, if applicable, an Affected System, from stability, short circuit, and voltage issues that would result if the Generating Facility were interconnected without project modifications or system modifications.

Queue Position shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests. The Queue Position is established based upon the date and time of receipt of the valid Interconnection Request by Transmission Provider.

Reasonable Efforts shall mean, with respect to an action required to be attempted or taken by a Party under the Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Reliability Assessment Study shall mean an engineering study that evaluates the impact of a proposed Generating Facility Replacement on the reliability of Transmission System during the time period between the date that the Existing Generating Facility ceases commercial operations and the Commercial Operation Date of the Replacement Generating Facility.

Effective On: March 11, 2020
Replacement Generating Facility shall mean a Generating Facility that replaces an Existing Generating Facility, or a portion thereof, at the same electrical Point of Interconnection pursuant to Section 3.7 of this Attachment X.

Replacement Impact Study shall mean an engineering study that evaluates the impact of a proposed Generating Facility Replacement on the reliability of the Transmission System.

Revised System Impact Study shall mean the System Impact Study performed during Definitive Planning Phase II

Scoping Meeting shall mean the meeting between representatives of Interconnection Customer or MHVDC Connection Customer, Transmission Owner, Affected System Operator(s) and Transmission Provider conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection or Points of Connection.

Shared Network Upgrade shall mean a Network Upgrade or Common Use Upgrade that is funded by an Interconnection Customer(s) and also benefits other Interconnection Customer(s) or MHVDC Connection Customer(s) that are later identified as beneficiaries.

Site Control shall mean a documented right for one or more parcels of land for the purpose of constructing a Generating Facility, Interconnection Customer’s Interconnection Facilities, and, if applicable (i.e., when the Interconnection Customer is providing the site for such facilities), the Transmission Owner’s Interconnection Facilities and Network Upgrades at the POI that the Interconnection Customer will develop. Such documented right shall be one of the following: (1) ownership of a site; (2) a leasehold interest in a site; (3) an option to purchase or acquire a leasehold interest in a site; or (4) any other
contractual or legal right to possess or occupy a site.

**Small Generating Facility** shall mean a Generating Facility that has an aggregate net Generating Facility Capacity of no more than five MW and meets the requirements of Section 14 and Appendix 3.

**Special Protection System (SPS)** shall mean an automatic protection system or remedial action scheme designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components, to maintain system reliability. Such action may include changes in demand (MW and MVar), energy (MWh and MVArh), or system configuration to maintain system stability, acceptable voltage, or power flows. An SPS does not include: (a) underfrequency or undervoltage load shedding; (b) fault conditions that must be isolated; (c) out-of-step relaying not designed as an integral part of an SPS; or (d) Transmission Control Devices.

**Stand-Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer or MHVDC Connection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Transmission Provider, Transmission Owner and Interconnection Customer or MHVDC Connection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Generator Interconnection Agreement or Appendix B of the Transmission Connection Agreement.

**System Planning and Analysis Phase** shall mean the phase of the Generator Interconnection Procedure process, prior to January 4, 2017, which consisted of an Interconnection System Impact Study for those Interconnection Requests that were studied in this phase.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission System or other systems of the Parties. The System Protection Facilities include the following:
delivery systems or other generating systems from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission System or on other delivery systems or other generating systems to which the Transmission System is directly connected.

**Tariff** shall mean the Transmission Provider’s Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Control Devices** shall mean a generally accepted transmission device that is planned and designed to provide dynamic control of electric system quantities, and are usually employed as solutions to specific system performance issues. Examples of such devices include fast valving, high response exciters, high voltage DC links, active or real power flow control and reactive compensation devices using power electronics (e.g., unified power flow controllers), static var compensators, thyristor controlled series capacitors, braking resistors, and in some cases mechanically switched capacitors and reactors. In general, such systems are not considered to be Special Protection Systems.

**Transmission Owner** shall mean that Transmission Owner as defined in the Tariff, which includes an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at which Interconnection Customer proposes to interconnect or otherwise integrate the operation of the Generating Facility. Transmission Owner should be read to include any Independent Transmission Company that manages the transmission facilities of Transmission Owner and shall include, as applicable, the owner and/or operator of distribution facilities interconnected to the Transmission System, over which facilities transmission service or Wholesale Distribution Service under the Tariff is available at the time Interconnection Customer requests Interconnection Service and to which Interconnection Customer has requested interconnection of a Generating Facility for the purpose of either transmitting electric energy in interstate commerce or selling electric energy at wholesale in interstate commerce.

Effective On: March 11, 2020
**Transmission Provider** shall mean the Midcontinent Independent System Operator, Inc. (“MISO”), the Regional Transmission Organization that controls or operates the transmission facilities of its transmission-owning members used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff.

**Transmission Owner’s Interconnection Facilities (TOIF)** shall mean all facilities and equipment owned by Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Generator Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Transmission System** shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide transmission service (including HVDC Service) or Wholesale Distribution Service under the Tariff.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Variable Energy Resource** shall mean a device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator.

**Wholesale Distribution Service** shall have that meaning as provided in the Tariff. Wherever the term “transmission delivery service” is used, Wholesale Distribution Service shall also be implied.
SECTION 2. SCOPE AND APPLICATION.

2.1 Application of Generator Interconnection Procedures.
   a. Sections 2 through 13 of the GIP apply to processing an Interconnection Request pertaining to a Generating Facility. The GIP specifically applies when one of the following is proposed by an Interconnection Customer: (i) a new Generating Facility at a new Point of Interconnection that does not meet the criteria set forth in Sections 2.1 (b) or (c), (ii) additional generation at an existing Point of Interconnection, (iii) an increase in the capacity of an Existing Generating Facility, (iv) a Generating Facility Modification that may constitute a Material Modification to the operating characteristics of an Existing Generating Facility, or (v) a Replacement Generating Facility. The evaluation in subpart (iv) will be performed expeditiously depending on the specific information regarding any proposed Generating Facility Modification and the existence of an Emergency Condition.

   b. Section 14 of the GIP applies to a request to interconnect a certified Small Generating Facility meeting the certification criteria set forth in Appendix 3.

   c. A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kW shall be evaluated under the Appendix 4 – 10 kW Inverter Process.

   d. A request to interconnect to HVDC Facilities subject to Section 27A of the Tariff will be incorporated into the queue as described in Sections 2 through 13 of the GIP. Modifications to the process necessitated by the physics of a connection to HVDC Facilities are found in Section 15 of the GIP, and will apply to those requests to interconnect to HVDC Facilities.

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e. Network Resource Interconnection Service is available to Existing Generating Facilities connected to facilities external to the Transmission System, including any Existing Generating Facilities connected to any MHVDC Transmission Line. Such a request for Network Resource Interconnection Service shall be memorialized with a Service Agreement as found in Appendix 13 of the GIP.

f. Sections 1 through 7, Section 10, Section 13 and Section 16 of the GIP apply to processing an Interconnection Request pertaining to Injection Rights for an MHVDC Transmission Line. Any such request for Injection Rights will be incorporated into the queue as described in Sections 2 through 7 of the GIP. Procedures for obtaining Injection Rights and the conversion of those rights to external Network Resource Interconnection Service are set forth in Section 16 of the GIP. All references to MHVDC Connection Customer(s) in these GIP shall be understood to refer to MHVDC Connection Customer(s) seeking Injection Rights.

g. A request for Replacement Generating Facility shall be evaluated pursuant to Section 3.7 of the GIP.

h. A request for Generating Facility Modification for an Existing Generating Facility must be submitted to and coordinated with the Transmission Provider pursuant to the provisions set forth in the Generator Interconnection Business Practices Manual to allow the Transmission Provider to determine whether the proposed modification would result in a substantive modification to the operating characteristics of such Existing Generating Facility.

2.2 **Comparability.**

Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in the GIP. Transmission Provider will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all
Interconnection Customers regardless of Generating Facility ownership and from all MHVDC Connection Customers regardless of MHVDC Transmission Line ownership.

2.3 Base Case Data.
Transmission Provider shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to confidentiality provisions in GIP Section 13.1. In the event that the Base Case data contains commercially sensitive information, transmission related information, or Critical Energy Infrastructure Information, Transmission Provider shall require that Interconnection Customer or MHVDC Connection Customer sign a confidentiality agreement and release from liability in the form attached hereto as Attachment C to Appendix 1 before the release of the Base Case data. Such databases and lists shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for the Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority. To the extent that a Company has a Universal Non-Disclosure Agreement in place with MISO, the Company will not be required to execute the Non-Disclosure and Confidentiality Agreement in Attachment C to Appendix 1 of the GIP.

2.4 No Applicability to Transmission Service.
Nothing in the GIP shall constitute a request for transmission service or confer upon an Interconnection Customer or MHVDC Connection Customer any right to receive transmission service or Wholesale Distribution Service under the Tariff.

SECTION 3. INTERCONNECTION REQUESTS.

3.1 General.
An Interconnection Customer or MHVDC Connection Customer shall submit to Transmission Provider an Interconnection Request in the form of Appendix 1 to the GIP and the deposit along with the other items listed in Section 3.3.1 of these GIP.

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Transmission Provider shall apply the deposit towards the cost of any Interconnection Study. Interconnection Customer or MHVDC Connection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. Interconnection Customer or MHVDC Connection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Points of Interconnection; provided, however, that an Interconnection Request for Injection Rights shall only evaluate one voltage level at each Point of Connection.

3.2 Identification of Types of Services.

At the time the Interconnection Request is submitted, Interconnection Customer must request NR Interconnection Service, ER Interconnection Service or Net Zero Interconnection Service, as described; provided, however, any Interconnection Customer requesting NR Interconnection Service may also request that it be concurrently studied as an ER Interconnection Service, up to the expiration of Decision Point II. Interconnection Customer may then elect to proceed with NR Interconnection Service or to proceed under a lower level of NR Interconnection Service to the extent that only certain upgrades will be completed. MHVDC Connection Customer may only request Injection Rights pursuant to Section 16 of the GIP and shall not be eligible to receive any Interconnection Services specified in the GIP.

3.2.1 Energy Resource Interconnection Service (ER Interconnection Service).

3.2.1.1 The Product. ER Interconnection Service allows Interconnection Customer to connect the Generating Facility to the Transmission System or Distribution System, as applicable, and be eligible to deliver the Generating Facility’s output using the existing firm or non-firm capacity of the Transmission System on an “as available” basis and may be granted on a conditional basis. ER Interconnection Service does not in and of
itself convey any right to deliver electricity to any specific customer or Point of Delivery.

3.2.1.2 The Study. The study consists of short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The short circuit/fault duty analysis would identify the Interconnection Facilities required and the Network Upgrades necessary to address short circuit issues associated with the Interconnection Facilities. The stability and steady state studies would identify necessary upgrades to allow full output of the proposed Generating Facility and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting Generating Facility without requiring additional Network Upgrades.

3.2.2 Network Resource Interconnection Service (NR Interconnection Service).

3.2.2.1 The Product. Transmission Provider must conduct the necessary studies and Transmission Owner shall cause the construction of the Network Upgrades, System Protection Facilities, Distribution Upgrades or Generator Upgrades, subject to the approval of Governmental Authorities, needed to integrate the Generating Facility in the same manner as for any Generating Facility being designated as a Network Resource. NR Interconnection Service allows the Generating Facility to be designated as a Network Resource, up to the Generating Facility’s full output on the same basis as existing Network Resources that are interconnected to the Transmission or Distribution System as applicable, and to be studied as a Network Resource on the assumption that such a designation will occur. NR Interconnection Service may be granted on a conditional basis pursuant to the terms of Article 4.1.2.3 of the GIA. Interconnection Customer with an in-service Generating Facility or with an executed GIA, having ER Interconnection Service or equivalent interconnection service...
can request NR Interconnection Service by making an Interconnection Request for obtaining only NR Interconnection Service.

3.2.2.2 The Study. The Interconnection Study for NR Interconnection Service shall assure that the Generating Facility meets the requirements for NR Interconnection Service and will qualify the Generating Facility as a Network Resource under Module B and the RAR of the Transmission Provider’s Tariff. As a general matter, the Generating Facility’s interconnection is studied with the Transmission System at both off-peak and peak loads, under a variety of severely stressed conditions, to determine whether, with the Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load on the Transmission System or Distribution System, as applicable, consistent with Applicable Reliability Standards. This approach assumes that some portion of existing Network Resources is displaced by the output of the Generating Facility. NR Interconnection Service does not convey any right to deliver electricity to any specific customer or Point of Delivery.

3.2.3 Net Zero Interconnection Service.

3.2.3.1 The Product. Net Zero Interconnection Service is restricted ER Interconnection Service that allows an Interconnection Customer to increase the gross generating capability at the same Point of Interconnection of an Existing Generating Facility without increasing the Existing Generating Facility’s Capacity at that Point of Interconnection. Net Zero Interconnection Service does not convey any right to deliver electricity to any specific customer or Point of Delivery.
3.2.3.2 The Study. The Interconnection Study for Net Zero Interconnection Service consists of reactive power, short circuit/fault duty, and stability analyses. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied. If the Existing Generating Facility was not studied under off-peak condition, off-peak steady state analyses will be performed to the required level necessary to demonstrate reliable operation of the Net Zero Interconnection Service. If no System Impact Study was available for the existing generation, both off-peak and peak analysis may need to be performed for the Generating Facility seeking Net Zero Interconnection Service in accordance with the GIP. The Interconnection Study will identify the Interconnection Facilities required and the Network Upgrades necessary to address reliability issues associated with the Interconnection Facilities.

3.2.4 Injection Rights

3.2.4.1 The Product. Injection Rights serve as a pre-certification of the Transmission System’s capability to receive capacity and energy from the MHVDC Transmission Line at the requested Point of Connection, and in the specified MW quantity, without degrading the reliability of the Transmission System. Injection Rights do not grant Interconnection Service or Transmission Service to the MHVDC Connection Customer. Injection Rights must be converted to external Network Resource Interconnection Service as set forth in Section 16.2 of the GIP before those rights may be used to offer energy or capacity into the MISO markets.

3.2.4.2 The Study. Requests for Injection Rights shall include both ERIS-level and NRIS-level evaluations. For ERIS-level evaluation, the study will include short circuit/fault duty, steady state (thermal and voltage) and stability analyses.
The stability and steady state studies would identify necessary upgrades to allow full output of the proposed MHVDC Transmission Line and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting MHVDC Transmission Line without requiring any additional upgrades.

For NRIS-level evaluation, the study will assure that the output of the MHVDC Transmission Line meets the requirements for NR Interconnection Service and will qualify any existing Generating Facility connected to the MHVDC Transmission Line as a Network Resource under Module B and the RAR of the Transmission Provider Tariff. As a general matter, such Generating Facility’s interconnection with the Transmission System is studied at both off-peak and peak loads, under a variety of severely stressed conditions, to determine whether, with such Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load on the Transmission System or Distribution System, as applicable, consistent with Applicable Reliability Standards. This approach assumes that some portion of an existing Network Resource is displaced by the output of such Generating Facility.

3.3 **Valid Interconnection Request.**

3.3.1 **Initiating an Interconnection Request.**

An Interconnection Customer or an MHVDC Connection Customer wishing to join the next Definitive Planning Phase shall submit their Interconnection Request to the Transmission Provider no later than the application deadline, which will be at least ninety (90) Calendar Days prior to the scheduled start of the next Definitive Planning Phase cycle, published on the MISO public website. Any Interconnection Request received after the application deadline published on the MISO public website shall be applied towards the following Definitive Planning Phase cycle.
Definitive Planning Phase study deposits are required based on the Megawatt amount of the new Interconnection Service requested per the following schedule:

<table>
<thead>
<tr>
<th>Amount of new Interconnection Service and/or Injection Rights requested (MW)</th>
<th>Non-Refundable Deposit 1 (D1)</th>
<th>Study Deposit 2 (D2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 6 MW</td>
<td>$5,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>20 ≥ MW ≥ 6</td>
<td>$5,000</td>
<td>$120,000</td>
</tr>
<tr>
<td>50 ≥ MW &gt; 20</td>
<td>$5,000</td>
<td>$180,000</td>
</tr>
<tr>
<td>100 ≥ MW &gt; 50</td>
<td>$5,000</td>
<td>$270,000</td>
</tr>
<tr>
<td>200 ≥ MW &gt; 100</td>
<td>$5,000</td>
<td>$320,000</td>
</tr>
<tr>
<td>500 ≥ MW &gt; 200</td>
<td>$5,000</td>
<td>$420,000</td>
</tr>
<tr>
<td>1000 &gt; MW &gt; 500</td>
<td>$5,000</td>
<td>$530,000</td>
</tr>
<tr>
<td>MW ≥ 1000</td>
<td>$5,000</td>
<td>$640,000</td>
</tr>
</tbody>
</table>

An Interconnection Request for a Replacement Generating Facility shall be accompanied by a study deposit in the amount of $60,000.

Thirty (30) Calendar Days after the execution of a non-provisional GIA or a Transmission Connection Agreement in which the Injection Rights option has been selected, Interconnection Customer or MHVDC Connection Customer may replace any non-encumbered balance of the study deposits with an irrevocable letter of credit reasonably acceptable to Transmission Provider.

Interconnection Customer or MHVDC Connection Customer shall be required to provide to Transmission Provider the following data along with its Interconnection Request:

(i) a detailed stability model for the proposed Generating Facility or MHVDC Transmission Line;

(ii) Technical data as outlined in Attachment A of Appendix 1 of this GIP;
(iii) an Interconnection Study Agreement executed by Interconnection Customer or MHVDC Connection Customer in the form of Appendix 1, Attachment B;

(iv) a definitive Point of Interconnection or Point of Connection;

(v) for Interconnection Requests proposing to share Interconnection Facilities with another pending Interconnection Request or existing project, a consent agreement in accordance with Section 3.3.1.3 of these Generator Interconnection Procedures;

(vi) a one line diagram showing the Generating Facility or MHVDC Transmission Line and associated electrical equipment with appropriate rating and impedance information; and

(vii) Megawatt amount of new Interconnection Service or Injection Rights requested.

In addition, Interconnection Customer or MHVDC Connection Customer entering the Definitive Planning Phase shall provide the Definitive Planning Phase entry milestone in the form of either cash or irrevocable letter of credit reasonably acceptable to Transmission Provider.

The Definitive Planning Phase entry milestone (M2) will be calculated as $4,000 per Megawatt amount of new Interconnection Service or Injection Rights requested.

Except as otherwise provided for Site Control in Section 7.2 of this GIP, all applicable deposits, milestone payments, and data required to enter the Definitive Planning Phase must be received no later than the application deadline published on the Transmission Provider website.

Interconnection Customer shall provide proof of Site Control or a cash deposit in lieu of Site Control in accordance with the requirements and timing established in Section 7.2 of this GIP. In the event that an Interconnection Customer or MHVDC Connection

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Customer has a state regulatory requirement to process two Points of Interconnection or Points of Connection through the entire process, that Interconnection Customer or MHVDC Connection Customer is not required to comply with the Site Control requirements in Section 7.2 for the second Interconnection Request, provided it is properly identified as the required alternative.

Deposits shall be applied toward any Interconnection Studies pursuant to the Interconnection Request.

The expected In-Service Date of the Generating Facility or MHVDC Transmission Line shall be no later than the process window for the Transmission Provider’s regional expansion planning period not to exceed seven years from the date the Interconnection Request is received by Transmission Provider, unless Interconnection Customer or MHVDC Connection Customer demonstrates that engineering, permitting and construction of the Generating Facility or MHVDC Transmission Line will take longer than the regional expansion planning period, nor shall it be any sooner than the process time described in the Generator Interconnection Procedures and confirmed in the Pre-Queue Phase. The In-Service Date may succeed the date the Interconnection Request is received by Transmission Provider by a period up to ten years, or longer where Interconnection Customer or MHVDC Connection Customer and Transmission Provider agree, such agreement not to be unreasonably withheld.

The expected Commercial Operation Date of a Replacement Generating Facility shall be no more than three (3) years from the date of cessation of operation of the Existing Generating Facility. For Existing Generating Facility that is in suspension pursuant to Section 38.2.7 of the Tariff or in Forced Outage, the start date of suspension or outage shall be considered the date of cessation of operation of the Existing Generating Facility for purposes of calculating the three (3) year limit. If the requested period of time between the cessation of operation of the Existing Generating Facility and expected Commercial Operation Date of the Replacement Generating Facility is more than three...
(3) years, the request shall be treated as Interconnection request for a new Generating Facility.

3.3.1.1 Additional Requirements for a Net Zero Interconnection Request application

A request for Net Zero Interconnection Service made by an Interconnection Customer must meet the requirements listed in section 3.3.1 above, plus the following requirements:

1. The Existing Generating Facility must request that MISO post on its website that it is willing to enter into a Net Zero arrangement with a suitable proposal. Such posting will include the name of this Existing Generating Facility, the exact electrical location of the physical termination point of the Net Zero Generating Facility, including proposed breaker position(s) within its substation, the state and county of the Existing Generating Facility, and a valid email address and phone number to contact the representative of the Existing Generating Facility. This requirement does not apply to Interconnection Requests for which a GIA has been executed with an effective date prior to the effective date granted by the Commission for the revisions to the GIP filed in Docket No. ER12-309 (January 1, 2012).

2. The Interconnection Customer must include the System Impact Study performed for the Existing Generating Facility with its application or indicate that such study is not available. Transmission Provider will use that System Impact Study to appropriately scope the Interconnection Customer’s System Impact Study described in Section 7 of this GIP.
3.3.1.2 Evaluation Process for Net Zero Interconnection Request and the Requirements for the Request to Remain Valid

The process posted on the Transmission Provider’s website will provide a description of the selection process that will take place between the time that Transmission Provider posts that an Existing Generating Facility interconnection customer is offering Net Zero Interconnection Service and the time an Interconnection Customer is selected, including a timeline and the selection criteria developed by the Existing Generating Facility. The selection process may vary among Existing Generating Facility interconnection customers, but the following conditions will apply:

1. The Existing Generating Facility interconnection customer will choose the winning request;

2. System Impact Study scope will be determined for each Interconnection Request, and the study will be performed as necessary based as determined by Transmission Provider;

3. The winning request shall be selected after the latter of System Impact Study or Interconnection Facilities Study, and the posting will include a description of when and how the identity of the winning request will be disclosed;

4. For its Interconnection Request to remain valid, the Net Zero customer has 90 days after the winning request has been chosen to provide Transmission Provider an executed Energy Displacement Agreement (including, in a separate agreement, the agreed upon compensation arrangements – rates, terms, and conditions), and an executed Monitoring and Consent Agreement with the Transmission Owner and/or
Transmission Operator, to be effective upon execution of a GIA.

The executed Monitoring and Consent Agreement shall be in the form of Appendix 11 of the GIP to be effective upon execution of a GIA and must remain in effect during the term of the GIA.

The executed Energy Displacement Agreement shall be in the form of Appendix 12 of the GIP to be effective upon execution of a GIA and must remain in effect during the term of the GIA.

If at any time prior to execution of the GIA the Energy Displacement Agreement or Monitoring and Consent Agreement required above is no longer in effect, the Interconnection Request for Net Zero Interconnection Service shall be deemed to have been withdrawn.

5. The Interconnection Facilities Study will be performed in Definitive Planning Phase II if needed; and

6. Transmission Provider will begin drafting GIA one Business Day after the later of the date of the completion of the Facilities Study or the submission dates of Energy Displacement Agreement and Monitoring and Consent Agreement.

3.3.1.3 Additional Requirements for Interconnection Requests Proposing to Share Interconnection Facilities

Interconnection Customer may submit an Interconnection Request that proposes to share Interconnection Facilities with one or more existing projects or pending Interconnection Requests. Interconnection Requests proposing such an arrangement shall so indicate in their Interconnection Request and attach a
consent agreement executed by the applicable Transmission Owner and all Interconnection Customers with projects that propose to connect, or are connected, to the shared Interconnection Facilities. Such consent agreement shall, in accordance with the Business Practices Manuals, describe the proposed configuration of the projects, the proposed ownership of the Interconnection Facilities, the division of rights and responsibilities among the parties with respect to operations, maintenance, and repair of the Interconnection Facilities, and such other information regarding the operation of the Generating Facilities under this arrangement as may be specified in the Generator Interconnection Business Practice Manual. The consent agreement shall indicate the parties’ consent to sharing the Interconnection Facilities in the manner described in the Interconnection Request(s).

3.3.1.4 Evaluation Process for Interconnection Requests Proposing to Share Interconnection Facilities

Interconnection Requests proposing shared Interconnection Facilities shall require the consent of the Transmission Provider to proceed, which consent shall not be unreasonably withheld, conditioned, or delayed. The Transmission Provider shall review Interconnection Requests proposing to share Interconnection Facilities amongst multiple projects to confirm compliance with the requirements of Section 3.3.1.3 of these Generator Interconnection Procedures, that all Interconnection Customer responsibilities have been appropriately accounted for, and that all parties have consented to the described arrangement. The Transmission Provider shall complete this review and notify the parties whether the Transmission Provider consents to the proposed arrangement no later than five (5) days prior to the start of the Scoping Meeting in which their requests are discussed. In the event that the Transmission Provider does not consent, the Transmission Provider shall provide a written statement of the reasons for such decision to each of the parties. Interconnection Requests that do not receive the Transmission Provider’s
consent for the sharing of Interconnection Facilities may be revised and resubmitted for inclusion in the applicable cycle prior to the start of DPP Phase I.

Any Interconnection Customer that has an Interconnection Request pending in the DPP as of August 14, 2019 and that intends to share Interconnection Facilities for that Interconnection Request with one or more existing projects or other Interconnection Requests shall satisfy each of the terms of Sections 3.3.1.3 and 3.3.1.4 of these Generator Interconnection Procedures, prior to the start of GIA negotiations for any Interconnection Request that remains pending in the DPP and that will participate in the sharing arrangement.

### 3.3.2 Acknowledgment of Interconnection Request.

Transmission Provider shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the Interconnection Request. Transmission Provider shall tender to Interconnection Customer or MHVDC Connection Customer a copy of the countersigned Interconnection Study Agreement within ten (10) Business Days of acceptance of the Interconnection Request as valid. All acknowledgments and other communications may be made via e-mail and/or other electronic means.

### 3.3.3 Deficiencies in Interconnection Request.

An Interconnection Request will not be considered to be a valid request until all items in Section 3.3.1 have been received by Transmission Provider. If an Interconnection Request fails to meet the requirements set forth in Section 3.3.1, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer within fifteen (15) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. In the event Transmission Provider discovers or verifies a deficiency later in the GIP process, Transmission Provider will notify Interconnection Customer or MHVDC Connection Customer as soon as practicable. Interconnection Customer or MHVDC Connection Customer shall provide Transmission Provider the additional requested...
information needed to constitute a valid request no later than ten (10) Business Days after the request is made. Failure by Interconnection Customer or MHVDC Connection Customer to comply with this Section 3.3.3 will result in the Interconnection Request not being processed until such deficiency is cured. In the event that the deficiency is not cured, deposits will be held by Transmission Provider until such time that a withdrawal notice is given per Section 3.6.

3.3.4 Scoping Meeting.

Within ten (10) Business Days after receipt of a valid Interconnection Request, Transmission Provider shall submit a summary of the Interconnection Request to Interconnection Customer or MHVDC Connection Customer and likely affected Transmission Owners. The Transmission Provider shall establish a date agreeable to Interconnection Customer and Transmission Owner for a Scoping Meeting, and such date shall be at least five (5) Business Days prior to and no more than forty-five (45) Calendar days prior to the kick-off of the Definitive Planning Phase, unless otherwise mutually agreed upon by Transmission Provider, Transmission Owner and Interconnection Customer or MHVDC Connection Customer. The Transmission Provider, Interconnection Customer, or MHVDC Connection Customer, and Transmission Owner must attend the Scoping Meeting. Transmission Provider shall use Reasonable Efforts to include any other Affected System Operators in the Scoping Meeting.

The purpose of the Scoping Meeting shall be to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection. Transmission Provider, Transmission Owner and Interconnection Customer or MHVDC Connection Customer will bring to the meeting such technical data including, but not limited to, known: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues including voltage and frequency ride-through capabilities for the Generating Facility, (v) general power quality issues including voltage flicker,
harmonics, (vi) general reliability issues; and (vii) diagrams and/or layout of applicable substations as may be reasonably required to accomplish the purpose of the meeting. Transmission Provider and Interconnection Customer or MHVDC Connection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer or MHVDC Connection Customer may modify its Point of Interconnection/Connection and one or more available alternative Point(s) of Interconnection/Connection. Interconnection Customer or MHVDC Connection Customer will have five (5) Business Days from the date of the Scoping Meeting to submit to Transmission Provider its modified Point of Interconnection/Connection or one of its alternative Point(s) of Interconnection/Connection as a result of the Scoping Meeting. The duration of the meeting shall be sufficient to accomplish its purpose.

3.4 OASIS Posting.

Transmission Provider will maintain on its OASIS a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected In-Service Date; (v) the status of the Interconnection Request, including Initial, and when applicable, Definitive Planning Phase Queue Position; (vi) the type of Interconnection Service being requested or whether the Interconnection Request is for Injection Rights; (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Generating Facility to be constructed including technology and fuel type); (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed; (xi) associated System Impact Study phase costs by Definitive Planning Phase; and (xii) for a Generating Facility Replacement, the planned date of cessation of operation for the Existing Generating Facility or actual date if the Existing Generating Facility already has ceased commercial operations, the expected Commercial Operation Date of the
replacement facility and requested Interconnection Service. The list will not disclose the identity of Interconnection Customer or MHVDC Connection Customer until Interconnection Customer or MHVDC Connection Customer executes a GIA or a TCA or requests that Transmission Provider file an unexecuted GIA or TCA with FERC. Transmission Provider shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports shall be posted to the Transmission Provider’s OASIS site prior to the meeting between Interconnection Customer and Transmission Provider to discuss the applicable study results. Transmission Provider shall also post any known deviations in the Generating Facility’s In-Service Date.

3.5 Coordination with Affected Systems.

Interconnection Customer or MHVDC Connection Customer, Transmission Provider, Transmission Owner and Affected System Operator shall each coordinate and cooperate on studies required to determine the impact of the Interconnection Request on Affected Systems. Transmission Provider will include such Affected System Operators, whose representatives either abide by FERC’s Standards of Conduct pursuant to 18 C.F.R Parts 37 and 358 or have executed a non-disclosure agreement with Transmission Provider, in all meetings held with Interconnection Customer as required by the GIP. If the Affected System is not under the functional control of Transmission Provider, the Affected System Operator’s procedures shall be applicable. Interconnection Customer or MHVDC Connection Customer will be separately responsible to adhere to the Affected Systems Operator’s procedures and costs related to studies and modifications to the Affected System.

Interconnection Customer or MHVDC Connection Customer will cooperate with Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Transmission Provider may limit Interconnection Service or Injection Rights for an Interconnection Request until needed reliability upgrades on an Affected System(s) are complete under separate agreements.
Each Interconnection Customer or MHVDC Connection Customer shall provide notice to Transmission Owner and Transmission Provider that the facilities built under such agreements are in service.

3.6 Withdrawal.

Interconnection Customer or MHVDC Connection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to Transmission Provider. In addition, if Interconnection Customer fails to adhere to all requirements of the GIP, except as provided in Section 13.5 (Disputes), Transmission Provider shall deem the Interconnection Request to be withdrawn and shall provide written notice to Interconnection Customer or MHVDC Connection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Unless otherwise provided in this GIP, upon receipt of such written notice, Interconnection Customer or MHVDC Connection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cure the deficiency or to notify Transmission Provider of its intent to pursue Dispute Resolution.

In the event that an MHVDC Transmission Connection Request is withdrawn or deemed withdrawn in accordance with the terms of Attachment GGG to the Tariff, then all Interconnection Requests associated with that MHVDC Transmission Connection Request will also be deemed withdrawn.

Withdrawal prior to or during Interconnection Customer Decision Point I shall result in the loss of the Interconnection Customer’s or MHVDC Connection Customer’s Definitive Planning Phase Queue Position. Withdrawal after Interconnection Customer Decision Point I, but prior to or during Interconnection Customer Decision Point II shall result in the loss of the Interconnection Customer’s or MHVDC Connection Customer’s Definitive Planning Phase Queue Position and forfeiture of the Definitive Planning Phase entry milestone (M2) payment. Withdrawal after Interconnection Customer Decision Point II shall result in the loss of Interconnection Customer’s or MHVDC Connection
Customer’s Definitive Planning Phase Queue Position and forfeiture of the M2, M3 and M4 milestone payments, except as otherwise provided in Section 7.6.2.

If an Interconnection Customer or MHVDC Connection Customer disputes the withdrawal and loss of its applicable queue position, then during Dispute Resolution, the Interconnection Customer’s or MHVDC Connection Customer’s Interconnection Request is eliminated from the queue until such time that the outcome of Dispute Resolution would restore its applicable queue position.

An Interconnection Customer or MHVDC Connection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to Transmission Provider all costs that Transmission Provider prudently (i) incurs prior to the Transmission Provider’s receipt of notice described above and (ii) will incur as a result of the withdrawal. Interconnection Customer or MHVDC Connection Customer must pay all monies due to Transmission Provider before it is allowed to obtain any Interconnection Study data or results.

Transmission Provider shall (i) update the OASIS list of Interconnection Requests and (ii) refund to Interconnection Customer or MHVDC Connection Customer any portion of the Interconnection Customer’s or MHVDC Connection Customer’s study deposit that exceeds the costs that Transmission Provider has incurred or will incur as a result of the withdrawal as described in Section 13.3, including interest earned on the Interconnection Customer’s or MHVDC Connection Customer’s study deposit and Definitive Planning Phase entry milestone payment while held in Transmission Provider’s interest-bearing, money market account, or if such account does not exist, then the interest calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii). In the event of such withdrawal, Transmission Provider, subject to the confidentiality provisions of Section 13.1, shall provide, at Interconnection Customer’s or MHVDC Connection Customer’s request, all information that Transmission Provider developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.
3.7 Additional requirements for Generating Facility Replacement Requests.

3.7.1 Requirements for Replacement Generating Facility Requests.

i) Any Replacement Generating Facility must connect to the Transmission System at the same electrical Point of Interconnection (i.e. same voltage level at the interconnecting substation) as the Existing Generating Facility.

ii) The request for Generating Facility Replacement must be submitted to the Transmission Provider by the Interconnection Customer for its Existing Generating Facility at least one (1) year prior to the date that the Existing Generating Facility will cease operation unless the Existing Generating Facility is in suspension pursuant to Section 38.2.7 of the Tariff or in Forced Outage. The request shall include the planned or actual date of cessation of operation for the Existing Generating Facility and the expected Commercial Operation Date for the Replacement Generating Facility.

iii) The Interconnection Customer shall request only ER Interconnection Service for the Replacement Generating Facility if the Existing Generating Facility has only ER Interconnection Service. The request for NR Interconnection Service for the Replacement Generating Facility, when the Existing Generating Facility has only ER Interconnection Service, shall be submitted as a separate Interconnection Request and shall proceed through the Definitive Planning Phase cycle in the same manner as an Interconnection Request for a new Generating Facility. The Interconnection Customer may request either ER Interconnection Service or NR Interconnection Service for the Replacement Generating Facility if the Existing Generating Facility has NR Interconnection Service.

Requests for ER or NR Interconnection Service that exceed the amount of Interconnection Service for the Existing Generating Facility shall be processed as a new Interconnection Request for the amount of such excess pursuant to Section 3.7.1.iv of this Attachment X to the Tariff.
iv) If the Replacement Generating Facility requires Interconnection Service (MW) in excess of that of the Existing Generating Facility that is being replaced, Interconnection Customer shall initiate a separate request for Interconnection Service in an amount (MW) equal to the excess. Such Interconnection Request shall be assigned a new Queue Position, and proceed through the Definitive Planning Phase cycle in the same manner as an Interconnection Request for a new Generating Facility.

v) If the request for Generating Facility Replacement requests less Interconnection Service (MW) than that of the Existing Generating Facility that is being replaced, the owner shall be required to submit an Attachment Y Notice for the amount (MW) of such decrease in generating capacity to the Transmission Provider in accordance with timing and requirements of Section 38.2.7 of the Tariff.

vi) No request for Generating Facility Replacement may be made until twelve (12) months have elapsed from: (1) the date of any assignment of the Generator Interconnection Agreement applicable to the Existing Generating Facility, or (2) the date of sale or other transfer of such Existing Generating Facility. Upon submission of a request for Generating Facility Replacement, the Interconnection Customer shall not sell or otherwise transfer the Existing Generating Facility, the Replacement Generating Facility, nor assign the applicable Generator Interconnection Agreement until such time as the Transmission Provider completes evaluation of the request for Generating Facility replacement unless the Interconnection Customer first withdraws such request for Generating Facility Replacement in writing. In the event that the Transmission provider notifies Interconnection Customer that the request for Generating Facility Replacement has been granted, the prohibition on sale, transfer, or assignment shall be extended in accordance with Section 3.7.5 of this Attachment X. For purposes of this Section 3.7.1 (vi), prohibited assignments include assignments to affiliates pursuant to Article 19.1 of the pro forma Generator Interconnection Agreement or any analogous provision in the applicable GIA.
A transfer, sale, or assignment of the Existing Generating Facility, Replacement Generating Facility, or applicable GIA that violates this Section 3.7.1 (vi) of Attachment X shall void the request for Generating Facility Replacement.

3.7.1.1 Requirements for modification of Replacement Generating Facility Requests.
The request for Replacement Generating Facility can be modified any time before the evaluation process is complete.

1) If the revised planned date of cessation of operation for the Existing Generating Facility is prior to the planned date of cessation of operation specified in original request, a new request for Replacement Generating Facility must be submitted at least one (1) year prior to the date that the Existing Generating Facility is planned to cease operation.

2) If the revised expected Commercial Operation Date for the Replacement Generating Facility is after the expected Commercial Operation Date for the Replacement Generating Facility in the original request, a new request for Replacement Generating Facility must be submitted at least one (1) year prior to the date that the Existing Generating Facility is planned to cease operation, unless the Existing Generating Facility is in suspension pursuant to Section 38.2.7 of the Tariff or in Forced Outage.

3.7.2 Evaluation Process for Generating Facility Replacement Requests.
The Transmission Provider will evaluate Generating Facility Replacement requests in the order in which they are submitted. The evaluation will consist of two studies: i) a Replacement Impact Study as set forth in Section 3.7.2.1 of the GIP, and ii) a Reliability Assessment Study as set forth in Section 3.7.2.2 of the GIP.

Transmission Provider shall use Reasonable Efforts to complete the Replacement Impact Study and Reliability Assessment Study and share results with the Interconnection Customer within one hundred eighty (180) Calendar Days of the request.
3.7.2.1 Generating Facility Replacement—Replacement Impact Study.

The Replacement Impact Study will include analyses to determine if the Replacement Generating Facility has a material adverse impact on the Transmission System when compared to Existing Generating Facility. The Replacement Impact Study may include steady-state (thermal/voltage), reactive power, short circuit/fault duty, and stability analyses, as necessary, to ensure that required reliability conditions are studied. If the Replacement Impact Study identifies any materially adverse impact from operating the Replacement Generating Facility when compared to the Existing Generating Facility, such impacts shall be deemed a Material Modification, and in order to move forward, the Interconnection Customer must submit all information and milestone payments necessary for a valid Interconnection Request for a new Generating Facility pursuant to Section 3.3 of this GIP, be assigned queue priority as of the date such information and milestones are provided, and proceed through the Definitive Planning Phase cycle as an Interconnection Request for a new Generating Facility. In such event, the Interconnection Customer shall be subject to the timing and requirements of Section 38.2.7 of the Tariff for any retirement of the Existing Generating Facility.

3.7.2.2 Generating Facility Replacement—Reliability Assessment Study

The Reliability Assessment Study for the time period between the date that the Existing Generating Facility ceases commercial operations and the Commercial Operation Date of the Replacement Generating Facility shall evaluate the performance of the Transmission System to determine if thermal and/or voltage violations of applicable NERC Standards and Transmission Owner planning criteria are caused by removing the Existing Generating Facility from service prior to the Commercial Operation Date of the Replacement Generating Facility. This study shall compare the conditions on the Transmission System that would exist if the Existing Generating Facility is taken offline to the conditions on the Transmission System as they exist when the Existing Generating Facility is online. The scope of Reliability Assessment Study may include stability analysis as necessary. The Existing Generating Facility shall be responsible for mitigating...
any reliability violation identified in the Reliability Assessment Study and may not cease operations until all mitigations are implemented or are in service. Mitigation for this interim period may, as applicable, include: (i) redispatch/reconfiguration through operator instruction; and (ii) remedial action scheme or any other operating steps depending upon the type of reliability violation identified.

3.7.3 Generating Facility Replacement - Notice to Proceed
Interconnection Customer requesting Generating Facility Replacement shall inform Transmission Provider within thirty (30) Calendar Days after having received results of the Replacement Impact Study and Reliability Assessment Study of its election to proceed and Transmission Provider will initiate an Interconnection Facility Study or tender a draft GIA. Interconnection Customer that fails to provide an election to proceed within thirty (30) Calendar Days will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

3.7.4 Scope of Interconnection Facilities Study
Interconnection Facilities Study focusing on the Interconnection Facilities for the Replacement Generating Facility will start, if the Transmission Provider determines such a study is necessary, upon Interconnection Customer’s notice to proceed to the Transmission Provider after completion of the Replacement Impact Study and the Reliability Assessment Study. This Interconnection Facilities Study will identify estimates for cost and the time required to construct the Interconnection Facilities. Transmission Provider shall use Reasonable Efforts to complete this portion of the Interconnection Facilities Study within ninety (90) Calendar Days.

3.7.5 GIA for Generating Facility Replacement.
Transmission Provider shall tender a draft pro forma GIA or, if deemed appropriate, an amended GIA that conforms to the pro forma GIA in effect at the time, within thirty (30) Calendar Days after the Interconnection Customer communicates its election to proceed
with Generator Replacement if an Interconnection Facilities Study is not required or within thirty (30) Calendar Days after final Facility Study reports are provided to the Interconnection Customer. The draft pro forma GIA shall include updated appendices describing the timing of Generating Facility Replacement and a condition that the GIA cannot be assigned and the Replacement Generating Facility cannot be transferred to any other Party, including an affiliate of the Interconnection Customer, until such date as the Replacement Generating Facility achieves commercial operation. A transfer, sale, or assignment of the Existing Generating Facility, Replacement Generating Facility, or applicable GIA that violates this Section 3.7.5 shall be void and constitute a material breach of the GIA.

SECTION 4. QUEUE POSITION.

4.1 General.
Transmission Provider shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form, and Interconnection Customer or MHVDC Connection Customer provides such information in accordance with Section 3.3.1, then Transmission Provider shall assign Interconnection Customer or MHVDC Connection Customer a Queue Position based on the date the application was deemed complete by Transmission Provider. Moving a Point of Interconnection or Point of Connection shall result in a reassignment of the Queue Position except as otherwise noted in Section 4.4.

The Definitive Planning Phase Queue Position will be established based upon the date Interconnection Customer or MHVDC Connection Customer satisfies all of the requirements of Section 7.2 to enter the Definitive Planning Phase. The Definitive Planning Phase Queue Position will also be used for the determination of cost responsibility for the facilities necessary to accommodate the Interconnection Request,
except for Group Studies. The determination of cost responsibility for common facilities necessary to accommodate two or more Interconnection Requests participating in a Group Study may depend on factors other than the Definitive Planning Phase Queue Position. A higher queued Interconnection Request is one that has been placed “earlier” in the queue in relation to another Interconnection Request that is lower queued.

Transmission Provider may perform an Interconnection Study out of queue order at any time to the extent warranted by Good Utility Practice based upon: 1) the electrical remoteness of the Generating Facility or MHVDC Transmission Line or 2) the request of Interconnection Customer or MHVDC Connection Customer, if Transmission Provider concurs with the request and has the resources to do the study provided Interconnection Customer or MHVDC Connection Customer accepts the financial risk that study resources may be reassigned, that its Interconnection Request is subject to review and restudy in queue order, and that its GIA or TCA may be amended to reflect a reassignment of upgrades as Interconnection Studies of higher queued Interconnection Requests are completed. Interconnection Customer or MHVDC Connection Customer may request the Transmission Provider’s concurrence 1) in connection with a resource solicitation process, 2) when Interconnection Customer or MHVDC Connection Customer proposes to replace equipment due to catastrophic failure and such replacement is determined to be Material Modifications under Section 4.4, and 3) for other reasons specific to Interconnection Customer or MHVDC Connection Customer.

4.2 Group Study Organization of Interconnection Studies.

Interconnection System Impact Studies and Interconnection Facilities Studies may be performed in a Group Study format, whenever applicable, in the Definitive Planning Phase, except when a particular Interconnection Request is sufficiently electrically remote from others that it cannot reasonably be grouped with other Interconnection Requests. Interconnection Requests for both ER Interconnection Service and NR Interconnection Service may be part of a Group Study at the option of Transmission
Provider. An Interconnection Request’s inclusion in a Group Study will not relieve Transmission Provider from meeting the timelines provided in the GIP.

Grouping shall be implemented on the basis of electrical proximity. Transmission Provider may elect to perform Group Studies: (i) in connection with a resource solicitation process with the concurrence of Transmission Provider; (ii) when a coordinated study with an Affected System Operator will be performed that involve Interconnection Requests in the generator interconnection queue of Transmission Provider and of the Affected System Operator; (iii) to identify Common Use Upgrades; or (iv) at the request of a group of affected Interconnection Customers or MHVDC Connection Customers.

If item (i) above applies and Transmission Owner concurs, the solicitor must (a) be authorized by Interconnection Customers participating in the solicitation to act as the agent for all the Interconnection Requests submitted by Interconnection Customers, (b) maintain valid Interconnection Requests, (c) submit all Interconnection Requests at the same time, (d) submit a reasonable number of study portfolios (i.e., a mixture of projects meeting the requirements of the solicitation that are studied in parallel), and (e) select one portfolio prior to the start of the Interconnection Facilities Study.

Interconnection Requests included in a Group Study related to a resource solicitation process are subject to study according to their Definitive Planning Phase Queue Position in the process. Interconnection Requests for projects that are not included in a Group Study related to a resource solicitation process are subject to study according to their Definitive Planning Phase Queue Position outside the process in accordance with the provision of the GIP, and such studies may not be delayed as a result of the resource solicitation process. An Interconnection Customer may request that its Interconnection Request be included in a Group Study related to a resource solicitation process without having to abandon the existing Definitive Planning Phase Queue Position for such
Interconnection Request. Once the solicitor rejects a project in the resource solicitation process, the Interconnection Request associated with the rejected project loses the Definitive Planning Phase Queue Position it held as part of the resource solicitation process. An Interconnection Customer that participates in a Group Study related to a resource solicitation process may at any time for the same project submit a separate Interconnection Request that is not included in the Group Study, provided, however, that Interconnection Customer shall be responsible for all Interconnection Study costs associated with its non-solicitation-related Interconnection Request in addition to any costs associated with Interconnection Customer’s bid into the resource solicitation. When the solicitor selects a project in the resource solicitation process, Interconnection Customer may no longer maintain more than one Definitive Planning Phase Queue Position for the selected project. Interconnection System Impact Studies performed as Group Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the Transmission System’s capabilities at the time of each study.

In the event that an Interconnection Customer or MHVDC Connection Customer in a Group Study withdraws from the process at any point during the Definitive Planning Phase, then Transmission Provider may substitute the next highest queued similarly situated Interconnection Request into the existing Group Study, provided such substitution occurs on a non-discriminatory basis and does not have a material impact on the effort required for the Group Study.

4.3 Transferability of Queue Position.
An Interconnection Customer or MHVDC Connection Customer may transfer either of its queue positions to another entity only if such entity acquires the specific Generating Facility or MHVDC Transmission Line identified in the Interconnection Request and the Point of Interconnection or Point of Connection does not change.

4.4 Modifications.
Interconnection Customer or MHVDC Connection Customer shall submit to Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. Interconnection Customer or MHVDC Connection Customer shall retain its Queue Position if the modifications proposed by Interconnection Customer or MHVDC Connection Customer are in accordance with Sections 4.4.1 or 4.4.4. Notwithstanding any modifications to information provided in the Interconnection Request, the applicable timing requirements of Section 7.2 to return study agreements and obligation to provide study deposits will not change.

Notwithstanding the above, during the course and prior to the completion of the Interconnection Studies, Interconnection Customer or MHVDC Connection Customer, Transmission Owner or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to Transmission Provider, Transmission Owner and Interconnection Customer or MHVDC Connection Customer, such acceptance not to be unreasonably withheld; Transmission Provider shall modify the Point of Interconnection or Point of Connection and/or configuration in accordance with such changes and proceed with any required Interconnection Studies. Changes to the Point of Interconnection or Point of Connection requested by Interconnection Customer or MHVDC Connection Customer during the Definitive Planning Phase, except as described in this paragraph, will result in the Interconnection Request having to be revalidated according to the procedures in Section 3.3.1, and a new Definitive Planning Phase Queue Position assigned in accordance with the procedures in Section 4.1.

**4.4.1** During the Definitive Planning Phase, the only modification permitted is a change in the technical parameters associated with the Generating Facility or MHVDC Connection Customer technology or a change to the Point of Interconnection or Point of Connection permitted under Section 4.4. For such permitted
modification proposed by Interconnection Customer or MHVDC Connection Customer, Interconnection Customer or MHVDC Connection Customer shall submit a detailed analysis demonstrating why they believe the change is not a Material Modification. Transmission Provider must review such analysis and will determine, in its discretion, if the proposed modification is a Material Modification. In the absence of such analysis, the modification shall be deemed a Material Modification.

4.4.2 After entering the Definitive Planning Phase any modifications to the type of Interconnection Service selected by Interconnection Customer in the Interconnection Request, other than a change from NR Interconnection Service to ER Interconnection Service pursuant to Section 3.2 of this GIP, shall be deemed a Material Modification.

4.4.3 After entering the Definitive Planning Phase, any modification to the size of the Interconnection Request, other than as allowed in Section 7.3.1.4 or Section 7.3.2.4 of this GIP, shall be deemed a Material Modification.

4.4.4 After entering the Definitive Planning Phase any extension by Interconnection Customer or MHVDC Connection Customer to the In-Service Date or Commercial Operation Date of the Generating Facility or MHVDC Transmission Line shall be deemed a Material Modification except that the Transmission Provider will not unreasonably withhold approval of an Interconnection Customer’s or MHVDC Connection Customer’s proposed change in the In-Service Date or Commercial Operation Date of the Generating Facility or MHVDC Transmission Line if that change is the result of either (a) a change in milestones by another party to the GIA or TCA, (b) a change in a higher-queued Interconnection Request, (c) delays in the completion of the Definitive Planning Phase Studies, or (d) Interconnection Customer demonstrates that engineering, permitting and construction of the Generating Facility will take longer than the
process window for the Transmission Provider’s Definitive Planning Phase period. Where such exceptions apply, extensions to the Commercial Operation Date or In-Service Date shall not exceed three years beyond the original Commercial Operation Date or In-Service Date. A change to either of these dates that exceeds three years from the date in the original Interconnection Request is a Material Modification. At the completion of the Definitive Planning Phase, the Commercial Operation Date shall be set forth in a GIA. Consistent with Article 2.3.1 of the GIA, once that GIA is executed or filed unexecuted, if the Generating Facility fails to reach Commercial Operation by the Commercial Operation Date set forth in the GIA, such Commercial Operation Date as set forth in the GIA may be extended by Interconnection Customer for a period up to three (3) consecutive years, after which Transmission Provider shall terminate the GIA if the Generating Facility has still failed to reach Commercial Operation. Notwithstanding the foregoing, in the limited circumstance that the Interconnection Request is served by a contingent Network Upgrade with an in-service date that is farther out than the Commercial Operation Date permitted under this Section 4.4.4, Transmission Provider shall only terminate the GIA for failure to achieve Commercial Operation by that later in-service date of the contingent Network Upgrade.

SECTION 5. PROCEDURES FOR INTERCONNECTION REQUESTS SUBMITTED PRIOR TO EFFECTIVE DATE OF GENERATOR INTERCONNECTION PROCEDURES.

5.1 Queue Position for Pending Requests.

5.1.1 All Interconnection Requests that have entered a Definitive Planning Phase and the Definitive Planning Phase System Impact Study has been completed prior to January 4, 2017 will complete the Definitive Planning Phase pursuant to the approved GIP in effect on January 3, 2017. The August 2015 Definitive Planning
Phase cycle shall be completed pursuant to the approved GIP in effect on January 3, 2017.

5.1.2 All Interconnection Requests that have entered a Definitive Planning Phase and the System Impact Study has not been started, or started and not completed, as of January 4, 2017 will be required to conform to Section 7 of this GIP excluding Section 7.2 “Eligibility for the Definitive Planning Phase” and the Site Control provisions found in Section 7.3.2.4 so long as the Interconnection Customer has previously complied with the then existing Section 8.2 “Eligibility for the Definitive Planning Phase.” All study deposits will be applied to studies performed under this transition plan and M2 milestone amounts previously paid will satisfy the M2 milestone requirement of Section 7.2. These projects will then follow all other sections of these Generator Interconnection Procedures in effect as of January 4, 2017.

5.1.3 All Interconnection Requests that have been received but have not had an M2 milestone calculated as of January 4, 2017, and have not met the requirements of Section 5.1.4, will be required to conform to Section 7 of these GIPs and will then follow all other sections of these Generator Interconnection Procedures in effect as of January 4, 2017.

5.1.4 All Interconnection Requests that are in the System Planning and Analysis Phase of the GIPs in effect prior to January 4, 2017 may pay their M2 milestone payment prior to January 4, 2017 and shall be treated pursuant to section 5.1.2. Interconnection Requests that are in the System Planning and Analysis Phase prior to the effective date of these GIPs that have not paid an M2 milestone payment prior to January 4, 2017 shall be treated pursuant to section 5.1.3. Interconnection Requests that are in the System Planning and Analysis Phase may remain in the System Planning and Analysis Phase until 45 Calendar Days prior to the start of the first cycle under these GIPs which begins August 1, 2017.
MISO shall deem withdrawn any Interconnection Requests that are in the System Planning and Analysis Phase that have not made their M2 milestone payment at least 45 Calendar Days prior to the start of the first cycle under these GIPs. Notwithstanding the foregoing, any request for HVDC facilities listed as being in the System Planning and Analysis Phase as of June 16, 2017 shall be deemed transferred into the Pre-Queue Phase. Furthermore, any MHVDC projects in the Pre-Queue Phase as of the effective date of the MHCP shall be deemed transferred to the MHCP, as set forth in Section 4 of the MHCP.

5.2 **Transition Period.**

An Interconnection Customer of a new transmission owning member of Transmission Provider shall transition to the revised GIP within a reasonable period of time not to exceed ninety (90) Calendar Days from the date when this GIP becomes applicable to that transmission owning member.

5.3 **New Transmission Provider.**

If Transmission Provider transfers control of its Transmission System to a successor Transmission Provider during the period when an Interconnection Request is pending, the original Transmission Provider shall transfer to the successor Transmission Provider any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by the GIP shall be paid by or refunded to Interconnection Customer, as appropriate. The original Transmission Provider shall coordinate with the successor Transmission Provider to complete any Interconnection Study, as appropriate, that the original Transmission Provider has begun but has not completed. If Transmission Provider has tendered a draft GIA to Interconnection Customer but Interconnection Customer has not either executed the GIA or requested the filing of an unexecuted GIA with FERC, unless otherwise provided, Interconnection Customer must complete negotiations with the successor Transmission Provider.
5.4 **Transition to Revised Scope of DPP Phase I Studies.**

With the exception of this provision, the Tariff revisions accepted in Docket Nos. ER18-2049-000 and -001 shall not apply to any queue cycle(s) for which the Definitive Planning Phase preliminary System Impact Study has started prior to September 19, 2018.

5.5 **Transitional Notice Requirements for Generating Facility Replacement.**

All requests for Replacement Generating Facility that are submitted to the Transmission Provider within 365 Calendar Days after May 16, 2019 shall have a date of cessation of operation for the Existing Generating Facility that is not earlier than May 16, 2021.

5.6 **Transition to Revised Milestone Requirements Accepted in Docket No. ER20-__.**

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was prior to April 29, 2019 shall be required to adhere to milestone requirements in GIP in effect prior to December 2, 2019.

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was on April 29, 2019 shall be required to adhere to the revised milestone requirements accepted in Docket No. ER20-__, but shall not be subject to the M2 refund provisions in Section 7.6.2.1 of this GIP. All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was on April 29, 2019 shall be subject to M2 refund provisions in effect prior to December 2, 2019.

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase is after April 29, 2019 shall be required to adhere to the revised milestone requirements accepted in Docket No. ER20-__.

5.7 **Transition to Revised Site Control Requirements Accepted in Docket No. ER20-__.**
All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was prior to April 29, 2019 shall be required to adhere to Site Control requirements in GIP in effect prior to December 2, 2019.

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was on April 29, 2019 shall be required to provide proof of Site Control for the Generation Facility by the end of Interconnection Customer Decision Point II in accordance with the timing requirements established in Section 7.2.2.1. Such Interconnection Requests shall not be required to provide proof of Site Control for the Generating Facility ninety (90) Calendar Days prior to the start of DPP Phase I in accordance with the timing requirements established in Section 7.2.1. For such requests, the proof of Site Control for all applicable Interconnection Customer’s Interconnection Facilities, and, if applicable (i.e., when the Interconnection Customer is providing the site for such facilities), the Transmission Owner’s Interconnection Facilities and Network Upgrades at the POI shall be due in accordance with the terms of Sections 7.2.2.1 and 7.2.2.2.

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase is after April 29, 2019 will be subject to the Site Control requirements as set forth in Section 7.2.

SECTION 6. PRE-QUEUE PHASE.

6.1 Pre-Queue Customer Education

Transmission Provider will be available for consultation with Interconnection Customer to discuss potential Interconnection Requests for Generating Facilities or study and processing of HVDC facilities. Such discussions may include, but are not limited to: (i) general facility loadings; (ii) general instability issues; (iii) general short circuit issues; (iv) general voltage issues including voltage and frequency ride-through capabilities for the Generating Facility; (v) general power
quality issuesincluding voltage flicker, harmonics; (vi) general reliability issues as may be reasonably required to accomplish the purpose of the meeting; (vii) estimated timing of Interconnection Request proceeding to the Definitive Planning Phase; (viii) estimated in-service date for the request; and (ix) any process related questions.

6.2 **Interim Treatment of HVDC Facilities in Pre-Queue Phase:** All requests for HVDC facilities deemed transferred into the Pre-Queue Phase pursuant to Section 5.1.4 of this GIP or which otherwise are permitted to enter the Pre-Queue Phase shall not be eligible to proceed to the Definitive Planning Phase until such time as additional procedures for processing such facilities are implemented.

6.3 **Small Generating Facility Pre-Application Report.**

6.3.1 In addition to the information described in section 6.1, which may be provided in response to an informal request, an Interconnection Customer proposing to interconnect its Small Generating Facility may submit a formal written request form along with a non-refundable fee of $300 for a pre-application report on a proposed project at a specific site. The Transmission Provider shall provide the pre-application data described in section 6.3.2 to the Interconnection Customer within twenty (20) Business Days of receipt of the completed request form and payment of the $300 fee. Should the Transmission Provider notify the Interconnection Customer that more than twenty (20) Business Days are necessary to provide the pre-application data described in section 6.3.2 below because the information is not readily available to the Transmission Provider, the Interconnection Customer shall notify the Transmission Provider that it desires more complete information and waives the twenty (20) Business Day timeline. The pre-application report produced by the Transmission Provider is non-binding, does not confer any rights, and the
Interconnection Customer must still successfully apply to interconnect to the Transmission Provider’s system. The written pre-application report request form shall include the information in sections 6.3.1.1 through 6.3.1.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.

6.3.1.1 Project contact information, including name, address, phone number, and email address.

6.3.1.2 Project location (street address with nearby cross streets and town)

6.3.1.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available.

6.3.1.4 Generator Type (e.g., solar, wind, combined heat and power, etc.)

6.3.1.5 Size (alternating current kW)

6.3.1.6 Single or three phase generator configuration

6.3.1.7 Stand-alone generator (no onsite load, not including station service – Yes or No?)

6.3.1.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.
6.3.2 Using the information provided in the pre-application report request form in section 6.3.1, the Transmission Provider will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. This selection by the Transmission Provider does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. Subject to section 6.3.3, the pre-application report will include the following information:

6.3.2.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.

6.3.2.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.

6.3.2.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.

6.3.2.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).
6.3.2.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

6.3.2.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.

6.3.2.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.

6.3.2.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 14.4.4.1.1 below and absolute minimum load, when available.

6.3.2.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.

6.3.2.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.

6.3.2.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.

6.3.2.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.

6.3.2.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity
issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

6.3.3 The pre-application report need only include existing data. A pre-application report request does not obligate the Transmission Provider to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the Transmission Provider cannot complete all or some of a pre-application report due to lack of available data, the Transmission Provider shall provide the Interconnection Customer with a pre-application report that includes the data that is available. The provision of information on “available capacity” pursuant to section 6.3.2.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions of this section, the Transmission Provider shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

SECTION 7. DEFINITIVE PLANNING PHASE.

7.1 Purpose of the Definitive Planning Phase.
The Definitive Planning Phase is designed to identify Network Upgrades that will reliably and efficiently integrate the proposed generation, including through Injection Rights requested by MHVDC Connection Customer, into the Transmission Provider’s Transmission System. The Definitive Planning Phase will be composed of three distinct phases in which Interconnection System Impact Studies and Interconnection Facilities Studies will be performed.
7.1.1 Screening Analysis Prior to Definitive Planning Phase.

Transmission Provider will perform an indicative non-binding screening analysis to identify potential thermal and voltage constraints and publish the results of that analysis for Interconnection Customers and MHVDC Connection Customers entering the Definitive Planning Phase at least fifteen (15) Calendar Days prior to the kick-off of the Definitive Planning Phase I. If the Interconnection Customer or MHVDC Connection Customer decides to withdraw its Interconnection Request before the start of the Definitive Planning Phase I, then the Transmission Provider will refund to Interconnection Customer or the MHVDC Connection Customer 100% of Definitive Planning Phase entry milestone (M2) and any remaining study deposits pursuant to Section 7.6.

7.2 Eligibility for the Definitive Planning Phase.

The Interconnection Request shall enter the Definitive Planning Phase after the Interconnection Customer or MHVDC Connection Customer has met the requirements of Section 3.3, specifically having provided the Definitive Planning Phase entry milestone, technical data requirements, and Definitive Planning Phase study deposit. The Definitive Planning Phase will start on a periodic basis, where an Interconnection Customer or MHVDC Connection Customer may elect to enter the next scheduled Definitive Planning Phase.

7.2.1 Requirements for Demonstrating Site Control for Generating Facility.

Except as otherwise provided in Section 5.7, at least ninety (90) Calendar Days prior to the kick-off of DPP Phase I the Interconnection Customer shall submit one of the following to the Transmission Provider:

(i) Proof of Site Control for the Generating Facility demonstrating that the Interconnection Customer has obtained a right to develop the site, and that such Site Control:
(a) is exclusive to the specific project referenced in the Interconnection Request and the site meets the total resource-specific acreage requirements established in the Generator Interconnection Business Practices Manual; or

(b) either is not exclusive to the specific project or includes less acreage than the standard resource-specific acreage requirements established in the Generator Interconnection Business Practice but is nonetheless sufficient to accommodate the final design of the Generating Facility, and account for any other projects that will utilize all or part of the same site; or

(ii) A cash deposit in lieu of Site Control and supporting documentation demonstrating regulatory restrictions in accordance with Section 7.2.1.2 of this GIP.

Site Control for a Generating Facility shall be demonstrated in accordance with Section 7.2.1.1 and Section 7.2.1.2 of this GIP.

All documentation establishing proof of Site Control under Sections 7.2.1 of this GIP shall be accompanied by a signed affidavit from an officer or from an agent of the Interconnection Customer stating either that the Interconnection Customer: (1) possesses Site Control in accordance with Section 7.2.1.1 of this GIP; or (2) is subject to regulatory restrictions that preclude Interconnection Customer from obtaining Site Control pursuant to Section 7.2.1.2 of this GIP. Such affidavit shall adhere to the form specified in Attachment E of Appendix 1 of Attachment X.

7.2.1.1 Site Control Demonstration.

In order to demonstrate Site Control for a Generating Facility, an Interconnection Customer must submit the following:
To demonstrate that an Interconnection Customer has Site Control in accordance with Section 7.2.1(i)(a) of this GIP, a Geographic Information System (GIS) site plan map, data files, and documentation that shows the following information: (a) sufficient land to meet the acreage requirements set forth in the Generator Interconnection Business Practices Manual; (b) boundary for the proposed project indicating the boundaries of the Interconnection Customer’s leasehold/ownership interests for the site; and (c) the proposed location of each of the following: the Collector Substation, the Point of Interconnection, and the Interconnection Facilities based on the Point of Interconnection.

To demonstrate that an Interconnection Customer has obtained Site Control in accordance in accordance with Section 7.2.1(i)(b) of this GIP, Interconnection Customer must submit a Geographic Information System (GIS) site plan map, data files, and documentation that meets the requirements specified in Section 7.2.1.1(i)(b) and (c) and show the following additional information:

(a) Sufficient land to accommodate the proposed Generating Facility based on the location and approximate land utilization requirements of proposed electrical devices (i.e., turbine, solar panel, battery storage, inverter), local spacing and setback requirements, and the proposed location of the feeder routes to the Collector Substation; and

(b) In the event that Interconnection Customer elects to share a site with other projects in accordance with Section 7.2.1(i)(b) of this GIP, Interconnection Customer shall include with its Interconnection Request documentation demonstrating that the
project referenced in the Interconnection Request is concurrently feasible with the development of any other projects that will share Site Control over all or a portion of the same site. Such proof of concurrent feasibility shall include:

(1) an identification of any other Interconnection Requests or projects that will share all or a portion of the same site; and

(2) identification of the proposed location and space utilization of all projects that will share the site together with any related technical information specified in the Generator Interconnection Business Practices Manual to enable the Transmission Provider to determine that development of the project referenced in the submitted Interconnection Request is not inconsistent with development of any of the other projects that will share all or a portion of the same site.

Any GIS site plan map, and data files submitted in accordance with this Section 7.2.1.1 must be consistent with the modeling data submitted with the Interconnection Request.

7.2.1.2 Cash in lieu of Site Control.

If the Interconnection Customer is unable to obtain Site Control for its proposed Generating Facility as a result of regulatory restrictions, the Interconnection Customer shall provide a cash deposit in lieu of Site Control. In order to demonstrate regulatory restrictions, Interconnection Customer must submit: (i) a signed affidavit in accordance with the terms of Section 7.2.1 of this GIP indicating that Site Control is unobtainable due to regulatory requirements; (ii) documentation sufficiently describing and explaining the source of and effects of such regulatory restrictions,
including a description of any conditions that must be met in order to satisfy the regulatory restrictions and the anticipated time by which the Interconnection Customer expects to satisfy the regulatory restrictions. The cash deposit made in lieu of Site Control shall be $10,000 per MW of new Interconnection Service requested, and at least $500,000 but no more than $2,000,000. In the event that Interconnection Customer needs to submit a cash deposit in lieu of Site Control as a result of regulatory restrictions, Interconnection Customer must provide proof of Site Control as soon as the Interconnection Customer satisfies the regulatory requirements described in the Interconnection Customer’s affidavit and supporting documents. Interconnection Customer’s cash deposit made in lieu of Site Control shall only be refunded once the Interconnection Customer satisfies the Site Control requirements in accordance with the terms of Sections 7.2.1(i), 7.2.1.1, and 7.2.2 of the GIP or is withdrawn from the queue.

7.2.1.3 Transmission Provider Review of Site Control Sufficiency.

The Transmission Provider shall review the Site Control documentation submitted by Interconnection Customer and determine whether the Interconnection Customer has satisfied the applicable Site Control requirements specified in Section 7.2.1, and 7.2.1.1 or 7.2.1.2 of this GIP, as applicable. Transmission Provider shall evaluate the Site Control documentation using sound engineering judgement and in a non-discriminatory manner. In addition, Transmission Provider shall adhere to any guidelines for such analysis as may be included in the Generator Interconnection Business Practices Manual.

In the event that the Transmission Provider determines that the Interconnection Customer does not demonstrate sufficient Site Control, Transmission Provider shall, consistent with Section 7.2.3(ii) of this GIP,
provide a written explanation, including the technical reasons for such
determination, to Interconnection Customer no later than thirty (30)
Calendar Days prior to the kick-off of the DPP Phase I. Any such
deficiencies shall be processed as set forth in Section 7.2.3(ii) of this GIP.

7.2.2 Continued Site Control for Generating Facilities; Site Control for
Interconnection Facilities and Network Upgrades.

7.2.2.1 Timing Requirements.

(i) After the start and prior to the end of Interconnection Customer
Decision Point II, Interconnection Customer shall submit proof
that Interconnection Customer continues to maintain Site Control
for the Generating Facility in accordance with terms in Section
7.2.1.1 of this GIP.

(ii) Prior to conclusion of the Interconnection Customer’s GIA
execution period, as defined in Section 11 of this GIP,
Interconnection Customer shall submit proof of the following: (a)
continued Site Control for the Generating Facility in accordance
with terms in Section 7.2.1.1 of this GIP; and (b) 50% Site Control
for all Interconnection Customer’s Interconnection Facilities, and,
if applicable (i.e., when the Interconnection Customer is providing
the site for such facilities), the Transmission Owner’s
Interconnection Facilities and Network Upgrades at the POI that
the Interconnection Customer will develop.

(iii) To the extent there is any change in the POI as a result of the
Interconnection Facilities Study started in DPP Phase II and
completed in DPP Phase III, the Transmission Provider shall
provide the Interconnection Customer additional time to procure land rights for the new Interconnection Customer’s Interconnection Facilities and, if applicable (i.e., when the Interconnection Customer is providing the site for such facilities), the Transmission Owner’s Interconnection Facilities and Network Upgrades at the POI that the Interconnection Customer will develop. The amount of additional time awarded for this purpose shall be determined on a case-by-case basis and in accordance with Section 4.4 of this GIP.

(iv) After the Interconnection Customer timely satisfies each of the requirements of this Section 7.2.2.1 and execution of the GIA, any changes made to the site layouts and interconnection facility routes shall not be construed as a failure to satisfy the requirements of this Section 7.2.2.1. In the event that the Interconnection Customer makes any modifications to the design of the site layouts or Interconnection Facility routes after execution of this GIA, Interconnection Customer shall: (1) immediately notify the Parties of such changes; and (2) provide to Transmission Provider evidence of continued Site Control for land sufficient to accommodate the changes in site layouts and/or Interconnection Facility routes in accordance with the terms of its GIA.

7.2.2.2 Content Requirements -- Demonstrating Site Control for Applicable Interconnection Facilities and Network Upgrades.

In order to demonstrate Site Control for the Interconnection Customer’s Interconnection Facilities and, if applicable (i.e., when the Interconnection Customer is providing the site for such facilities), the Transmission Owner’s Interconnection Facilities and Network Upgrades at the POI, Interconnection Customer shall submit a site plan map by the deadline...
specified in Section 7.2.2.1 of this GIP. Such site plan map shall demonstrate land that is sufficient to accommodate 50% of the total land acreage required for the Interconnection Customer’s Interconnection Facilities for the proposed Generating Facility (including the total linear miles for the associated lead line required to electrically interconnect the Generating Facility to the Transmission System) and, if applicable (i.e., when the Interconnection Customer is providing the site for such facilities), 50% of the total land acreage required for the Transmission Owner’s Interconnection Facilities and the Network Upgrades at the POI for the proposed Generating Facility.

The Site Plan submitted in accordance with Section 7.2.2 of this GIP shall identify the specific locations within the site for which Site Control is achieved, and those locations for which Site Control is not yet achieved.

To the extent that the Interconnection Customer intends to locate its Interconnection Facilities in a public right of way, Interconnection Customer shall also submit proof of submission of all requisite state and local permits.

Demonstration of Site Control pursuant to this Section 7.2.2.2 shall conform to any technical and documentation requirements as may be specified in the Generator Interconnection Business Practice Manual.

7.2.3. Effect of Deficiencies in Demonstration of Site Control

In the event that the Interconnection Customer fails to timely satisfy any of the requirements of Sections 7.2.1 and 7.2.2 including subsections, as applicable, Interconnection Customer’s Interconnection Request shall be deemed withdrawn as set forth below:
(i) If Interconnection Customer fails to submit all of the documentation and information required by the applicable deadline, Interconnection Customer’s Interconnection Request shall immediately be deemed withdrawn as of the date of such deadline without any cure period. Transmission Provider shall provide Interconnection Customer with notice of such withdrawal.

(ii) If Interconnection Customer has timely submitted all information required by an applicable deadline but the Transmission Provider determines after review that such submission does not meet the requirements of this GIP, Interconnection Customer’s Interconnection Request shall be deemed withdrawn in accordance with Section 3.6 of this GIP.

7.3 Duration of the Definitive Planning Phase

The Definitive Planning Phase will include the following three phases:

(i) Definitive Planning Phase I

(ii) Definitive Planning Phase II

(iii) Definitive Planning Phase III.

7.3.1 Definitive Planning Phase I

The Definitive Planning Phase I will start on a defined, periodic basis. The Definitive Planning Phase I will include the following steps:

(i) Model Building and Review (30 Calendar Days)

(ii) Preliminary System Impact Study (90 Calendar Days)

(iii) Interconnection Customer Decision Point I (15 Business Days)

7.3.1.1 Purpose
The Definitive Planning Phase I is designed to provide Interconnection Customers or MHVDC Connection Customers with a preliminary detailed analysis of their Interconnection Request’s impact on the reliability of the Transmission System. Upon completion of the preliminary Interconnection System Impact Study, Transmission Provider will provide a detailed reliability analysis, pursuant to Section 7.3.1.5, to each Interconnection Customer or MHVDC Connection Customer that has an Interconnection Request in the Definitive Planning Phase I. Upon receipt of the preliminary Interconnection System Impact Study, the Interconnection Customer can either proceed to Definitive Planning Phase II or withdraw its Interconnection Request pursuant to Section 7.3.1.4 of this Attachment X.

7.3.1.2 Model Building and Point of Interconnection Review
Before starting the preliminary Interconnection System Impact Study, Transmission Provider will distribute the study models to Interconnection Customer or MHVDC Connection Customer and Transmission Owner. Interconnection Customer and Transmission Owner may recommend changes to the study model by providing a completed Interconnection Study Model Review Form, Appendix 10 to the GIP within ten (10) Business Days after receipt of the study models. Proposed changes will be incorporated in the study models after mutual agreement between Interconnection Customer or MHVDC Connection Customer, Transmission Owner and Transmission Provider, such agreement not to be unreasonably withheld. Transmission Provider shall thereafter begin the preliminary Interconnection System Impact Study. Failure of Interconnection Customer or MHVDC Connection Customer to provide the completed Interconnection Study Model Review Form within ten (10) Business Days will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.
7.3.1.3 **Scope of the Preliminary Interconnection System Impact Study**

The preliminary Interconnection System Impact Study shall evaluate the impact of the proposed Interconnection Request(s) in the Definitive Planning Phase I on the reliability and safety of the Transmission System. The preliminary Interconnection System Impact Study will consider the Base Case as well as all generating and MHVDC facilities (and with respect to subpart iv below, any identified Network Upgrades, System Protection Facilities, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, Shared Network Upgrades, or, if such upgrades have been determined, upgrades on Affected Systems, associated with such higher queued Interconnection Requests) that, on the date the preliminary Interconnection System Impact Study is commenced: (i) are interconnected to the Transmission System or Distribution System; (ii) are interconnected or queued to interconnect to Affected Systems and may have an impact on the Interconnection Request; (iii) have Interconnection Request is part of the same group; and (iv) have executed a GIA or a pending unexecuted GIA on file at FERC or a TCA pursuant to which Transmission Provider has granted Injection Rights.

The preliminary Interconnection System Impact Study will consist of a power flow analysis. If Transmission Provider determines in accordance with Good Utility Practice that any voltage stability analysis is needed, the preliminary Interconnection System Impact Study may include voltage stability analysis. The preliminary Interconnection System Impact Study will also include analysis needed to determine the Generating Facility’s reactive power capability required to maintain the Transmission Owner’s voltage schedule and power factor criteria at the Point of Interconnection.
Preliminary Interconnection System Impact Studies for Net Zero Interconnection Service requests will consist of short circuit and stability analyses as described in this Section 2.1.3.2. If Transmission Provider determines upon a review of the Interconnection Studies performed for the Existing Generating Facility (against which the Net Zero Interconnection Service is sought) that power flow analyses are required, then the preliminary Interconnection System Impact Study may include such analyses as well.

Determination of the full scope of the preliminary Interconnection System Impact Study in the Definitive Planning Phase I will be on a non-discriminatory basis per the methodologies listed in the Generator Interconnection Business Practices Manual. Transmission Provider shall use Reasonable Efforts to complete the preliminary Interconnection System Impact Study within ninety (90) Calendar Days.

The preliminary Interconnection System Impact Study will state the assumptions upon which it is based, state the results of the analyses, and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The preliminary Interconnection System Impact Study will provide a preliminary list of facilities (including Interconnection Facilities, Connection Facilities, Network Upgrades, Generator Upgrades, Common Use Upgrades, and Shared Network Upgrades) that are required as a result of the Interconnection Request and a preliminary non-binding good faith estimate of cost and a non-binding good faith estimated time to construct.

At the request of Interconnection Customer or MHVDC Connection
Customer, or at any time Transmission Provider determines that it will not meet the required time frame for completing the preliminary Interconnection System Impact Study, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer regarding the following:

(i) Schedule status of the preliminary Interconnection System Impact Study

(ii) Estimated completion date and an explanation of the reasons why additional time is required.

(iii) Revised cost estimate of study deposits with an explanation of the reasons why cost estimates were revised. Interconnection Customer or MHVDC Connection Customer shall then provide within thirty (30) Calendar Days of Transmission Provider’s notice, an additional deposit equal to the difference between the initial and revised cost estimate. Failure of Interconnection Customer or MHVDC Connection Customer to provide this additional deposit will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

7.3.1.4 Interconnection Customer Decision Point I

All Interconnection Customers or MHVDC Connection Customers with Interconnection Requests in the Definitive Planning Phase I will pass through Interconnection Customer Decision Point I. The Interconnection Customer Decision Point I will last for fifteen (15) Business Days beginning with the receipt of the preliminary Interconnection System Impact Study analysis including estimated upgrades and costs, as applicable. Transmission Provider shall notify all Interconnection Customers or MHVDC Connection Customers at the beginning of Interconnection Customer Decision Point I that the Interconnection Customer or MHVDC Connection Customer shall have fifteen (15)
Business Days to decide whether it wants to proceed to the Definitive Planning Phase II or withdraw its Interconnection Request. During Interconnection Customer Decision Point I, an Interconnection Customer or MHVDC Connection Customer may reduce the size of its Interconnection Request but the required Definitive Planning Phase II Milestone calculation shall be based on the DPP Phase I results. If the Interconnection Customer or MHVDC Connection Customer decides to withdraw its Interconnection Request during, or any time before, the end of Interconnection Customer Decision Point I, then the Transmission Provider will refund Interconnection Customer with 50% of Definitive Planning Phase I milestone (M2) and any remaining study deposits pursuant to Section 7.6. Any withdrawal during the Definitive Planning Phase I, but prior to Interconnection Customer Decision Point I, will neither be processed nor deemed withdrawn until Interconnection Customer Decision Point I.

If the Interconnection Customer or MHVDC Connection Customer decides to proceed to the Definitive Planning Phase II, then it will be required to pay Definitive Planning Phase II milestone (M3), pursuant to Section 7.3.1.4.1, prior to the end of Interconnection Customer Decision Point I.

If the Transmission Provider does not receive written confirmation from Interconnection Customer or MHVDC Connection Customer on whether it wants to proceed to the Definitive Planning Phase II or withdraw its Interconnection Request, during the Interconnection Customer Decision Point I, the Transmission Provider will deem the Interconnection Request as withdrawn. After Interconnection Customer or MHVDC Connection Customer enters the Definitive Planning Phase II, the Definitive Planning
Phase I (M2) milestone payment becomes 100% non-refundable, pursuant to Section 7.8.

7.3.1.4.1 **Definitive Planning Phase II Milestone (M3) Calculation.**

The Definitive Planning Phase II milestone (M3) will be in the form of either cash or irrevocable letter of credit reasonably acceptable to Transmission Provider. Interconnection Customers and MHVDC Connection Customers may replace cash milestone payments with a letter of credit and may replace letters of credit with cash. The Definitive Planning Phase II milestone (M3) will be ten percent (10%) of the amount of Network Upgrades identified in the Preliminary System Impact Study less the amount previously provided at M2, but in no event shall the M3 be less than zero dollars.

7.3.2 **Definitive Planning Phase II**

The Definitive Planning Phase II start the next day after the fifteen (15) Business Days Interconnection Customer Decision Point I window expires.

The Definitive Planning Phase II will include the following steps:

(i) Model Building and Review (10 Business Days)

(ii) System Impact Study (45 Calendar Days)

(iii) Interconnection Customer Decision Point II (15 Business Days)

(iv) Interconnection Facilities Study (90 Calendar Days)

7.3.2.1 **Purpose**

The Definitive Planning Phase II is designed to provide Interconnection Customers and MHVDC Connection Customers a revised and a detailed analysis of their Interconnection Project’s impact on the reliability of the
Transmission System after incorporating updated generation and MHVDC assumptions due to potential withdrawal of Interconnection Requests during Definitive Planning Phase I. Upon completion of the revised Interconnection System Impact Study, Transmission Provider will provide a detailed reliability analysis, pursuant to Section 7.3.2.5, to each Interconnection Customer or MHVDC Connection Customer that has an Interconnection Request in the Definitive Planning Phase II. Upon receipt of the revised System Impact Study, the Interconnection Customer or MHVDC Connection Customer can either proceed to Definitive Planning Phase III or withdraw its Interconnection Request pursuant to Section 7.3.2.4 of this Attachment X.

7.3.2.2 Model Building

Before starting the revised Interconnection System Impact Study, Transmission Provider will distribute the study models to Interconnection Customer or MHVDC Connection Customer and Transmission Owner. The Transmission Provider will update the study models built during Definitive Planning Phase I, pursuant to Section 7.3.1.2, by removing all Interconnection Requests that did not proceed to the Definitive Planning Phase II. The Transmission Provider will distribute the revised study models to the Transmission Owner and Interconnection Customer or MHVDC Connection Customer for final review. Any comments or corrections from the Transmission Owner or Interconnection Customer or MHVDC Connection Customer to the revised study models must be submitted to the Transmission Provider within five (5) Business Days after receipt of the revised study models. Should the Transmission Owner or Interconnection Customer or MHVDC Connection Customer fail to provide feedback on the revised study models within five (5) Business Days, Transmission Provider will deem the models acceptable.
Transmission Provider shall thereafter begin the revised Interconnection System Impact Study.

7.3.2.3 Scope of the Interconnection System Impact Study

The revised Interconnection System Impact Study shall provide an updated, detailed analysis of their Interconnection Project’s impact on the reliability of the Transmission System after incorporating updated generation and MHVDC assumptions due to potential withdrawal of Interconnection Requests during Definitive Planning Phase I. The revised Interconnection System Impact Study shall follow the procedures as the Preliminary System Impact Study described in Definitive Planning Phase I Section 7.3.1.3, as well as include a short circuit analysis and stability analysis. Transmission Provider shall include in the revised Interconnection System Impact Study an analysis of the upgrades on Distribution System, if applicable, and Affected Systems. If Transmission Provider determines in accordance with Good Utility Practice that any such analyses are needed, any stability analysis performed in a revised Interconnection System Impact Study may include transient stability, large and small signal, sub-synchronous stability, dynamic voltage stability, mid- and long-term stability, voltage flicker analyses and excessive neutral current. Transmission Provider shall utilize existing studies to the extent practicable in performing the revised Interconnection System Impact Study. Transmission Provider shall use Reasonable Efforts to complete the revised Interconnection System Impact Study within forty-five (45) Calendar Days.

At the request of Interconnection Customer or MHVDC Connection Customer, or at any time Transmission Provider determines that it will not meet the required time frame for completing the revised Interconnection System Impact Study, Transmission Provider shall notify Interconnection...
Customer or MHVDC Connection Customer regarding the following:

(i) Schedule status of the revised Interconnection System Impact Study

(ii) Estimated completion date and an explanation of the reasons why additional time is required.

(iii) Revised cost estimate of study deposits with an explanation of the reasons why cost estimates were revised. Interconnection Customer or MHVDC Connection Customer shall then provide within thirty (30) Calendar Days of Transmission Provider’s notice, an additional deposit equal to the difference between the initial and revised cost estimate. Failure of Interconnection Customer or MHVDC Connection Customer to provide this additional deposit will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

7.3.2.4 Interconnection Customer Decision Point II

All Interconnection Customers and MHVDC Connection Customers with Interconnection Requests in the Definitive Planning Phase II will pass through Interconnection Customer Decision Point II. The Interconnection Customer Decision Point II will last for fifteen (15) Business Days beginning with the receipt of the revised Interconnection System Impact Study analysis and Affected System analysis, including estimated upgrades and costs as applicable. Transmission Provider shall notify all Interconnection Customers and MHVDC Connection Customers at the beginning of Interconnection Customer Decision Point II that the Interconnection Customer or MHVDC Connection Customer shall have fifteen (15) Business Days to decide whether it wants to proceed to the Definitive Planning Phase III or withdraw its Interconnection Request. During Interconnection Customer Decision Point II, an Interconnection Customer or MHVDC Connection Customer may reduce the size of its
Interconnection Request by as much as ten percent (10%) compared to what was studied in DPP Phase II, but the required M4 milestone calculation shall be based on the DPP Phase II results.

Milestone payments will be refunded in the event the Interconnection Customer or MHVDC Connection Customer withdraws because the total Network Upgrade cost estimates in the DPP Phase II System Impact Study increased by more than twenty-five percent (25%) and more than $10,000 per MW over the DPP Phase I System Impact Study as a result of Transmission Provider, or Transmission Owner error.

If the Interconnection Customer or MHVDC Connection Customer decides to withdraw its Interconnection Request during, or any time before, the end of Interconnection Customer Decision Point II, then the Transmission Provider will refund Interconnection Customer’s Definitive Planning Phase II milestone (M3) and any remaining study deposits pursuant to Section 7.8. Any withdrawal during the Definitive Planning Phase II, but prior to Interconnection Customer Decision Point II, will neither be processed nor deemed withdrawn until Interconnection Customer Decision Point II.

If the Interconnection Customer or MHVDC Connection Customer decides to proceed to the Definitive Planning Phase III, then it will be required to pay Definitive Planning Phase III milestone (M4), pursuant to Section 7.3.2.4.1, as well as provide evidence of continued Site Control for the proposed Generating Facility prior to the end of Interconnection Customer Decision Point II pursuant to Section 7.2.2.

If the Transmission Provider does not receive written confirmation from Interconnection Customer or MHVDC Connection Customer on whether it
wants to proceed to the Definitive Planning Phase III or withdraw its Interconnection Request, during the Interconnection Customer Decision Point II, the Transmission Provider will deem the Interconnection Request as withdrawn and refund Interconnection Customer’s Definitive Planning Phase II milestone (M3) and any remaining study deposits pursuant to Section 7.6. After Interconnection Customer or MHVDC Connection Customer enters the Definitive Planning Phase III, the Definitive Planning Phase II (M3) milestone payment becomes 100% non-refundable, pursuant to Section 7.8.

7.3.2.4.1 Definitive Planning Phase III Milestone (M4) Calculation.

The Definitive Planning Phase III milestone (M4) will be in the form of either cash or irrevocable letter of credit reasonably acceptable to Transmission Provider. Interconnection Customers and MHVDC Connection Customers may replace cash milestone payments with a letter of credit and may replace letters of credit with cash. The Definitive Planning Phase III milestone (M4) will be twenty percent (20%) of the amount of Network Upgrades identified in the revised System Impact Study less any payments made as M2 and M3, but in no event shall the M4 be less than zero dollars.

7.3.2.4.2 True-down of Milestone Payments.

Within ten (10) Business Days from the start of Definitive Planning Phase III, Transmission Provider shall notify the Interconnection Customer if the total posted milestone payments (i.e., the sum of the M2, M3 and M4 payments) for the Interconnection Request exceed twenty percent (20%) of the total Network Upgrade cost assigned to such Interconnection Request in the revised System Impact Study. Transmission Provider shall
refund such excess amounts to the Interconnection Customer as soon as practicable.

7.3.2.5 Scope of Interconnection Facilities Study.
The first portion of the Interconnection Facilities Study focusing on the Interconnection Facilities or the Connection Facilities for the project will start the first day of Definitive Planning Phase II. This portion of the Interconnection Facilities Study will identify estimates for cost and the time required to construct the Interconnection Facilities or the Connection Facilities. Transmission Provider shall use Reasonable Efforts to complete this portion of the Interconnection Facilities Study within ninety (90) Calendar Days.

7.3.3 Definitive Planning Phase III
The Definitive Planning Phase III will start the day after the expiration of the fifteen (15) Business Day Interconnection Customer Decision Point II.

The Definitive Planning Phase III will include the following steps:
(i) Model Building and Review (10 Business Days)
(ii) Final Interconnection System Impact Study (30 Calendar Days)
(iii) Interconnection Facilities Study for Network Upgrades (90 Calendar Days)

7.3.3.1 Purpose
The Definitive Planning Phase III is designed to provide Interconnection Customers and MHVDC Connection Customers a final, detailed analysis of their Interconnection Project’s impact on the reliability of the Transmission System after incorporating updated generation and MHVDC assumptions due to potential withdrawal of Interconnection Requests during Definitive Planning Phase II. Upon completion of the final Interconnection System Impact Study, Transmission Provider will perform...
Facilities Study pursuant to Section 7.3.3.5. Upon completion of the Interconnection Facilities Study, Transmission Provider will tender a draft pro forma Generator Interconnection Agreement to the Interconnection Customer and Transmission Owner.

7.3.3.2 Model Building

Before starting the final Interconnection System Impact Study, Transmission Provider will distribute the study models to Interconnection Customer or MHVDC Connection Customer and Transmission Owner. The Transmission Provider will update the study models built during Definitive Planning Phase II, pursuant to Section 7.3.2.2, by removing all Interconnection Requests that did not proceed to the Definitive Planning Phase III. The Transmission Provider will distribute the revised study models to the Transmission Owner and Interconnection Customer or MHVDC Connection Customer for final review. Any comments or corrections from the Transmission Owner or Interconnection Customer or MHVDC Connection Customer to the revised study models must be submitted to the Transmission Provider within seven (7) Calendar Days after receipt of the revised study models. Should the Transmission Owner or Interconnection Customer or MHVDC Connection Customer fail to provide feedback on the revised study models within seven (7) Calendar Days, Transmission Provider will deem the models acceptable. Transmission Provider shall thereafter begin the final Interconnection System Impact Study.

7.3.3.3 Scope of the Final Interconnection System Impact Study

The final Interconnection System Impact Study shall provide a final, detailed analysis of their Interconnection Project’s impact on the reliability of the Transmission System after incorporating updated generation assumptions due to potential withdrawal of Interconnection Requests.
during Definitive Planning Phase II. The final Interconnection System Impact Study shall follow the procedures as the Revised System Impact Study described in Definitive Planning Phase II Section 7.3.2.3. Transmission Provider shall utilize existing studies to the extent practicable in performing the final Interconnection System Impact Study.

The final Interconnection System Impact Study will start the day after the completion of the Model Review in the Definitive Planning Phase III. Transmission Provider shall use Reasonable Efforts to complete the final Interconnection System Impact Study within thirty (30) Calendar Days.

At the request of Interconnection Customer or MHVDC Connection Customer, or at any time Transmission Provider determines that it will not meet the required time frame for completing the final Interconnection System Impact Study, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer regarding the following:

(i) Schedule status of the final Interconnection System Impact Study.
(ii) Estimated completion date and an explanation of the reasons why additional time is required.
(iii) Revised cost estimate of study deposits with an explanation of the reasons why cost estimates were revised. Interconnection Customer or MHVDC Connection Customer shall then provide within thirty (30) Calendar Days of Transmission Provider’s notice, an additional deposit equal to the difference between the initial and revised cost estimate. Failure of Interconnection Customer or MHVDC Connection Customer to provide this additional deposit will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

7.3.3.4 Scope of Interconnection Facilities Study.
The second portion of the Interconnection Facilities Study shall start after the final Interconnection System Impact Study in the Definitive Planning Phase III is complete. This phase will identify estimates for the cost and time required to build necessary Network Upgrades that are identified in the final Interconnection System Impact Study. Transmission Provider shall use Reasonable Efforts to complete this portion of the Interconnection Facilities Study within ninety (90) Calendar Days.

The Interconnection Facilities Study, in its entirety, shall specify and estimate the cost of the required equipment, engineering, procurement and construction work needed to implement the Network Upgrades and Interconnection Facilities or Connection Facilities identified in the final Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facilities or the Connection Facilities to the Transmission or Distribution System, as applicable, as well as that equipment, to the extent known and available in accordance with Section 3.5 of these GIP, required by Affected Systems to accommodate the interconnection of the Generating Facility or the MHVDC Transmission Line.

The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Owner’s Interconnection Facilities or Connection Facilities and Network Upgrades, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and to the extent known and available in accordance with Section 3.5 of the GIP, upgrades on Affected Systems necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.
7.3.3.5 Interconnection Facilities Study Procedures.

Transmission Provider shall coordinate the Interconnection Facilities Study with any Affected System pursuant to Section 3.5 of this GIP. Transmission Provider shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The Interconnection Facilities Study for an Interconnection Request shall be typically performed as a Group Study with respect to Common Use Upgrades and/or Interconnection Facilities or Connection Facilities common to more than one Interconnection Request.

At the request of Interconnection Customer or MHVDC Connection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Interconnection Facilities Study, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer as to the schedule status of the Interconnection Facilities Study. If Transmission Provider is unable to complete the Interconnection Facilities Study and issue draft GIA or TCA appendices and, as applicable, associated draft appendices for the related FCA(s) and/or MPFCA(s) and supporting documentation within the time required, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. If Transmission Provider is unable to complete the Interconnection Facilities Study with the study deposit provided by Interconnection Customer or MHVDC Connection Customer, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer and provide a revised cost estimate with an explanation of the reasons why. Interconnection Customer or MHVDC Connection Customer shall then provide within fifteen (15) Calendar Days of Transmission Provider’s notice, an additional deposit equal to the
difference between the initial and revised cost estimate. Failure of Interconnection Customer or MHVDC Connection Customer to provide this additional deposit will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

Interconnection Customer or MHVDC Connection Customer and Transmission Owner may, within fifteen (15) Calendar Days after receipt of the draft GIA or TCA appendices and, as applicable, associated draft appendices for the related FCA(s) and/or MPFCA(s) and supporting documentation, provide written comments to Transmission Provider, which Transmission Provider shall include in the final Interconnection Facilities report. Transmission Provider shall issue the final GIA or TCA appendices and, as applicable, associated appendices for the related FCA(s) and/or MPFCA(s) and supporting documentation within ten (10) Calendar Days of receiving the Interconnection Customer’s or the MHVDC Connection Customer’s comments or promptly upon receiving Interconnection Customer’s or the MHVDC Connection Customer’s statement that it will not provide comments. Transmission Provider may reasonably extend such fifteen-day period upon notice to Interconnection Customer or MHVDC Connection Customer if the Interconnection Customer’s or the MHVDC Connection Customer’s comments require Transmission Provider to perform additional analyses or make other significant revisions prior to the issuance of the final Interconnection Facilities Report. Upon request, Transmission Provider shall provide Interconnection Customer or MHVDC Connection Customer supporting documentation, work papers, and databases or data developed in the preparation of the Interconnection Facilities Study, subject to confidentiality arrangements consistent with Section 13.1. Interconnection Customer or MHVDC Connection Customer shall maintain as confidential any information that is provided by Transmission
7.4 **Meeting with Transmission Provider.**

Within ten (10) Business Days of providing draft GIA or TCA appendices and, as applicable, associated draft appendices for the related FCA(s) and/or MPFCA(s) and supporting documentation to Interconnection Customer, Transmission Owner and Interconnection Customer may meet to discuss the results of the Interconnection Facilities Study.

7.5 **Interconnection Study Restudy.**

If a restudy of any Interconnection Study is required because an Interconnection Request withdraws or is deemed to have withdrawn prior to all GIAs, TCAs, FCAs, and/or MPFCAs, as applicable, for each respective Definitive Planning Phase cycle have been executed or filed unexecuted with the Federal Energy Regulatory Commission, Transmission Provider shall provide notice of restudy as necessary. The Transmission Provider’s notice shall include a summary of a preliminary analysis supporting the need for an Interconnection Study restudy, an explanation of why an Interconnection Study restudy is required and a good faith estimate of the cost to perform the Interconnection Study restudy. The Interconnection Study restudy shall be performed subject to the GIP and Business Practices Manuals in effect at the time notice is provided by Transmission Provider. Interconnection Customer or MHVDC Connection Customer shall notify Transmission Provider within five (5) Business Days whether Interconnection Customer or MHVDC Connection Customer wishes to proceed with the Interconnection Study restudy or withdraw its Interconnection Request. Transmission Provider shall deem Interconnection Customer’s or MHVDC Connection Customer’s failure to notify Transmission Provider to proceed to perform the Interconnection Study restudy as Interconnection Customer’s or
MHVDC Connection Customer’s withdrawal of its Interconnection Request in accordance with Section 3.6 of this GIP. Transmission Provider shall use Reasonable Efforts to complete such Interconnection Study restudy no later than sixty (60) Calendar Days from the date of notice. Transmission Provider may elect to perform any Interconnection Study restudy of Network Upgrades common to more than one Interconnection Request as a Group Study.

7.6 Refunds

7.6.1 Refunds of Study Deposits

Transmission Provider shall charge and Interconnection Customer or MHVDC Connection Customer shall pay the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded to, except as otherwise provided herein, the Interconnection Customer. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. Interconnection Customer or MHVDC Connection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice. Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer or MHVDC Connection Customer has paid all undisputed amounts in compliance herewith.

All charges associated with performing Interconnection Studies, during all three phases of the Definitive Planning Phase, are the responsibility of Interconnection Customers or MHVDC Connection Customers with active Interconnection Requests during each respective Definitive Planning Phase.

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If the Interconnection Customer or MHVDC Connection Customer withdraws its Interconnection Request any time before the end of Interconnection Customer Decision Point I, the Transmission Provider will refund to the Interconnection Customer or MHVDC Connection Customer any unused portion of the study deposits. Any Interconnection Customer or MHVDC Connection Customer that withdraws its Interconnection Request, or is deemed to be withdrawn, during Definitive Planning Phase I but before Interconnection Customer Decision Point I is responsible for its pro rata portion of the group Interconnection Study costs for Definitive Planning Phase I. Any Interconnection Customer or MHVDC Connection Customer that withdraws its Interconnection Request, or is deemed to be withdrawn, prior to the expiration of Interconnection Customer Decision Point I will not be responsible to fund any Interconnection Studies that take place during or after the start of the Definitive Planning Phase II of the GIP.

If the Interconnection Customer or MHVDC Connection Customer withdraws its Interconnection Request any time after Interconnection Customer Decision Point I, but before the expiration of the Interconnection Customer Decision Point II, then the Transmission Provider will refund to the Interconnection Customer or MHVDC Connection Customer any unused portion of the study deposits. Any Interconnection Customer or MHVDC Connection Customer that withdraws its Interconnection Request, or is deemed to be withdrawn, during Definitive Planning Phase II but before Interconnection Customer Decision Point II is responsible for its pro rata portion of the group Interconnection Study costs for Definitive Planning Phase II. Any Interconnection Customer or MHVDC Connection Customer that withdraws its Interconnection Request prior to the expiration of Interconnection Customer Decision Point II will not be responsible to fund...
any Interconnection Studies that take place during or after the start of Definitive Planning Phase III of the GIP.

If the Interconnection Customer or MHVDC Connection Customer withdraws its Interconnection Request any time during Definitive Planning Phase III of the GIP, and if the Transmission Provider determines that an Interconnection Study restudy is required, then the withdrawing Interconnection Customer or MHVDC Connection Customer will be responsible to fund all such restudies in Definitive Planning Phase III of the GIP, up to the amount of that Interconnection Customer’s total study deposit. However, if the Transmission Provider determines that no Interconnection Study restudy is required due to the withdrawal of Interconnection Customer’s or MHVDC Connection Customer’s Interconnection Request, then the withdrawing Interconnection Customer or MHVDC Connection Customer will not be responsible to fund any further Interconnection Studies during Definitive Planning Phase III of the GIP and the Transmission Provider shall refund to the Interconnection Customer or MHVDC Connection Customer any unused portion of the study deposit paid to enter the Definitive Planning Phase.

7.6.2 Refunds of Definitive Planning Phase Milestones (M2, M3, M4)

7.6.2.1 Refunds of Definitive Planning Phase entry milestone (M2)
Interconnection Customers and MHVDC Connection Customers are eligible to receive one hundred percent (100%) refund of the Definitive Planning Phase entry milestone (M2) only when the Interconnection Request is withdrawn or deemed withdrawn prior to the start of Definitive Planning Phase I. Interconnection Customers and MHVDC Connection Customers are eligible to receive fifty percent (50%) refund of the Definitive Planning Phase entry milestone (M2) only when the
Interconnection Request is withdrawn or deemed withdrawn during
Definitive Planning Phase I or at any time before the end of
Interconnection Customer Decision Point I. The remaining 50% of the
Definitive Planning Phase entry milestone (M2) becomes non-refundable
pursuant to Section 7.8 of the GIP. If the Interconnection Request is
withdrawn any time after the Interconnection Customer Decision Point I,
then the entire Definitive Planning Phase entry milestone (M2) becomes
non-refundable pursuant to Section 7.8 of the GIP.

7.6.2.2 Refund of Definitive Planning Phase II milestone (M3)
Interconnection Customers and MHVDC Connection Customers are
eligible to receive one hundred percent (100%) refund of the Definitive
Planning Phase II milestone (M3) only when the Interconnection Request
is withdrawn or deemed withdrawn after Interconnection Customer
Decision Point I and before the end of Interconnection Customer Decision
Point II. If the Interconnection Request is withdrawn any time after the
end of Interconnection Customer Decision Point II, then the Definitive
Planning Phase II milestone (M3) becomes non-refundable pursuant to
Section 7.8 of the GIP.

7.6.2.3 Refund of Definitive Planning Phase II milestone (M4)
If the Interconnection Customer or MHVDC Connection Customer
decides to withdraw its Interconnection Request any time after entering
the Definitive Planning Phase III, then the Definitive Planning Phase III
milestone (M4) becomes non-refundable pursuant to Section 7.8 of the
GIP.

7.6.2.4 Withdrawal and refund due to increase in Network Upgrade
costs
Milestone payments will be refunded in the event the Interconnection Customer or MHVDC Connection Customer withdraws because the total Network Upgrade cost estimates in the DPP Phase III System Impact Study increased by more than twenty-five percent (25%) and more than $10,000 per MW over the DPP Phase II System Impact Study as a result of Transmission Provider, Affected System or Transmission Owner error.

Milestone payments will also be refunded in the event the Interconnection Customer or MHVDC Connection Customer withdraws and the total Network Upgrade cost estimates in the Facilities Study increased by more than twenty-five percent (25%) and more than $10,000 per MW over the Network Upgrade cost estimates in the DPP Phase III Interconnection System Impact Study.

Milestone payments will also be refunded in the event the Interconnection Customer or MHVDC Connection Customer withdraws within the later of five (5) Business Days or at the end of a Decision Point, if applicable, of results indicating designated increases in estimated upgrade costs across the following intervals:

1. DPP Phase I to DPP Phase II
   a. An increase in MISO Network Upgrade costs of twenty-five percent (25%) and more than $10,000 per MW from the Preliminary SIS to the Revised SIS; or
   b. Affected System upgrade costs on transmission systems other than the MISO Transmission System of more than $10,000 per MW.

2. DPP Phase II to DPP Phase III
   a. An increase in MISO Network Upgrade costs of thirty-five percent (35%) and more than $15,000 per MW from the Revised SIS to any DPP Phase III SIS; or

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b. An increase in Affected System upgrade costs on transmission systems other than the MISO Transmission System of forty percent (40%) and more than $15,000 per MW.

3. DPP Phase I to DPP Phase III (or beyond)
   a. An increase in MISO Network Upgrade costs of fifty (50%) and more than $20,000 per MW from the Preliminary SIS to any DPP Phase III SIS (or any subsequent restudy).

7.7 Applicability of Definitive Planning Phase Milestone Payments (M2, M3, and M4) to Generator Interconnection Agreement Initial Payment or Transmission Connection Agreement Initial Payment

In the event the Interconnection Customer has elected to make its milestones in the form of cash, Transmission Provider will transfer the Definitive Planning Phase milestones to the appropriate Transmission Owner to satisfy the initial payment requirement of the Generator Interconnection Agreement, TCA or other applicable service agreement within forty-five (45) Calendar Days of the effective date of the Generator Interconnection Agreement, TCA or other applicable service agreement. The Transmission Provider shall refund Milestone cash payments exceeding the initial payment requirement to the Interconnection Customer, MHVDC Connection Customer or the applicable Transmission Owner upon Interconnection Customer’s or MHVDC Connection Customer’s request with Transmission Owner’s consent, within forty-five (45) Calendar Days of the effective date of the Generator Interconnection Agreement, TCA or other applicable service agreement. In the event the milestone payments are less than the initial payment requirement, the Interconnection Customer or MHVDC Connection Customer shall be responsible for the remaining payment to the Transmission Owner.

In the event milestone payments were provided pursuant to an irrevocable letter of credit, such letter of credit shall be released upon satisfaction of the initial
payment requirement in the Generator Interconnection Agreement, TCA or other applicable service agreement.

7.8 **Use of Definitive Planning Phase Entry Milestone Payments (M2, M3 and M4) of Withdrawn Projects**

Upon completion of the Definitive Planning Phase III and after any subsequent restudy performed after Definitive Planning Phase III, Transmission Provider will determine the financial impact of withdrawn projects on each remaining Interconnection Request in the same cycle. This financial impact will be determined using the following two steps.

First, Transmission Provider will determine the cost of upgrades that are shifted from withdrawn projects to remaining projects that were co-participants in Common Use Upgrades or Shared Network Upgrades. For each remaining Interconnection Request in a given queue cycle, the Transmission Provider shall compare the planning level cost estimates of each Common Use Upgrades and Shared Network Upgrade between each of the following: (i) Definitive Planning Phase I to Definitive Planning Phase III; (ii) Definitive Planning Phase II to Definitive Planning Phase III; and (iii) Definitive Planning Phase III to any subsequent restudy that was performed before the execution of the last GIA from the given cycle. If the comparative planning level cost analysis indicates that a project withdrawal causes an increase in financial impact to any remaining co-participants, those remaining co-participants will be credited using the milestones that were forfeited by the withdrawn Interconnection Customers or MHVDC Connection Customers in the same cycle.

Second, the Transmission Provider will calculate the financial impact to each remaining Interconnection Request that is obligated to fund Network Upgrades other than Common Use Upgrades or Shared Network Upgrades. In order to determine whether a withdrawal caused financial impact to those remaining Interconnection Requests, the Transmission Provider shall compare the total planning level cost estimates of all Network Upgrades...
other than Common Use Upgrades or Shared Network Upgrades between each the
following: (i) comparison of Definitive Planning Phase I to Definitive Planning Phase III;
(ii) comparison of Definitive Planning Phase II to Definitive Planning Phase III; and (iii)
comparison of Definitive Planning Phase III to any subsequent restudy that was
performed after Definitive Planning Phase III. If any portion of the comparative analyses
described supra indicates that the withdrawal of a project causes an increase in the total
cost of Network Upgrades, other than Common Use Upgrades or Shared Network
Upgrades, for any of the remaining Interconnection Requests, the Transmission
Provider will use the Definitive Planning Phase milestones (M2, M3 and M4),
collected from the withdrawn Interconnection Requests in the current Definitive
Planning Phase cycle, to offset the cost difference for those remaining
Interconnection Requests in the same cycle. If any portion of the comparative
analyses described supra indicated that the withdrawal of a project causes a
decrease in the total cost of Network Upgrades, other than Common Use
Upgrades or Shared Network Upgrades, for any of the remaining Interconnection
Requests, those remaining Interconnection Customers and MHVDC Connection
Customers shall not receive any reimbursement from the collected Definitive
Planning Phase milestones. If any portion of the comparative analyses described
supra indicates that the withdrawal of a project causes the total cost of Network
Upgrades, other than Common Use Upgrades or Shared Network Upgrades, for
any of the remaining Interconnection Requests to remain the same, those
remaining Interconnection Customers and MHVDC Connection Customers shall
not receive any reimbursement from the collected Definitive Planning Phase
milestones.

The total allocation to any remaining Interconnection Requests will not exceed
the total Definitive Planning Phase milestones collected from the Interconnection
Customers and MHVDC Connection Customers that withdrew their
Interconnection Requests from the same Definitive Planning Phase cycle. In
instances where the total cost of Network Upgrades has increased for multiple
Interconnection Requests, but the collected Definitive Planning Phase milestones
are insufficient to cover the increase in total cost of Network Upgrades for all affected Interconnection Requests, the Transmission Provider will allocate the collected Definitive Planning Phase milestones equally as a percentage of increased Network Upgrade costs.

If any collected Definitive Planning Phase milestones remain after allocating to remaining affected Interconnection Requests, the Transmission Provider will refund the remaining collected Definitive Planning Phase milestones to each Interconnection Customer and MHVDC Connection Customer in proportion to that customer’s forfeited milestone payments as a pro rata share of the total collected Definitive Planning Phase milestones.

7.9 Provisional Generator Interconnection Agreement

The Transmission Provider may provide a provisional Generator Interconnection Agreement for limited operation at the discretion of Transmission Provider based upon the results of available studies. An Interconnection Customer may request such provisional Generator Interconnection Agreement by providing written notice to the Transmission Provider beginning upon Interconnection Request submission and through Interconnection Customer Decision Point II (Section 7.3.2.4 of this GIP).

If scheduled Interconnection Customer Decision Point I, Interconnection Customer Decision Point II, or the Interconnection Facilities Study for Network Upgrades becomes delayed by more than sixty (60) Calendar Days, Interconnection Customers may also request a provisional Generator Interconnection Agreement from Transmission Provider. A request for a provisional Generator Interconnection Agreement at any other time shall be deemed invalid by the Transmission Provider.
All provisions of the Definitive Planning Phase (Section 7 of this GIP) apply, except as provided in Section 7.9.1. After receiving a request for a provisional Generator Interconnection Agreement, the Transmission Provider will begin the first portion of the Interconnection Facilities Study as discussed in Section 7.3.3.4 as well as the Preliminary System Impact Study as discussed in Section 7.3.1.3. The Transmission Provider will perform a Provisional Interconnection Study. After completing required studies, the Transmission Provider will issue a draft provisional Generator Interconnection Agreement pursuant to Section 11.2.

7.9.1 Additional Definitive Planning Phase Requirements for Provisional Generator Interconnection Agreements

Interconnection Customers seeking a provisional Generator Interconnection Agreement must submit Definitive Planning Phase II and Definitive Planning Phase III Milestones (M3 and M4). If M3 and M4 have not been calculated at the time of Interconnection Customer’s request for a provisional Generator Interconnection Agreement, M3 and M4 shall each be initially $4,000 per MW. The Transmission Provider shall then calculate the M3 and M4 as provided in Sections 7.3.1.4.1 and 7.3.2.4.1. If the actually calculated M3 and M4 values are higher than the M3 and M4 previously paid, Interconnection Customer shall pay any difference between the M3 and M4 previously paid and the actually calculated values within thirty (30) Calendar Days of those amounts being calculated by the Transmission Provider. Failure to pay any difference between the calculated M3 and M4 and the initially paid M3 and M4 within thirty (30) Calendar Days shall result in automatic withdrawal of the Interconnection Request. If the actually calculated M3 and M4 values are lower than the M3 and M4 previously paid, Transmission Provider shall refund any difference between the M3 and M4 previously paid and the actually calculated values.
7.9.2 Consent to Proceed Through Definitive Planning Phase Decision Points
Interconnection Customers seeking a provisional Generator Interconnection Agreement automatically consent to the Transmission Provider moving the Interconnection Request through Definitive Planning Phases II and III without regard to Interconnection Customer Decision Point II unless notification of withdrawal is provided to the Transmission Provider.

7.9.3 Withdrawal
Interconnection Customers seeking a provisional Generator Interconnection Agreement are eligible to receive one hundred percent (100%) refund of all Definitive Planning Phase milestones (M2, M3, and M4) only when the Interconnection Request is withdrawn prior to the start of Definitive Planning Phase I and unencumbered study deposits remaining. Interconnection Customers seeking a provisional Generator Interconnection Agreement at the time of Interconnection Request submission may withdraw before the end of Interconnection Customer Decision Point I and Transmission Provider will refund fifty percent (50%) of the Definitive Planning Phase entry milestone (M2), all of the Definitive Planning Phase Milestone payments M3 and M4, and unencumbered study deposits remaining. After Interconnection Customer Decision Point I, Interconnection Customers seeking a provisional Generator Interconnection Agreement may withdraw from the Transmission Provider’s interconnection queue at any time, but all Definitive Planning Phase Milestone (M2, M3, and M4) payments are non-refundable and will be used in accordance to Section 7.8.

7.9.4 Reversion to Standard Definitive Planning Phase Process
Interconnection Customers seeking a provisional Generator Interconnection Agreement may notify Transmission Provider before and during Interconnection Customer Decision Point I that the Interconnection Customer wishes to revert to the standard Definitive Planning Phase process. Transmission Provider will subsequently refund the Definitive Planning Phase III (M4) milestone payment. Interconnection Customer must then continue to abide by all Definitive Planning Phase requirements.

SECTION 8. {RESERVED}

SECTION 9. ENGINEERING & PROCUREMENT ("E&P") AGREEMENT.

Prior to executing an GIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and Transmission Provider shall offer Interconnection Customer, an E&P Agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, Transmission Provider shall not be obligated to offer an E&P Agreement if Interconnection Customer is in Dispute Resolution as a result of an allegation that Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the GIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer’s Definitive Planning Phase Queue Position or In-Service Date. The E&P Agreement shall provide for Interconnection Customer to pay the cost of all activities authorized by Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its Interconnection Request, which cannot be mitigated as hereafter described, whether or not such
items or equipment later become unnecessary. If Interconnection Customer withdraws its application for interconnection or a Party to the E&P Agreement terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, Transmission Owner may elect: (i) to take title to the equipment, in which event Transmission Owner shall refund Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to Interconnection Customer, in which event Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

SECTION 10. OTHER INTERCONNECTION STUDIES.

10.1 Optional Interconnection Study

10.1.1 Optional Interconnection Study Agreement.

Optional Interconnection Studies are for informational purposes only and are to be completed within an agreed upon time period using Reasonable Efforts. The request for an Optional Interconnection Study can be made on a stand-alone basis or in parallel with the processing of valid Interconnection Request. The request shall describe the assumptions that Interconnection Customer or MHVDC Connection Customer wishes Transmission Provider to study within the scope described in Section 10.1.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, Transmission Provider shall provide to Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5.

The Optional Interconnection Study Agreement shall: (i) specify the
technical data that Interconnection Customer or MHVDC Connection Customer must provide for each phase of the Optional Interconnection Study, and (ii) specify Interconnection Customer’s or MHVDC Connection Customer’s assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case. Notwithstanding the above, Transmission Provider shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request and shall continue processing the Interconnection Request in accordance with these GIP.

Interconnection Customer or MHVDC Connection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the technical data and a deposit equal to sixty thousand dollars ($60,000.00) to Transmission Provider.

10.1.2 Scope of Optional Interconnection Study.

The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by Interconnection Customer or MHVDC Connection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify the Transmission Owner’s Interconnection Facilities, System Protection Facilities, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the results of the Optional Interconnection Study. The
Optional Interconnection Study shall be performed solely for informational purposes. Transmission Provider shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the types of Interconnection Services that are being studied. Transmission Provider shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.

10.1.3 Optional Interconnection Study Procedures.

The executed Optional Interconnection Study Agreement, the prepayment, and technical and other data called for therein must be provided to Transmission Provider within ten (10) Business Days of Interconnection Customer or MHVDC Connection Customer receipt of the Optional Interconnection Study Agreement. Transmission Provider shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed upon time period specified within the Optional Interconnection Study Agreement. If Transmission Provider is unable to complete the Optional Interconnection Study within such time period, it shall notify Interconnection Customer or MHVDC Connection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the study payment and the actual cost of the study shall be paid to Transmission Provider or refunded to Interconnection Customer, as appropriate. Upon request, Transmission Provider shall provide Interconnection Customer or MHVDC Connection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study, subject to confidentiality arrangements consistent with Section 13.1.

10.2 Provisional Interconnection Study

10.2.1 Scope of Provisional Interconnection Study
The Provisional Interconnection Study will consist of stability, short circuit, and voltage analysis to identify issues that would result if the Generating Facility were interconnected without project modifications or system modifications. The Provisional Interconnection Study will also identify the Transmission Owner’s Interconnection Facilities, System Protection Facilities, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and the Network Upgrades, and the estimated cost thereof, that may be required to provide Energy Resource Interconnection Service on a provisional basis based upon the results of the Provisional Interconnection Study. Transmission Provider shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the type of Interconnection Service that is being studied. Transmission Provider shall utilize existing studies to the extent practicable in conducting the Provisional Interconnection Study.

10.2.2 Provisional Interconnection Study Procedures

Transmission Provider must receive the information and milestones as described in Sections 7.9 and 7.9.1 prior to beginning the Provisional Interconnection Study. Transmission Provider shall use Reasonable Efforts to complete the Provisional Interconnection Study within a mutually agreed upon time. If Transmission Provider is unable to complete the Provisional Interconnection Study within such time period, it shall notify Interconnection Customer or MHVDC Connection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Actual cost of the Provisional Interconnection Study shall be paid by Interconnection Customer or MHVDC Connection Customer pursuant to Section 7.6.1. Upon request, Transmission Provider shall provide Interconnection Customer or MHVDC Connection Customer supporting documentation and workpapers and databases or data developed in the preparation of the
Provisional Interconnection Study, subject to confidentiality arrangements consistent with Section 13.1.

SECTION 11. GENERATOR INTERCONNECTION AGREEMENT (GIA), FACILITIES CONSTRUCTION AGREEMENT (FCA), AND MULTI-PARTY FACILITIES CONSTRUCTION AGREEMENT (MPFCA).

11.1 Tender.
Interconnection Customer and Transmission Owner shall return comments on the draft GIA, and as applicable, draft FCA(s) and/or MPFCA(s) including appendices and supporting documentation within thirty (30) Calendar Days of receipt of the document, along with the completion of the parts of the appendices for which Interconnection Customer is responsible. Within fifteen (15) Calendar Days after the comments are submitted, Transmission Provider shall tender for next day delivery a draft GIA, and as applicable, draft FCA(s) and/or MPFCA(s) to the Parties, together with draft appendices. The draft GIA shall be in the form of Transmission Provider’s FERC-approved standard for GIA, which is in Appendix 6 of Attachment X. The draft FCA and MPFCA shall be in the form of Transmission Provider’s FERC-approved standard form, which are in the Appendices 8 and 9 of these GIP.

If Transmission Provider determines that more than one Interconnection Request causes the need for Network Upgrades or System Protection Facilities, Transmission Provider shall determine whether such Network Upgrades or System Protection Facilities are Common Use Upgrades requiring the use of a MPFCA. For a MPFCA, Transmission Provider shall provide the draft MPFCA to all Interconnection Customers that create the need and share the responsibility for the Common Use Upgrade. If Transmission Provider determines that an Interconnection Customer should be added to an MPFCA as a party, Transmission Provider shall tender a draft MPFCA to the prospective Interconnection Customer.
and include the prospective Interconnection Customer in Group Studies as applicable.

11.2 Negotiation.
Notwithstanding Section 11.1, at the request of any party, the Parties shall begin negotiations concerning the appendices to the GIA, and, as applicable, FCA(s) and/or MPFCA(s) at any time after: 1) the preliminary draft Facility Study Report is issued or 2) upon agreement by all the Parties that a Facility Study is not required. Transmission Provider, Transmission Owner and Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft GIA, and, as applicable, draft FCA(s) and/or MPFCA(s) for not more than sixty (60) Calendar Days after tender of the final Facilities Study Report appendices, and, as applicable, appendices for FCA(s) and/or MPFCA(s) and support documentation. If Interconnection Customer, Transmission Owner or Transmission Provider determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft GIA, and, as applicable, draft FCA(s) and/or MPFCA(s) pursuant to Section 11.1 and request submission of the unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s) with FERC or initiate Dispute Resolution procedures pursuant to Section 13.5. If an Interconnection Customer requests termination of its negotiations, but within sixty (60) Calendar Days thereafter fails to request the filing of the unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s), it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if Interconnection Customer has not executed the GIA, and, as applicable, FCA(s) and/or MPFCA(s), requested filing of an unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s), within sixty (60) Calendar Days of tender of completed draft GIA, and, as applicable, draft FCA(s) and MPFCA(s), it shall be deemed to have withdrawn its Interconnection Request. Transmission Provider shall provide to Interconnection Customer and Transmission Owner a final GIA, and, as applicable, FCA(s) and/or MPFCA(s) within fifteen (15)
Business Days after the completion of the negotiation process. The Interconnection Customer’s sixty (60) Calendar Day deadline for execution will not reset upon a change to the agreement after the final GIA, FCA, or MPFCA has been tendered, irrespective of changes proposed and agreed to by the parties.

11.3 Execution and Filing.
Within one-hundred and eighty (180) Calendar Days after receipt of the final GIA Interconnection Customer shall provide Transmission Provider with reasonable evidence that one or more of the following milestones in the development of the Generating Facility has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Generating Facility; (iv) execution of a contract for the sale of electric energy or capacity from the Generating Facility, or a statement signed by an authorized officer from or agent of Interconnection Customer attesting that Interconnection Customer owns the Generating Facility and it is required to serve load; or (v) documentation of application for state and local air, water, land or federal nuclear permits and that the application is proceeding per regulations.

Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered GIA, and, as applicable, FCA(s) and/or MPFCA(s) and either tender them to Transmission Owner for its execution, which shall then be returned to Transmission Provider, or return them to Transmission Provider; or (ii) request in writing that Transmission Provider file with FERC the GIA, and, as applicable, FCA(s) and/or MPFCA(s) in unexecuted form. Within thirty (30) Calendar Days following execution of the GIA, and, as applicable, FCA(s) and/or MPFCA(s) by Interconnection Customer, or a request by Interconnection Customer that the GIA, and, as applicable, FCA(s) and/or MPFCA(s) be filed unexecuted pursuant to Section 11.2, Transmission Owner shall either (i) execute the tendered GIA, and, as applicable, FCA(s) and/or MPFCA(s) and tender them
to Transmission Provider for its execution, or (ii) request in writing that Transmission Provider file with FERC the GIA, and, as applicable, FCA(s) and/or MPFCA(s) in unexecuted form. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed tendered GIA or the request to file an unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s), Transmission Provider shall file the GIA, and, as applicable, FCA(s) and/or MPFCA(s) with FERC, together with its explanation of any matters as to which Interconnection Customer, Transmission Owner and Transmission Provider disagree and support for the costs that Transmission Owner proposes to charge to Interconnection Customer under the GIA, and, as applicable, FCA(s) and/or MPFCA(s). An unexecuted GIA should contain terms and conditions deemed appropriate by Transmission Provider for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted GIA, they may proceed pending Commission action.

11.4 Commencement of Interconnection Activities.
If Interconnection Customer executes the final GIA, and, as applicable, FCA(s) and/or MPFCA(s) Transmission Provider, Transmission Owner and Interconnection Customer shall perform their respective obligations in accordance with the terms of the GIA, and, as applicable, FCA(s) and/or MPFCA(s), subject to modification by FERC. Upon submission of an unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s), the Parties shall promptly comply with the unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s), subject to modification by FERC. As applicable, compliance with the terms of such unexecuted FCA(s) and/or MPFCA(s) or execution and performance under a FCA and/or MPFCA will be a requirement under the GIA.

11.5 Special Considerations.
The maximum permissible output of the Generating Facility in the provisional Generator Interconnection Agreement will be updated on a quarterly basis, and determined by finding the transfer limit of energy commensurate with the analysis for Energy Resource Interconnection Service. This study shall be performed assuming the system topology represented by the base cases used to calculate Available Flowgate Capability as described in Attachment C of this Tariff with dispatch and optimization algorithms posted on the MISO internet site. Limits will be posted on the Transmission Provider’s OASIS site, and operation above those limits will be deemed as unauthorized use of the transmission system and subject to provisions in this Tariff surrounding that use. Interconnection Customer assumes all risks and liabilities with respect to changes, which may impact the Generator Interconnection Agreement including, but not limited to, change in output limits and future Network Upgrade cost responsibilities.

11.6 Quarterly Operating Limit Studies.
Interconnection Customers subject to Quarterly Operating Limits shall be responsible for the cost of performing the required quarterly studies.
Interconnection Customers shall submit a Quarterly Operating Limit study deposit in the amount of $10,000 sixty (60) Calendar Days prior to the start of the first applicable binding quarter. Any difference between the study deposit and the actual cost of the applicable Quarterly Operating Limit studies shall be paid by, or refunded to, the Interconnection Customer. MISO will refund any difference the quarter following the Interconnection Customer no longer being subject to Quarterly Operating Limits.

SECTION 12. CONSTRUCTION OF TRANSMISSION OWNER’S OR AFFECTED SYSTEM TRANSMISSION OWNER’S INTERCONNECTION FACILITIES, SYSTEM PROTECTION FACILITIES, DISTRIBUTION UPGRADES AND NETWORK UPGRADES.
12.1 Schedule.

Transmission Owner, Interconnection Customer, and, as applicable, Interconnection Customers in an MPFCA and a Transmission Owner that is an Affected System and, at its election, Transmission Provider shall negotiate in good faith concerning a schedule for the construction of the Transmission Owner’s Interconnection Facilities, System Protection Facilities, Distribution Upgrades, Network Upgrades, Common Use Upgrades, and the Stand-Alone Network Upgrades. Interconnection Customer and Transmission Owner shall each provide the other Parties its detailed construction schedule.

12.2 Construction Sequencing.

12.2.1 General

In general, the In-Service Date of an Interconnection Customer seeking interconnection to the Transmission System will determine the sequence of construction of Transmission Owner’s Interconnection Facilities, System Protection Facilities, Distribution Upgrades, if any, and Network Upgrades, including any Common Use Upgrades. If the time required to build the facilities described in the GIA, and, as applicable, FCA(s) and/or MPFCA(s) is greater than the time between execution of the GIA, and, as applicable, FCA(s) and/or MPFCA(s) and the requested In-Service Date, the In-Service Date will be adjusted through the milestones delineated in the GIA, and as applicable, FCA(s) and/or MPFCA(s) appendices prior to the execution of the Generator Interconnection Agreement.

12.2.2 Advance Construction of Network Upgrades, System Protection Facilities, Distribution Upgrades or Generator Upgrades that are an Obligation of an Entity other than Interconnection Customer
An Interconnection Customer with a GIA, and, as applicable, FCA(s) and/or MPFCA(s), in order to maintain its In-Service Date, may request that Transmission Owner advance to the extent necessary the completion of Network Upgrades, System Protection Facilities or Distribution Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such In-Service Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than Interconnection Customer that is seeking interconnection to the Transmission System, in time to support such In-Service Date. Upon such request, Transmission Owner will use Reasonable Efforts to advance the construction of such Network Upgrades, System Protection Facilities or Distribution Upgrades, to the extent it is obligated for any such construction, to accommodate such request; provided that Interconnection Customer commits to pay Transmission Owner: (i) any associated expediting costs and (ii) the cost of such Network Upgrades, System Protection Facilities or Distribution Upgrades. Transmission Owner will refund to Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the GIA, and, as applicable, FCA(s) and/or MPFCA(s). Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that Transmission Owner has not refunded to Interconnection Customer. Payment by that entity shall be due on the date that it would have been due had there been no request for advance construction. Transmission Owner shall forward to Interconnection Customer (with copy to Transmission Provider) the amount paid by the entity with a contractual obligation to construct the Network Upgrades as payment in full for the outstanding balance owed to Interconnection Customer. Transmission Owner then shall refund to that entity the amount that it paid for the
Network Upgrades, in accordance with Article 11.4 of the GIA, and, as applicable, FCA(s) and/or MPFCA(s).

12.2.3 **Advancing Construction of Network Upgrades that are Part of an Expansion Plan of Transmission Provider**

An Interconnection Customer with a GIA, and, as applicable, FCA(s) and/or MPFCA(s), in order to maintain its In-Service Date, may request that Transmission Owner advance to the extent necessary the completion of Network Upgrades, System Protection Facilities or Distribution Upgrades that: (i) are necessary to support such In-Service Date, including those listed as a contingent element in the Interconnection Customer’s GIA, and, as applicable, FCA(s) and/or MPFCA(s); and (ii) would otherwise not be completed, pursuant to an expansion plan of Transmission Provider, in time to support such In-Service Date. Upon such request, Transmission Owner will use Reasonable Efforts to advance the construction of such Network Upgrades, System Protection Facilities or Distribution Upgrades to accommodate such request; provided that Interconnection Customer commits to pay Transmission Owner any associated expediting costs. Interconnection Customer shall be entitled to transmission credits, if any per Attachment FF, for any expediting costs paid associated with the Network Upgrades.

12.2.4 **Amended Interconnection System Impact and/or Interconnection Facilities Study**

The Interconnection System Impact Study resulting from the Definitive Planning Phase and/or Interconnection Facilities Study(ies) will be amended to determine the facilities necessary to support the requested In-Service Date. Any amended study will follow the procedures provided in the GIP, as applicable, regarding such study and study cost,
and include those transmission and Generating Facilities that are expected to be in service on or before the requested In-Service Date.

SECTION 13. MISCELLANEOUS.

13.1 Confidentiality.

Confidential Information shall include, without limitation, all information relating to a Party’s technology, research and development, business affairs, and pricing, and any information supplied by any Party to another Party prior to the execution of a GIA, and, as applicable, FCA(s) and/or MPFCA(s).

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by the receiving Party, the disclosing Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

13.1.1 Scope

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a non-Party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the
disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the GIA, and, as applicable, FCA(s) and/or MPFCA(s); or (6) is required, in accordance with Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the GIA, and, as applicable, FCA(s) and/or MPFCA(s). Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the receiving Party that it no longer is confidential.

13.1.2 Release of Confidential Information

No Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements) employees, agents, consultants, or to non-parties who may be or considering providing financing to or equity participation with Interconnection Customer or MHVDC Connection Customer, or to potential purchasers or assignees of Interconnection Customer or MHVDC Connection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section 13.1.

13.1.3 Rights
Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the receiving Party. The disclosure by a Party to the receiving Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

13.1.4 No Warranties
By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obliges itself to provide any particular information or Confidential Information to another Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

13.1.5 Standard of Care
Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to another Party under these procedures or its regulatory requirements.

13.1.6 Order of Disclosure
If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party may seek an appropriate protective order or waive compliance with the terms of the
GIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

13.1.7 Remedies

The Parties agree that monetary damages would be inadequate to compensate a Party for another Party’s breach of its obligations under this Section 13.1. Each Party accordingly agrees that the disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party breaches or threatens to breach its obligations under this Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the breaching Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this Section 13.1, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 13.1.

13.1.8 Disclosure to FERC, Its Staff, or a State.

Notwithstanding anything in this Section 13.1 to the contrary, and pursuant to 18 C.F.R Section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to these GIP, the Party shall provide the requested information to FERC.
or its staff, within the time provided for in the request for information.
In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. Section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. The Party is prohibited from notifying the other Parties prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Parties to the GIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. Section 388.112.

Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

13.1.9 Subject to the exception in Section 13.1.8, any information that a disclosing Party claims is competitively sensitive, commercial or financial information (“Confidential Information”) shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under the GIP or as the Regional Transmission Organization or a Local Balancing Authority operator including disclosing the Confidential Information to a subregional, regional or national reliability organization or planning group. The Party
asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party’s Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the receiving Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

13.1.10 This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

13.1.11 At the Interconnection Customer’s or MHVDC Connection Customer’s election, Transmission Provider shall cause the party in lawful possession of Confidential Information to, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

13.2 Delegation of Responsibility.
Transmission Provider may use the services of subcontractors as it deems appropriate to perform its obligations under the GIP. Transmission Provider shall remain primarily liable to Interconnection Customer or MHVDC Connection Customer for the performance of such subcontractors and compliance with its obligations of the GIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and for no other purpose.

13.3 Obligation for Study Costs.
Transmission Provider shall charge and Interconnection Customer or MHVDC Connection Customer shall pay the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to Interconnection Customer or MHVDC Connection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. Interconnection Customer or MHVDC Connection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice. Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer or MHVDC Connection Customer has paid all undisputed amounts in compliance herewith.

In the event Interconnection Customer’s or MHVDC Connection Customer’s project is withdrawn, terminated or suspended, Transmission Provider shall not be required to refund any unused portion of the study deposit paid to enter the Definitive Planning Phase that is necessary to account for study costs associated with the project or restudy costs associated with any affected lower-queued projects, any other project with which Interconnection Customer’s or MHVDC Connection Customer’s project shares responsibility for funding a Common Use Upgrade, or, in the event the project is included in a Group Study, any other affected projects in the Group Study. Unused study deposits from the Definitive Planning Phase that are not otherwise required due to the withdrawals, termination or suspension of the project will be refunded upon Commercial Operation.

13.4 Non-Parties Conducting Studies.
If (i) at the time of the signing of an Interconnection Study Agreement there is
disagreement as to the estimated time to complete an Interconnection Study, (ii) Interconnection Customer or MHVDC Connection Customer receives notice pursuant to the GIP that Transmission Provider will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) Interconnection Customer or MHVDC Connection Customer receives neither the Interconnection Study nor a notice under the GIP within the applicable timeframe for such Interconnection Study, then Interconnection Customer or MHVDC Connection Customer may require Transmission Provider or its agent to utilize a consultant reasonably acceptable to Interconnection Customer or MHVDC Connection Customer and Transmission Provider to perform such Interconnection Study under the direction of Transmission Provider. At other times, Transmission Provider may also utilize a consultant to perform such Interconnection Study, either in response to a general request of Interconnection Customer or MHVDC Connection Customer, or on its own volition.

In all cases, use of a consultant shall be in accord with Article 26 of the GIA (subcontractors), and, as applicable, FCA(s) and/or MPFCA(s) and limited to situations where Transmission Provider determines that doing so will help maintain or accelerate the study process for the Interconnection Customer’s or MHVDC Connection Customer’s pending Interconnection Request and not interfere with the Transmission Provider’s progress on Interconnection Studies for other pending Interconnection Requests. In cases where Interconnection Customer or MHVDC Connection Customer requests use of a consultant to perform such Interconnection Study, Interconnection Customer or MHVDC Connection Customer and Transmission Provider shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. Transmission Provider shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection
Request as soon as soon as practicable upon Interconnection Customer’s or MHVDC Connection Customer’s request subject to the confidentiality provision in Section 13.1. In any case, such consultant contract may be entered into with either Interconnection Customer or MHVDC Connection Customer or Transmission Provider at the Transmission Provider’s discretion. In the case of (iii), Interconnection Customer or MHVDC Connection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such consultant study. Such consultant shall be required to comply with the GIP, Article 26 of the GIA (subcontractors), and, as applicable, FCA(s) and/or MPFCA(s), and the relevant Tariff procedures and protocols as would apply if Transmission Provider were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes. Transmission Provider shall cooperate with such consultant and Interconnection Customer or MHVDC Connection Customer to complete and issue the Interconnection Study in the shortest reasonable time.

13.5 Disputes.

13.5.1 Submission.

In the event any Party has a dispute, or asserts a claim, that arises out of or in connection with the GIA, or, as applicable, FCA(s) and/or MPFCA(s), the GIP, or their performance, such Party (the “disputing Party”) shall provide the other Parties with written notice of the dispute or claim (“Notice of Dispute”). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Parties. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other non-disputing Parties’ receipt of the Notice of Dispute, such claim or dispute shall be submitted in accordance with the dispute resolution procedures of the Tariff. In the event
the designated representatives are able to resolve the claim or dispute within the above-described thirty (30) Calendar Day period, the disputing Party shall submit a written explanation of the resolution to the non-disputing Parties and shall obtain the written acknowledgement and acceptance from each non-disputing Party.

Disputes received after the GIA, or, as applicable, FCA(s) and/or MPFCA(s) has been tendered for execution pursuant to section 11.1 of this GIP will not affect any applicable deadline pursuant to Section 11.2 of this GIP.

13.6 Local Furnishing Bonds.

13.6.1 Transmission Owners That Own Facilities Financed by Local Furnishing Bonds.

This provision is applicable only to a Transmission Owner that has financed facilities for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code (“local furnishing bonds”). Notwithstanding any other provision of the GIP or GIA, and, as applicable, FCA(s) and/or MPFCA(s), Transmission Provider and Transmission Owner shall not be required to provide Interconnection Service to Interconnection Customer or MHVDC Connection Customer pursuant to this GIA and GIP if the provision of such Transmission Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance Transmission Owner’s facilities that would be used in providing such Interconnection Service.

13.6.2 Alternative Procedures for Requesting Interconnection Service.

If Transmission Provider determines that the provision of Interconnection Service requested by Interconnection Customer or MHVDC Connection Customer could jeopardize the tax-exempt status of any local furnishing...
bond(s) used to finance Transmission Owner’s facilities that would be
used in providing such Interconnection Service. Transmission Provider
shall notify Transmission Owner who then shall confirm the tax-exempt
status of any local furnishing bond(s) used by Transmission Owner and
shall advise Interconnection Customer or MHVDC Connection Customer
and Transmission Provider within thirty (30) Calendar Days of
Transmission Provider’s notice to Transmission Owner. Interconnection
Customer or MHVDC Connection Customer thereafter may renew its
request for interconnection using the process specified in Article 5.2(ii) of
the Transmission Provider’s Tariff.

SECTION 14. FAST TRACK PROCESS.

14.1 Applicability.
The Fast Track Process is available to an Interconnection Customer proposing to
interconnect its Small Generating Facility with the Transmission System if the
Small Generating Facility is no larger than 5 MW and if the Interconnection
Customer’s proposed Small Generating Facility meets the codes, standards, and
certification requirements of Appendix 3 of this GIP, or Transmission Provider has
reviewed the design or tested the proposed Small Generating Facility and is
satisfied that it is safe to operate.

14.1.1 Capacity of the Small Generating Facility
The Interconnection Request shall be evaluated using the maximum capacity that
the Small Generating Facility is capable of injecting into the Transmission
Provider’s electric system. However, if the maximum capacity that the Small
Generating Facility is capable of injecting into the Transmission Provider’s
electric system is limited (e.g., through use of a control system, power relay(s), or
other similar device settings or adjustments), then the Interconnection Customer
must obtain the Transmission Provider’s agreement, with such agreement not to be
unreasonably withheld, that the manner in which the Interconnection Customer
proposes to implement such a limit will not adversely affect the safety and
reliability of the Transmission Provider’s system. If the Transmission Provider
does not so agree, then the Interconnection Request must be withdrawn or revised
to specify the maximum capacity that the Small Generating Facility is capable of
injecting into the Transmission Provider’s electric system without such limitations.
Furthermore, nothing in this section shall prevent a Transmission Provider from
considering an output higher than the limited output, if appropriate, when
evaluating system protection impacts.

14.2 Initial Review.
Within fifteen (15) Business Days after Transmission Provider notifies
Interconnection Customer it has received a complete Interconnection Request,
Transmission Provider shall perform an initial review using the screens set forth
below, shall notify Interconnection Customer of the results, and include with the
notification copies of the analysis and data underlying the Transmission Provider’s
determinations under the screens.

14.2.1 Screens.

14.2.1.1 The proposed Small Generating Facility’s Point of Interconnection
must be on a portion of the Transmission System or Distribution
System that is subject to the Transmission Provider’s control under
the Tariff.

14.2.1.2 For interconnection of a proposed Small Generating Facility to a
radial distribution circuit, the aggregated generation, including the
proposed Small Generating Facility, on the circuit shall not exceed
fifteen percent (15%) of the line section annual peak load as most
recently measured at the relevant substation. A line section is that
portion of a Transmission Provider controlled electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

14.2.1.3 For interconnection of a proposed Small Generating Facility to the load side of spot network protectors, the proposed Small Generating Facility must use an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of five percent (5%) of a spot network’s maximum load or 50 kW.

14.2.1.4 The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than ten percent (10%) to the distribution circuit’s maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

14.2.1.5 The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed eighty-seven and one half percent (87.5%) of the short circuit interrupting capability; nor shall the interconnection proposed for a circuit that already exceeds eighty-seven and one half (87.5%) of the short circuit interrupting capability.

14.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer,
including line configuration and the transformer connection to
limit the potential for creating over-voltages on the Transmission
Provider’s electric power system due to a loss of ground during the
operating time of any anti-islanding function.

<table>
<thead>
<tr>
<th>Primary Distribution Line Type</th>
<th>Type of Interconnection to Primary Distribution Line</th>
<th>Result/Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-phase, three wire</td>
<td>3-phase or single phase, phase-to-phase</td>
<td>Pass screen</td>
</tr>
<tr>
<td>Three-phase, four wire</td>
<td>Effectively-grounded 3 phase or Single-phase, line-to-neutral</td>
<td>Pass screen</td>
</tr>
</tbody>
</table>

14.2.1.7 If the proposed Small Generating Facility is to be interconnected
on single-phase shared secondary, the aggregate generation
capacity on the shared secondary, including the proposed Small
Generating Facility, shall not exceed 20 kW.

14.2.1.8 If the proposed Small Generating Facility is single-phase and is to
be interconnected on a center tap neutral of a 240 volt service, its
addition shall not create an imbalance between the two sides of the
240 volt service of more than twenty percent (20%) of the
nameplate rating of the service transformer.

14.2.1.9 The Small Generating Facility, in aggregate with other generation
interconnected to the transmission side of a substation transformer
feeding the circuit where the Small Generating Facility proposes to
interconnect shall not exceed 10 MW in an area where there are
known, or posted, transient stability limitations to generating units
located in the general electrical vicinity (e.g., three or four
transmission busses from the Point of Interconnection).
14.2.1.10 No construction of facilities by Transmission Provider on its own system shall be required to accommodate the Small Generating Facility.

14.2.2 If the proposed interconnection passes the screens, the Interconnection Request shall be approved and Transmission Provider will provide Interconnection Customer an executable interconnection agreement within five (5) Business Days after the determination.

14.2.3 If the proposed interconnection fails the screens, but Transmission Provider determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, Transmission Provider shall provide Interconnection Customer an executable interconnection agreement within five (5) Business Days after the determination.

14.2.4 If the proposed interconnection fails the screens, but Transmission Provider does not or cannot determine from the initial review that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless Interconnection Customer is willing to consider minor modifications or further study, Transmission Provider shall provide Interconnection Customer with the opportunity to attend a customer options meeting.

14.3 Customer Options Meeting.

If Transmission Provider determines the Interconnection Request cannot be approved without (1) minor modifications at minimal cost, (2) a supplemental study or other additional studies or actions, or (3) incurring significant cost to address safety, reliability, or power quality problems, the Transmission Provider shall notify Interconnection Customer of that determination within five (5) Business Days after the determination.
Business Days after that determination and provide copies of all data and analyses underlying its conclusion. Within ten (10) Business Days of the Transmission Provider’s determination, Transmission Provider shall offer to convene a customer options meeting with Transmission Provider to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the Transmission Provider’s determination, or at the customer options meeting, Transmission Provider shall:

14.3.1 Offer to perform facility modifications or minor modifications to the Transmission System (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Transmission System. If the Interconnection Customer agrees to pay for the modifications to the Transmission System, the Transmission Provider will provide the Interconnection Customer with an executable interconnection agreement within ten (10) Business Days of the customer options meeting; or

14.3.2 Offer to perform a supplemental review in accordance with Section 14.4 and provide a non-binding good faith estimate of the costs of such review; or

14.3.3 Obtain the Interconnection Customer’s agreement to continue evaluating the Interconnection Request under the Attachment X Generator Interconnection Procedures.

14.4 Supplemental Review.
14.4.1 To accept the offer of a supplemental review, Interconnection Customer shall agree in writing and submit a deposit for the estimated costs of the supplemental review in the amount of the Transmission Provider’s good faith estimate of the costs of such review, both within 15 Business Days of the offer. If the written agreement and deposit have not been received by the Transmission Provider within that timeframe, the Interconnection Request shall continue to be evaluated under the Attachment X Generator Interconnection Procedures unless it is withdrawn by the Interconnection Customer.

14.4.2 The Interconnection Customer may specify the order in which the Transmission Provider will complete the screens in section 14.4.4.

14.4.3 The Interconnection Customer shall be responsible for the Transmission Provider’s actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within 20 Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the Transmission Provider will return such excess within 20 Business Days of the invoice without interest.

14.4.4 Within thirty (30) Business Days following receipt of the deposit for a supplemental review, the Transmission Provider shall (1) perform a supplemental review using the screens set forth below; (2) notify in writing the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the Transmission Provider’s determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the
Transmission Provider shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in section 14.4.4.1, within two Business Days of making such determination to obtain the Interconnection Customer’s permission to: (1) continue evaluating the proposed interconnection under this section 14.4.4; (2) terminate the supplemental review and continue evaluating the Small Generating Facility (the Attachment X Generator Interconnection Procedures); or (3) terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.

14.4.4.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed Small Generating Facility) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate Generating Facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed Small Generating Facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the Transmission Provider shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under section 14.4.4.

14.4.4.1.1 The type of generation used by the proposed Small Generating Facility will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of screen 14.4.1.1. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum
load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.

**14.4.4.1.2** When this screen is being applied to a Small Generating Facility that serves some station service load, only the net injection into the Transmission Provider’s electric system will be considered as part of the aggregate generation.

**14.4.4.1.3** Transmission Provider will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

**14.4.4.2** Voltage and Power Quality Screen:  In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.

**14.4.4.3** Safety and Reliability Screen: The location of the proposed Small Generating Facility and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The Transmission Provider shall give due
consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

14.4.4.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

14.4.4.3.2 Whether the loading along the line section is uniform or even.

14.4.4.3.3 Whether the proposed Small Generating Facility is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity.

14.4.4.3.4 Whether the proposed Small Generating Facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

14.4.4.3.5 Whether operational flexibility is reduced by the proposed Small Generating Facility, such that transfer of the line section(s) of the Small Generating Facility to a neighboring distribution circuit/substation may trigger overloads or voltage issues.
14.4.3.6 Whether the proposed Small Generating Facility employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

14.4.5 If the proposed interconnection passes the supplemental screens in sections 14.4.1.1, 14.4.1.2, and 14.4.1.3 above, the Interconnection Request shall be approved and the Transmission Provider will provide the Interconnection Customer with an executable interconnection agreement within the timeframes established in sections 14.4.5.1 and 14.4.5.2 below. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall continue to be evaluated under the Attachment X Generator Interconnection Procedures consistent with section 14.4.5.3 below.

14.4.5.1 If the proposed interconnection passes the supplemental screens in sections 14.4.1.1, 14.4.1.2, and 14.4.1.3 above and does not require construction of facilities by the Transmission Provider on its own system, the interconnection agreement shall be provided within ten Business Days after the notification of the supplemental review results.

14.4.5.2 If interconnection facilities or minor modifications to the Transmission Provider’s system are required for the proposed interconnection to pass the supplemental screens in sections 14.4.1.1, 14.4.1.2, and 14.4.1.3 above, and the Interconnection Customer agrees to pay for the modifications to the Transmission Provider’s electric system, the interconnection agreement, along
with a non-binding good faith estimate for the interconnection facilities and/or minor modifications, shall be provided to the Interconnection Customer within 15 Business Days after receiving written notification of the supplemental review results.

14.4.5.3 If the proposed interconnection would require more than interconnection facilities or minor modifications to the Transmission Provider’s system to pass the supplemental screens in sections 14.4.1.1, 14.4.1.2, and 14.4.1.3 above, the Transmission Provider shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results, that the Interconnection Request shall be evaluated under the Attachment X Generator Interconnection Procedures unless the Interconnection Customer withdraws its Small Generating Facility.

SECTION 15.  PROVISIONS FOR CONNECTION TO HVDC FACILITIES SUBJECT TO SECTION 27A OF THE TARIFF.

Interconnection Requests to HVDC Facilities that are subject to Section 27A of the Tariff shall follow the same process as detailed in Sections 2 through 13 of the GIP, except as specified in this Section 15.

15.1  Availability of ER Interconnection Service and NR Interconnection Service for HVDC Facilities subject to Section 27A of this Tariff.

ER Interconnection Service and NR Interconnection Service are both available for HVDC Facilities subject to Section 27A of this Tariff. In the case where Interconnection Customer identified a point-to-point transmission service request under Section 27A of this Tariff, NR Interconnection Service will qualify the
Generating Facility to be designated as a Network Resource so long as (and to the extent that) HVDC Service is confirmed across the HVDC Facilities. NR Interconnection Service will be limited to the confirmed megawatts in the transmission service request. When applicable, the HVDC Service requirement will be listed in Appendix A of the GIA, and such listing will be added during the negotiation phase of the document, as set forth in Section 11.2 of the GIP.

SECTION 16. PROVISIONS FOR OBTAINING INJECTION RIGHTS AND THEIR CONVERSION TO EXTERNAL NETWORK RESOURCE INTERCONNECTION SERVICE

16.1 Request for Injection Rights

MHDVC Connection Customers electing to request Injection Rights on the Transmission System pursuant to the procedures set forth in Section 3.2.3 of Attachment GGG to the Tariff shall make such requests for Injection Rights by submitting to Transmission Provider a completed Appendix 1 to Attachment X. The MHVDC Connection Customer must select “Injection Rights” in Appendix 1 and shall include all other relevant information required by Appendix 1 and its attachments. Requests for Injection Rights shall be studied and granted by Transmission Provider pursuant to the terms and conditions of the GIP, including requisite milestones and study deposits within the prescribed schedule deadlines.

Injection Rights serve as a pre-certification of the Transmission System’s capability to receive capacity and energy from the MHVDC Transmission Line at the requested Point of Connection, in the specified MW quantity, without degrading the reliability of the Transmission System. Injection Rights do not convey transmission service or Interconnection Service to the MHVDC Connection Customer or any other entity. Any such Injection Rights granted by Transmission Provider, and any increases or reductions to those Injection Rights, shall be documented in Appendix F to the Transmission Connection Agreement. Requests for Injection
Rights will be treated similar to requests for Interconnection Service from a queue priority perspective.

16.2 Conversion of Injection Rights to External Network Resource Interconnection Service

Before an Interconnection Customer with an Existing Generating Facility that is external to the Transmission System may offer energy or capacity across the MHVDC Transmission Line into the MISO markets, the Injection Rights granted pursuant to Section 3.2.3 of Attachment GGG to the Tariff and this Section 16 must be converted to external Network Resource Interconnection Service and transferred to that Interconnection Customer. Upon the request of an Interconnection Customer with an Existing Generating Facility for external Network Resource Interconnection Service via the MHVDC Transmission Line, Transmission Provider will convert the Injection Rights to external Network Resource Interconnection Service in an amount up to, but not greater than, the capacity of the MHVDC Transmission Line, and transfer that amount of external Network Resource Interconnection Service to that Interconnection Customer, subject to the conditions set forth below.

Prior to effectuating this conversion, Transmission Provider must receive the following information:

(a) from the Interconnection Customer seeking conversion:
   (i) a request for external Network Resource Interconnection Service pursuant to Appendix 1 of Attachment X, by including the requested MW quantity to be converted and transferred;
   (ii) documentation of the agreement between the Interconnection Customer and the MHVDC Connection Customer authorizing the conversion and transfer of the requested amount of Injection Rights;
   (iii) documentation that the Interconnection Customer has long-term firm transmission service from the Existing Generating Facility to the Point of Connection, including any transmission service agreements over the MHVDC
Transmission Line, that complies with the requirements included in the Service Agreement for Network Resources Interconnection Service for an Existing Generating Facility as set forth in Appendix 13 of Attachment X; and

(b) from the MHVDC Connection Customer that holds the Injection Rights being converted:

(i) documentation of the MHVDC Connection Customer’s procedures for the allocation of Injection Rights to Interconnection Customers, which shall be non-discriminatory and consistent with the Commission’s approval of the MHVDC Connection Customer’s right to charge negotiated (market based) rates for service on the applicable MHVDC Transmission Line.

Upon receipt of the required information, Transmission Provider will convert the requested amount of the MHVDC Connection Customer’s Injection Rights into external Network Resource Interconnection Service and grant the external Network Resource Interconnection Service to the Interconnection Customer, subject to the Interconnection Customer executing the Service Agreement for external Network Resource Interconnection Service for an Existing Generating Facility as set forth in Appendix 13 to Attachment X. All terms and conditions of such Service Agreement for external Network Resource Interconnection Service for an Existing Generating Facility and all the terms and conditions of Attachment X, including the rights to termination of Interconnection Service, shall apply to the Interconnection Customer’s external Network Resource Interconnection Service granted under this Article 16. After conversion of the Injection Rights, Transmission Provider shall document any remaining Injection Rights in Appendix F of the MHVDC Connection Customer’s Transmission Connection Agreement and shall post the Interconnection Customer’s external Network Resource Interconnection Service pursuant to the posting guidelines contained in Attachment X.

A request by an Interconnection Customer for a conversion of Injection Rights into external Network Resource Interconnection Service pursuant to this Section 16.2, shall not require any additional studies in the Definitive Planning Phase to the extent such studies have been performed as part of the MHVDC Connection Customer’s request for Injection Rights. To
the extent the MHVDC Connection Customer made the Definitive Planning Phase Milestone Payments (M2, M3, and M4) required in connection with its request for Injection Rights and evaluation, an Interconnection Customer obtaining a conversion to external Network Resource Interconnection Service based on the same request for Injection Rights shall not be required to make any additional Milestone Payments to Transmission Provider.

Any conversion to external Network Resource Interconnection Service under this Section 16.2 shall occur within three (3) years from the Commercial Operation Date for the MHVDC Transmission Line, as set forth in Appendix C of the Transmission Connection Agreement. Failure to convert any amount of the Injection Rights to external Network Resource Interconnection Service within the time period specified above shall result in termination of Injection Rights with respect to such unconverted amount. In the event any external Network Resource Interconnection Service obtained pursuant to this Section 16 terminates more than three (3) years after the Commercial Operation Date for the MHVDC Transmission Line, as set forth in Appendix C of the Transmission Connection Agreement, such terminated external Network Resource Interconnection Service may not revert back to Injection Rights.

SECTION 17. FACILITIES SERVICE AGREEMENT.

In the event that the Transmission Owner elects to fund the capital for the Network Upgrades and the Transmission Owner's System Protection Facilities, the Interconnection Customer, Transmission Owner, and Transmission Provider shall enter into a Facilities Service Agreement to memorialize the terms of repayment for those Network Upgrades and Transmission Owner's System Protection Facilities that the Transmission Owner elected to self-fund. The Facilities Service Agreement shall take the form of the pro forma Facilities Service Agreement that is included as Appendix 14 of Attachment X of the MISO Tariff. The Facilities Service Agreement shall be subject to the terms and conditions of Attachment X, including the rights to termination of Interconnection Service.
## APPENDICES TO GIP

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ATTACHMENT FF

TRANSMISSION EXPANSION PLANNING PROTOCOL

I. Transmission Expansion Plan - Purpose and Scope, Definition and Role of OMS Committee: This Attachment FF describes the process to be used by the Transmission Provider to develop the MISO Transmission Expansion Plan (“MTEP”), subject to review and approval by the Transmission Provider Board. The provisions of this Attachment FF are consistent with the applicable provisions of Appendix B of the ISO Agreement and this Tariff. For purposes of this Attachment FF, all references to Transmission Owner(s) will include ITC(s). The costs incurred by the Transmission Provider in the performance of data collection, analyses and review, and in the development of the MTEP report, costs incurred under Section I.C of this Attachment FF, and costs incurred under Section I.D of this Attachment FF shall be recovered from all Transmission Customers under Schedule 10 of the Tariff.

A. Enrollment Process: The MTEP is developed to facilitate the timely and orderly expansion of and/or modification to the Transmission System to maintain reliability, promote efficiency in bulk power markets and facilitate compliance with applicable Federal and state laws, regulatory mandates and regulatory obligations. Any transmission provider that wishes to enroll in the Transmission Provider planning process for purposes of Order No. 1000 compliance must become a Transmission Owner, by signing the ISO Agreement, and by, within a reasonable period of time: (1) turning over functional control of its transmission facilities to the Transmission Provider; and (2) taking service under this Tariff for all its load that is physically located within the geographic area comprising the Transmission System. All Transmission Owners enrolled in the Transmission Provider’s transmission planning region are listed in either
(1) Attachment FF-4 of this Tariff, for Transmission Owners without a separately filed local planning process or (2) Attachment FF-5 of this Tariff, for Transmission Owners with a separately filed local planning process.

B. **OMS Committee Input to MTEP Process:** To the extent not otherwise specifically addressed in other portions of this Attachment FF, with respect to the MTEP process, the OMS Committee may provide input to the Transmission Provider planning staff and the System Planning Committee of the Transmission Provider Board, as appropriate, regarding the following:

1. At the start of a planning cycle, the OMS Committee may suggest to the Transmission Provider Board modifications to the Transmission Provider’s planning principles and planning objectives for that planning cycle;

2. At the start of a planning cycle, the OMS Committee may suggest additional scope elements in the MTEP;

3. Modeling inputs or assumptions used in the development of the MTEP and related appropriate cost/benefit analyses with respect to certain projects that are not proposed strictly for reliability; and

4. Concerns about general or specific issues with the MTEP process as they arise during the planning year.

Furthermore, at the end of the MTEP development process, but before the MTEP is submitted to the Transmission Provider Board for its review, the OMS Committee may submit a reconsideration request to the Transmission Provider planning staff, which shall respond prior to
submitting the final MTEP report to the Transmission Provider Board. This reconsideration request can be made only with respect to Network Upgrades eligible to receive regional cost allocation under Attachment FF if such projects: (1) will be recommended to the Transmission Provider Board for MTEP Appendix A approval, but have not been considered through the complete MTEP process or (2) will have a change in project cost of twenty-five percent (25%) or greater between the final Subregional Planning Meeting in the current planning year and the project being submitted to the Transmission Provider Board for approval. The Transmission Provider shall consider such a reconsideration request only if it is endorsed by the OMS acting by a vote of sixty-six percent (66%) or more of the OMS members.

At the end of each MTEP cycle, the OMS Committee may submit its assessment of the MTEP process to the Planning Advisory Committee, Transmission Provider, and the System Planning Committee of the Transmission Provider Board. Upon receipt of any such assessment from the OMS Committee, the Transmission Provider planning staff shall provide an appropriate response in a reasonably timely manner.

The manner in which the OMS Committee shall provide its assessment shall be set forth in the Transmission Planning Business Practices Manual procedures. The general procedures adopted with respect to the OMS Committee input into the MTEP shall remain unchanged until June 1, 2015, unless otherwise mutually agreed to by the Transmission Provider and the OMS Committee. Changes to the Transmission Planning Business Practices Manual procedures which describe OMS Committee input into the MTEP process may not be adopted with less than sixty
(60) days’ notice to the OMS Committee unless the OMS Committee consents to such earlier adoption. At the end of the two year period the Transmission Provider, the OMS, and other stakeholders will assess the success of the input procedures and provide suggestions for improvement.

C. Development of the MTEP: The Transmission Provider, working in collaboration with representatives of the Transmission Owners, OMS, and the Planning Advisory Committee, shall develop the MTEP, consistent with Good Utility Practice and taking into consideration long-range planning horizons, as appropriate. The Transmission Provider shall develop the MTEP for expected use patterns and analyze the performance of the Transmission System in meeting both reliability needs and the needs of the competitive bulk power market, under a wide variety of contingency conditions. The MTEP will give full consideration to the needs of all Market Participants, will include consideration of demand-side options, and will identify expansions or enhancements needed to i) support competition and efficiency in bulk power markets; ii) comply with Applicable Laws and Regulations; and iii) maintain reliability.

Transmission expansions or enhancements may include any facilities that are eligible to be included in the Transmission System as provided for under this Tariff, including SATOA. Any SATOA may only participate in the Transmission Provider’s markets to the extent necessary to receive Energy from the Transmission System and to inject Energy into the Transmission System to provide the services for which the SATOA was included in the MTEP. SATOA may not otherwise participate in the Energy and Operating Reserve Markets and/or the Planning Resource Auction unless and until the Tariff includes provisions for storage facilities recovering cost-based revenues as transmission assets to also participate in these or other Market Activities. This
analysis and planning process shall integrate into the development of the MTEP among other things:

(i) the Transmission Issues identified from Facilities Studies carried out in connection with specific transmission service requests; (ii) Transmission Issues associated with generator interconnection service; (iii) the Transmission Issues, including proposed transmission projects, identified by the Transmission Owners in connection with their planning analyses in accordance with local planning process described in Section I.D.1.a to this Attachment FF and the coordination processes of Section I.D.1.b., or developed by Transmission Owners utilizing their own FERC-approved local transmission planning process described in Section I.D.2, as applicable, to provide reliable power supply to their connected load customers and to expand trading opportunities, better integrate the grid and alleviate congestion; (iv) the transmission planning obligations of a Transmission Owner, imposed by federal or state law(s) or regulatory authorities, which can no longer be performed solely by the Transmission Owner following transfer of functional control of its transmission facilities to the Transmission Provider; (v) plans and analyses developed by the Transmission Provider to provide for a reliable Transmission System and to expand trading opportunities, better integrate the grid and alleviate congestion; (vi) the identification, evaluation, and analysis of expansions to enable the Transmission System to fully support the simultaneous feasibility of all Stage 1A ARRs; (vii) the inputs provided by the Planning Advisory Committee; (viii) the inputs, if any, provided by the state and local regulatory authorities having jurisdiction over any of the Transmission Owners; (ix) the inputs of the OMS Committee; and (x) the transmission needs driven by
public policy requirements selected to be included as Transmission Issues pursuant to
Section I.C.1.b.ii in accordance with Applicable Laws and Regulations.

1. Planning Cycle and Milestones: The ISO Agreement requires that a
regional transmission plan be developed biennially or more frequently. An MTEP
planning cycle is established for each calendar year. The development of the MTEP for a
planning cycle with a given calendar year designation begins on June 1 of the year prior
to the MTEP calendar year designation and ends with the approval of the final MTEP
report by the Transmission Provider Board. This approval typically occurs at the
Transmission Provider Board Meeting in December of the MTEP designated year. For
example, the development of the MTEP14 transmission plan will commence on June 1 of
2013 and typically end with approval in December 2014. The development of the MTEP
will follow specified process steps that are detailed, including process diagrams, in the
The TPBPM shall be posted on the website of the Transmission Provider.

a. Planning Functions: The planning process includes the following
functions which are described in detail in the TPBPM:

i. Model Development;

ii. Generator Interconnection Planning;

iii. Transmission Service Planning;

iv. Cyclical Regional Expansion Planning activities;

v. Interregional coordination with neighboring transmission planning
   regions;
vi. System Support Resource ("SSR") Studies for unit decommissioning;

vii. Transmission-to-Transmission Interconnections;

viii. Load Interconnections; and

ix. Focus Studies. These are studies initiated during the cyclical baseline planning process that cannot be delayed until the next planning cycle (for example, NERC/FERC directives, or near-term critical operational issues).

Each of these planning functions may develop system expansions that are taken into consideration in developing the entirety of the MTEP.

b. Planning Cycle: The regional planning process is performed through a continuous series of planning cycles, with each cycle typically addressing Transmission Issues through a rolling planning horizon. Each cycle commences with regional model development, identification of potential expansions from the local planning processes of the Transmission Owners, identification and selection of transmission needs driven by public policy requirements pursuant to Section I.C.1.b.ii to be included as Transmission Issues, and identification by stakeholders or the Transmission Provider of potential expansions that address the Transmission Issues. Each cycle concludes with recommendations to the Transmission Provider Board of recommended solutions to the Transmission Issues evaluated. Transmission Owner plans developed through local planning processes described in Section I.D.1.a are included in the beginning of each
regional planning cycle as potential alternatives to local Transmission Issues identified by
the Transmission Owners.

i. Key Planning Cycle Milestones: The regional planning process evaluates, with
stakeholder input throughout the cycle, the local plans of the Transmission
Owners, as one input to the development of the regional plan. Key milestones in
the typical MTEP development process are listed below and requirements and
timelines for data submittal, review, and comment at each of these milestone
points are described in the TPBPM:

(a) Model development;

(b) Identification and selection of transmission needs driven by public
policy requirements pursuant to Section I.C.1.b.ii to be included as
Transmission Issues;

(c) Testing models against applicable planning criteria;

(d) Development of possible solutions to identified Transmission
Issues;

(e) Selection of preferred solution;

(f) Determination of funding and cost responsibility; and

(g) Monitoring progress on solution implementation.

ii. Transmission needs driven by public policy requirements: The process for
selecting transmission needs driven by public policy requirements, out of the
larger set of transmission needs driven by public policy requirements that
stakeholders may propose, to be included in the Transmission Issue(s) for which
transmission solutions will be evaluated shall be as follows:

a. At the beginning of the MTEP cycle, stakeholders submit to the Transmission Provider, proposals to consider transmission needs driven by public policy requirements, as part of the Transmission Issues they may raise, in accordance with Section I.C.2.b, through Sub-Regional Planning Meetings, the Planning Subcommittee and/or the Planning Advisory Committee. The Transmission Provider may also identify transmission needs driven by public policy requirements to be evaluated.

b. The Transmission Provider will then consolidate all such identified transmission needs driven by public policy requirements that it receives into a list that will be distributed to stakeholders through the Planning Subcommittee and/or the Planning Advisory Committee and to other stakeholder forums as the Transmission Provider deems necessary.

c. Transmission needs driven by public policy requirements will be discussed in the Sub-Regional Planning Meetings, Planning Subcommittee and/or the Planning Advisory Committee in accordance with Section I.C.2.b.

d. The Transmission Provider will assess such identified
transmission needs driven by public policy requirements that it receives, considering the feedback received from stakeholders and the Sub-Regional Planning Meetings, Planning Subcommittee and/or the Planning Advisory Committee, and select the public policy requirements that will be further studied in the MTEP process. This selection will be based on:

1. the effective dates, nature and magnitude of the public policy requirements in the Applicable Laws and Regulations;
2. the immediacy or other estimated timing, and extent, of the potential impact on the identified transmission needs;
3. the availability of the resources, and any limitations thereto, that would be required by consideration of such transmission needs driven by public policy requirements;
4. the relative significance of other Transmission Issues that have been raised for consideration; and
5. other appropriate factors that can aid the prioritization of Transmission Issues to be considered by the regional transmission planning
iii. The Transmission Provider shall address each of these milestones throughout the planning cycle through Sub-regional Planning Meetings, Planning Subcommittee and Planning Advisory Committee meetings.

2. Stakeholders Input in Planning Process: The Transmission Provider shall facilitate discussions with its Transmission Customers, Transmission Owners, OMS Committee, and other stakeholders about the Transmission Issues and solutions involving both transferred and non-transferred facilities, as described in Section I.D.1 of this Attachment FF.

   These discussions will take place at Sub-regional Planning Meetings and at regularly scheduled meetings of the Transmission Provider’s Planning Subcommittee, at locations provided by the Transmission Provider and with communication capabilities for those participants unable to have in person representation at these meetings. Once the MTEP report for a specific planning cycle has been completed but prior to recommendation to the Transmission Provider Board for approval, the Transmission Provider shall seek feedback on the proposed MTEP, including Network Upgrades recommended for approval, from the Transmission Provider’s stakeholders and the OMS Committee.

   a. Planning Advisory Committee (“PAC”): The Planning Advisory Committee is a standing committee reporting to the Transmission Provider’s Advisory Committee, and functions subject to the Stakeholder Governance Guide developed by the Stakeholder Governance Working Group, as approved by the 

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Advisory Committee. The PAC is responsible for addressing planning policy issues of importance to stakeholders and within the responsibilities of the Transmission Provider. The PAC charter is maintained on the Transmission Provider’s website.

b. Planning Subcommittee ("PS"): The Planning Subcommittee is a standing stakeholder-chaired subcommittee of the Planning Advisory Committee, and functions subject to the Stakeholder Governance Guide developed by the Stakeholder Governance Working Group, as approved by the Advisory Committee. Planning Subcommittee membership is open to interested parties, including, but not limited to: transmission delivery service and interconnection service customers, marketers, developers, Transmission Owners, state and local regulatory authorities, federal regulatory staff, other Market Participants, and all interested parties. The charter for the committee is developed by stakeholders and is maintained on the Transmission Provider’s website. The Transmission Provider will seek guidance from Transmission Owners, state and local regulatory authorities, and other stakeholders through the Planning Subcommittee and/or the Planning Advisory Committee prior to the beginning of each new planning cycle. Guidance will include the scope of planning studies to be undertaken, the development of future scenarios to be modeled and analyzed in long-term planning studies, and the development of suitable models and assumptions to support such studies. The Transmission Provider will also seek guidance from Transmission Owners, state and local regulatory authorities, and other
stakeholders through the Planning Subcommittee and/or the Planning Advisory Committee prior to implementing changes or revisions to the scope, models, and assumptions during the planning cycle. The Planning Subcommittee and/or the Planning Advisory Committee may form working groups at the discretion of stakeholders to perform specific tasks supporting the planning processes, such as model development and detail review of study results and draft plan reports.

c. Sub-regional Planning Meetings (“SPMs”): The Transmission Provider shall utilize SPMs to provide opportunity for Transmission Owners, state and local regulatory authorities, and other stakeholders to provide input to the planning process, and to carry out the tasks of coordinating transmission plans among the Transmission Owners and proposals to address the Transmission Issues identified in the scope of transmission planning studies. Input and planned coordination may occur through the use of existing sub-regional planning groups (“SPGs”) where they exist, or through the establishment of new sub-regional meeting forums. One or more SPMs will be used or established for each of the four regional Planning Sub-regions of the Transmission Provider. Planning Sub-regions shall be defined based upon the Transmission Provider Planning Sub-regions: West, Central, South, and East as defined in Attachment FF-3.

   i) SPM Participants: Participants at an SPM will consist of representatives of the Transmission Owners operating within the associated Planning Sub-region that integrate their local planning processes with the regional process, representatives from state and local
regulatory authorities, and any other parties interested in or impacted by
the planning process. For those Transmission Owners engaged in local
planning under their own FERC approved local planning processes, such
Transmission Owners shall participate in the SPM in order to coordinate
their planning activities.
Neighboring transmission-owning utilities and regulatory participants are
eligible and encouraged to participate in the SPM to promote joint
planning between the Transmission Provider and neighboring transmission
systems.

ii) SPM Guidelines. The Sub-regional Planning Meeting participants
shall:
   (a) Make recommendations for a coordinated sub-regional
       Plan, after considering sub-regional and regional needs and
       alternatives, for the ensuing ten years, for all transmission facilities
       in the sub-region;
   (b) Review and comment on proposed Transmission Owners
       plans identified in local planning processes described in Section
       I.D.1.a. of this Attachment FF, for additions and modifications to
       the sub-regional transmission system, as potential solutions to
       identify Transmission Issues and review the transmission plans
developed by those Transmission Owners that have their own
FERC-approved local planning process (described in Section
I.D.2) to ensure coordination of the projects set forth in such plans with the potential regional planning solutions developed in the SPM process consistent with the requirements of Appendix B of the Transmission Owners’ Agreement;

(c) Form technical study task forces as required to carry out the sub-regional planning responsibilities;

(d) Encourage non-Transmission Provider member participation to improve understanding by the SPM participants, the Planning Subcommittee, and the Transmission Provider staff of facility changes outside the Transmission Provider Region to ensure the impact of such changes are considered in the planning studies;

(e) Promote other stakeholder (i.e., environmental agencies, and load and generation developers) involvement in development of the sub-regional plans.

(f) Recommend to the Planning Subcommittee proposed sub-regional plans to be included in the MTEP. In addition, the transmission projects developed by any Transmission Owner or Owners utilizing the provisions of their own FERC-approved local planning process shall be submitted for inclusion in the regional MTEP after being evaluated by the Transmission Provider in the regional evaluation of SPMs in accordance with Appendix B of the
Transmission Owners’ Agreement in determining the Transmission Provider’s recommendation for inclusion in the MTEP.

(g) Reflect, as desired, minority opinions to the Transmission Provider or the Planning Subcommittee.

(h) SPM Frequency, Location and Agenda: SPMs should meet at least two times per year or as otherwise provided for in the TPBPM, to provide input in the planning process, review plans and recommend changes, if any, needed to address stakeholder needs and to coordinate proposed plans.

Meetings involving CEII or confidential materials shall be handled under Section I.C.12 of this Attachment FF.

3. Meeting Notifications: Notice shall be provided by way of email distribution lists by the Transmission Provider of all SPMs, Planning Subcommittee, and Planning Advisory Committee meetings. These email distribution lists are established and maintained by the Transmission Provider and it is the responsibility of stakeholders to have registered as described on the Transmission Provider website. Meeting dates, times, locations, and materials will also be posted on the meeting calendar page of the Transmission Provider’s website. Meeting notification guidelines are set forth in the stakeholder developed Stakeholder Governance Guidelines.

4. Other Meeting Schedules: Planning Subcommittee meetings are regularly scheduled meetings that occur no less than bimonthly. Annual meeting schedules and
objectives are developed at the December meeting each year for the subsequent year.

Planning Advisory Committee meetings are scheduled as per the PAC Charter.

5. Planning Criteria: The Transmission Provider shall evaluate the system to address Transmission Issues in a manner consistent with the ISO Agreement and this Attachment FF. Projects included in the MTEP may be based upon any applicable planning criteria, including accepted NERC reliability standards and reliability standards adopted by Regional Entities, local planning reliability or economic planning criteria of the Transmission Owner, or required by State or local authorities, any economic or other planning criteria or metrics defined in this Attachment FF, and any Applicable Laws and Regulations. Transmission Owners are required to annually provide updated copies of local planning criteria for posting on the Transmission Provider’s website.

The Transmission Provider will post on its website an explanation of which transmission needs driven by public policy requirements will be evaluated for potential solutions in the local or regional transmission planning process, as well as an explanation of why other suggested potential transmission needs will not be evaluated.

6. Planning Analysis Methods: Planning analyses performed by the Transmission Provider will test the Transmission System under a wide variety of conditions as described in Section II and using standard industry applications to model steady state power flow, angular and voltage stability, short-circuit, and economic parameters, as determined appropriate by the Transmission Provider to be compliant with applicable criteria and this Tariff.
7. Planning Models: The Transmission Provider shall collaborate with Transmission Owners, other transmission providers, Transmission Customers, and other stakeholders to develop appropriate planning models that reflect expected system conditions for the planning horizon. The planning models shall reflect the projected Load growth of existing Network Customers and other transmission service and interconnection commitments. The models shall include any transmission projects identified in Service Agreements or Interconnection Agreements that are entered into in association with requests for transmission delivery service or interconnection service, as determined in Facilities Studies associated with such requests. Load forecasts applied to models will consider the forecast Load of Network Customers reported to the Transmission Provider in accordance with the requirements of Module B and RAR of this Tariff, and the Business Practices Manuals of the Transmission Provider. Models will be posted on an FTP site maintained by the Transmission Provider and accessible to stakeholders with security measures as provided for in the TPBPM. The Transmission Provider will provide an opportunity for stakeholders to review and comment on the posted models before commencing planning studies. The schedules for such reviews are maintained in the TPBPM. Stakeholders shall be afforded opportunities to provide input on Load projections from Tariff reporting requirements or from Transmission Owner forecasts. After the base line forecast and model are established, the Transmission Provider and/or Transmission Owners may adjust the forecast as necessary on an ad hoc basis throughout the planning year to
address customer requests for new Load interconnections arising from on-going dialogue with existing and prospective customers.

8. Planning Assumptions: Each MTEP report shall list in detail the planning assumptions upon which the analyses are based. In general, planning analyses will be based on the following:

   a. Planning Horizons: The MTEP will identify Transmission Issues for a minimum planning horizon of five years and a maximum planning horizon of twenty years.

   b. Load: Load demand will generally be modeled by the Transmission Provider as the most probable (“50/50”) coincident Load projection for each Transmission Owner’s service territory, for the season under study. Specific studies may model alternative Load probabilities or peak Load for areas within a Transmission Owner’s service territory as dictated by operational and planning experience and/or local planning criteria, but in any case shall be treated consistently in the planning for native Load and transmission access requests.

   c. Generation: Planning models of five years or longer will model generation, taking into consideration applicable planning reserve requirements, that are: (i) existing and expected to be in existence in the planning horizon; (ii) not existing but with executed interconnection agreements; and (iii) additional generation as determined with stakeholder input, as necessary to adequately and efficiently meet demand forecasted through the planning horizon and to facilitate compliance with statutory or regulatory mandates. The Transmission Provider
shall apply a scenario analysis to determine alternative future generation portfolio possibilities.

Generation portfolio development for planning model purposes will be developed with input from the Planning Advisory Committee and its subcommittees, working groups, and task forces. Point-To-Point Transmission Service and Network Integration Transmission Service customers will have an opportunity to guide new generation portfolio development that is reflective of customer future resource plans.

d. Demand Response Resources: Planning solutions will be based upon the best available information regarding the expected amount and location of Load that can be effectively and efficiently reduced by demand response or energy efficiency programs, as well as the amount of behind-the-meter generation that can reliably be expected to produce Energy that could impact planning solutions. The Transmission Provider shall perform and report on sensitivity analyses that indicate the effectiveness of potential demand response as alternative planning solutions, to the extent that appropriate methodology for such analyses is developed with stakeholders and documented in the TPBPM.

e. Topology: Each planning study will use the best known topology based upon the most recently approved MTEP. Planning studies will include all projects approved by the Transmission Provider Board, and shall identify, as appropriate, and as detailed in the TPBPM, any system needs already identified in the most recent approved MTEP.
9. Evaluation of Alternatives: When the planning analyses, based on the foregoing principles, identifies Transmission Issues, the Transmission Provider will consider the inputs from stakeholders derived from the SPM processes, the inputs from the Planning Subcommittee and the Planning Advisory Committee, the plans of any Transmission Owner with its own FERC-approved local planning process, and the MTEP aggregate system analyses against applicable planning criteria, in determining the solutions to be included in the MTEP and recommended to the Transmission Provider Board for implementation.

10. Facility Design: Facility design and system configuration (such as conductor sizes, transformer design, bus configuration, protection schemes) are selected by the Transmission Owner, and must be consistently applied by the Transmission Owner for comparable system service conditions. Comparable application of system design does not preclude the consideration or selection of advanced or alternative transmission technology. For Competitive Transmission Facilities associated with Competitive Transmission Projects, the Transmission Provider may provide limitations or requirements regarding facility design when necessary due to a planning driver or to ensure compatibility with existing transmission facilities to which the Competitive Transmission Facilities will interconnect as further described in Section VIII.C.2.c of this Attachment FF.

11. Status of Recommended Facilities: The status of all project facilities recommended for implementation in the MTEP shall be reported to the Transmission Provider on a quarterly basis and upon solicitation from the Transmission Provider. Each
Selected Developer and Transmission Owner is required to provide such status updates regarding the facilities for which it is responsible to construct to the Transmission Provider as further specified in this Section I.C.11 of Attachment FF of the Tariff and the Business Practices Manuals.

The Transmission Provider shall report on such status to the Transmission Provider Board on a quarterly basis, or as otherwise directed by the Transmission Provider Board. The Transmission Provider shall also publicly post such status in a form consistent with the Business Practices Manuals to the Transmission Provider’s website on a quarterly basis, redacting any CEII and/or confidential information as necessary.
(a) **Status of Eligible Project facilities approved after December 1, 2015:**

Each Selected Developer and incumbent Transmission Owner shall provide quarterly status reports to the Transmission Provider regarding the facilities included in an Eligible Project approved after December 1st, 2015 for which it is responsible to construct until the quarter after all such facilities have been placed into service and transferred to the Transmission Provider’s functional control, or the facilities and/or Eligible Project are otherwise reassigned, canceled, or terminated.

Quarterly status reports shall conform to the format set forth in the Business Practices Manuals and include, at a minimum, the following: (i) project schedule, including each facility’s estimated in-service date and any material changes therein; (ii) estimated project costs, including the estimated cost to complete each facility, any material changes therein as compared to the applicable Baseline Cost Estimate as set forth in Section IX.C.1.1, the total project expenditures to date, and the total project expenditures to date expressed as a percentage of the Baseline Cost Estimate, as set forth in Section IX.C.1.1; (iii) facility development status (i.e. under construction, in service, completed, or withdrawn); (iv) status of obtaining necessary regulatory and or environmental permits, certificates, or approvals, including meeting necessary licensing requirements; (v) status of land and right-of-way acquisition; (vi) status of design and engineering; (vii) status of any necessary interconnection agreements; (viii) an explanation of the causes of, or reasons for, any material changes to or deviations from the MTEP in-service date, Baseline Cost-Estimate as set forth in Section IX.C.1.1, and information provided in the last quarterly status report; and (ix) an assessment of the
impact of any material changes on the project, including the continued ability to meet the MTEP in-service date.

Within one hundred eighty (180) Calendar Days after the date the Selected Developer or Transmission Owner have placed all of the facilities included in an Eligible Project for which it is responsible to construct into service, including the transfer of functional control to the Transmission Provider, unless the Transmission Provider and Selected Developer or Transmission Owner agree on a different date, shall provide the Transmission Provider with the following:

1. the final costs to construct the facilities;
2. copies of the final “as-built” drawings and specifications of the facilities;
3. copies of any inspection reports performed on the facilities; and
4. geo-spatial information specific to the facilities (i.e. GIS compatible maps, GPS coordinates, etc.)

(b) Additional status requirements for Competitive Transmission Facilities:

In addition to the requirements specified above in Section I.C.11.a of Attachment FF, each Selected Developer shall also include in its status reports the following:

(i) status of any necessary project financing; (ii) the percentage (%) of the total project expenditures to date as compared to the total projected project cost schedule provided in the Selected Proposal; (iii) whether any rate filings associated with the Competitive Transmission Facilities were made during the previous quarter or expected to be made in the upcoming quarter; (iv) any changes in the continuing ability to meet the obligations of the Selected Developer Agreement according to the schedules and milestones agreed to...
therein, including any binding cost caps or cost-containment measures that were included in the Selected Proposal; (v) an explanation of the causes of, or reasons for, any changes from the specifications included in the Selected Proposal; and (vi) an assessment of the impact of any such changes on the Competitive Transmission Facilities included in the Competitive Transmission Project.

(c) **Status of all other facilities recommended for implementation in the MTEP:**

The requirements and obligations set forth in this section I.C.11.c of Attachment FF, shall be applicable to all facilities recommended for implementation in the MTEP except for those facilities that are included in an Eligible Project approved by the Transmission Provider Board after December 1, 2015.

Each incumbent Transmission Owner shall provide status reports to the Transmission Provider regarding the facilities that are included in projects other than those specified in Attachment FF §I.C.11.a for which it is responsible to construct, until the quarter after such facilities have been placed into service and transferred to the Transmission Provider’s functional control. Status reports shall conform to the format set forth in the Business Practices Manuals and at a minimum, include the following: (i) material changes to the schedule and to the estimated project cost; (ii) an explanation of the causes of, or reasons for, any such changes; and (iii) changes in project status (i.e., under construction, in service, completed, or withdrawn). The Transmission Provider shall report such progress to the Transmission Provider Board on a quarterly basis, or as otherwise directed by the Transmission Provider Board.
12. Treatment of Critical Energy Infrastructure Information (“CEII”) and Confidential Data: The Transmission Provider shall utilize a Non-Disclosure and Confidentiality Agreement (“NDA”) to address sharing of CEII transmission planning information. FTP sites containing such information will require such agreements to be executed in order to obtain access to those sites. Stakeholder meetings at which CEII may be available shall be noticed to email distribution lists and shall require execution of NDAs prior to participation in such meetings. In the alternative, such meetings will be structured to have separate discussion of issues involving CEII data only with participants that agree to execute the NDA. Confidential information related to economic (e.g., congestion) studies, as well as CEII, is clearly sensitive information which must remain confidential. The Transmission Provider shall use generic, publicly available, cost information from industry sources in the economic studies to prevent the accidental release of confidential information. This approach will promote an open planning process because the results of economic studies are available to all interested parties.

13. Resolution of Stakeholder Input: The Transmission Provider shall solicit input and comments from all stakeholders, including Transmission Owners, during and after stakeholder planning meetings, and will use reasonable efforts to reply to comments that the Transmission Provider does not elect to implement, together with reasons for such actions. The Transmission Provider shall develop a process for the documentation and resolution of stakeholder issues raised in the planning process, including but not limited to issues related to planning criteria.
14. **Dispute resolution:** Consistent with Attachment HH of this Tariff, the Transmission Provider shall resolve disputes concerning MTEP issues. The first step will be for designated representatives of the affected parties to work together to resolve the relevant issues in a manner that is acceptable to all parties. If that step is unsuccessful, each affected party shall designate an officer who shall review disputes involving them that their designated representatives are unable to resolve. The applicable officers of the parties involved in such dispute shall work together to resolve the disputes so referred in a manner that meets the interests of such parties, either until such agreement is reached, or until an impasse is declared by any party to such dispute. If such officers are unable to satisfactorily resolve the issues, the matter shall be referred to mediation. Parties that are not satisfied with the dispute resolution procedures may only file a complaint with the Commission during the negotiation or mediation steps.

If a matter remains unresolved, the affected parties may pursue arbitration.

**D. Project Coordination:** In the course of the MTEP process, the Transmission Provider shall seek out opportunities to coordinate or consolidate, where possible, individually defined transmission projects into more comprehensive cost-effective developments subject to the limitations imposed by prior commitments and lead-time constraints. The Transmission Provider shall coordinate with Transmission Owners, and shall consider the input from the SPMs, Planning Subcommittee, and Planning Advisory Committee to develop expansion plans to meet the needs of the system. This multi-party collaborative process will allow for all projects with regional and inter-regional impact to be analyzed for their combined effects on the Transmission System. Moreover, this collaborative process is designed to ensure that the MTEP
address Transmission Issues within the applicable planning horizon in the most efficient and cost effective manner, while giving consideration to the inputs from all stakeholders. In addition to the requirements of this Attachment FF, there may be state or local procedural requirements applicable to the planning or siting of transmission facilities by the Transmission Owners. A current list of those requirements can be found on the Transmission Provider’s website.

1. Transmission Owners Electing to Integrate their Local Planning Processes into the Transmission Provider’s Processes: Some Transmission Owners have agreed to integrate internal planning process with the Transmission Provider’s open and coordinated planning processes for all of their transmission facilities to comply with Order 890 Planning Principles instead of filing a separate Attachment K. Through this election, the local planning for all transmission facilities of these Transmission Owners, regardless of whether the facilities are ultimately transferred to the functional control of the Transmission Provider, shall be integrated with and included in the regional planning processes of the Transmission Provider. These regional planning processes, as provided for in this Attachment FF and in additional detail in the TPBPM, ensure that the planning decisions for all such facilities are made in an open and transparent environment.

This planning environment provides opportunity for input from, and review by, stakeholders of the Open Access Transmission Tariff services throughout the planning process, and is in accordance with the Planning Principles of the Order 890 Final Rule. The open and transparent planning provisions of this Attachment FF shall not preclude interaction between stakeholders and Transmission Owners prior to the submittal of proposed projects to the regional planning process.

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Transmission Owners integrating local planning processes into the regional planning processes are listed in Attachment FF-4. Such Transmission Owners shall be responsible for providing the Transmission Provider with sufficient information regarding all planning activities to enable the Transmission Provider to adequately review and incorporate all of the Transmission Owner’s transmission facilities into the regional planning process of the Transmission Provider, as described in Sections I.D.1.a. and I.D.1.b. of this Attachment FF.

The foregoing Transmission Owners will utilize the planning stakeholder forums of the Transmission Provider to demonstrate the need for, identify the alternatives to, and report the status of non-transferred transmission facilities using the same open, transparent and coordinated planning process provided by the Transmission Provider for transferred facilities as described in this Attachment FF.

a. Local Planning Processes of Transmission Owners: In accordance with the ISO Agreement, each Transmission Owner engages in local system planning in order to carry out its responsibility for meeting its respective transmission needs in collaboration with the Transmission Provider subject to the requirements of applicable state law or regulatory authority. In meeting its responsibilities under the ISO Agreement, the Transmission Owners may, as appropriate, develop and propose plans involving modifications to any of the Transmission Owner’s transmission facilities which are part of the Transmission System. The Transmission Owners shall include the following specific local planning steps in order to develop plans for potential inclusion in the regional plan, in accordance with the annual regional planning process as described in
Section I.D.1.b. of this Attachment FF, and in accordance with the regional planning principles of Section I.C of this Attachment. In addition to the local planning steps below, Transmission Owners shall adhere to any applicable state or local regulatory planning processes.

i. Define local study area and study horizon;

ii. Develop appropriate power system models;
   a) Utilize existing NERC or Transmission Provider cases to model external systems;
   b) Insert detailed model of Transmission Owner system if required;
   c) Insert updated detailed models of neighboring system models if required; and
   d) Verify model topology and generation.

iii. Update loads (spatial and magnitude) in study area;
   a) Review historical MW and MVAR data to develop growth trends;
   b) Obtain Load forecasts from customers in study area; and
   c) Obtain input from local distribution planners in the study area.

iv. Perform contingency analysis using applicable Transmission Owner planning criteria;

v. Identify any violations to planning criteria for each of study period;

vi. Develop alternative solutions to the criteria violations and test against the planning criteria;
a) Obtain cost estimates for each alternative and perform economic analyses; and

b) Determine non-cost attributes of each alternative such as operating flexibility, robustness, among others.

vii. Select alternative based on cost and non-cost attributes;

viii. Submit proposed solution and list of alternatives and assumptions to the Transmission Provider;

ix. Participate in stakeholder evaluations and discussions as a part of annual regional plan development process;

x. Perform additional analysis as required based on feedback from stakeholder groups (SPM/PS) in the regional planning process;

xi. Submit results of additional analysis (if performed) to the Transmission Provider for further discussion with stakeholders (SPM/PS);

xii. Consider regional planning process results, including stakeholder feedback on needs, proposed solutions, and alternatives, in determining whether or not to proceed with implementation of Transmission Owner proposed expansions; and

xiii. Post the planning criteria and assumptions, and power flow models used in development of each Transmission Owner’s current local planning proposal in accordance with Section I.D.1.b below. To the extent that the Transmission Owner uses the MISO MTEP models in developing its list of newly proposed projects, the Transmission Owner shall indicate as per Section I.D.1.b. below, the associated MTEP model used.
The Transmission Provider will maintain a link to applicable MTEP models on its website together with instructions for accessing such models consistent with CEII criteria and suitable non-disclosure agreements. In the event that the Transmission Owner applies its own power flow models in developing its proposed local plans, the Transmission Owner shall provide such models to the Transmission Provider for posting, or shall provide to the Transmission Provider a link to the location of such Transmission Owner model(s) and to instructions for accessing such models consistent with the Transmission Owner’s CEII and non-disclosure requirements. Transmission Provider shall post on its website links to such postings on Transmission Owner’s website.

b. Integration of Local Planning Processes of Transmission Owners:

Transmission Owners listed on Attachment FF-4 as integrating local planning processes with those of the Transmission Provider, shall integrate proposals for transmission expansions into the regional planning process as follows. Each Transmission Owner shall submit its proposals for transmission plans to the Transmission Provider prior to the start of each regional planning cycle. Each Transmission Owner’s local plan, which consists of a list of proposed projects, shall be made available on the Transmission Provider’s website for review by the PAC, the PS, and the SPM participants, subject to CEII and the confidentiality provisions in this Attachment FF. Such local plans shall be posted by September 15 each year in order to provide time for written comments by stakeholders. In addition to the list of proposed projects, each Transmission Owner submitting newly proposed projects by September 15 in any MTEP annual cycle shall
provide to the Transmission Provider by June 1 of the same year identification of any MISO base power flow model used by the Transmission Owner in support of the identification of the list of proposed projects to be subsequently posted in September, or in the event that the Transmission Owner uses a non-MISO base power flow model in support of the identification of the list of proposed projects the Transmission Owner shall provide to the Transmission Provider such base power flow model or a link to the power flow model and assumptions used.

Each Transmission Owner’s local planning model and associated assumptions shall be accessible on or through a link on the Transmission Provider’s website for review, subject to CEII and the confidentiality provisions in this Attachment FF and consistent with section I.D.1.a. In the event that the Transmission Owner uses a non-MISO base power flow model, the Transmission Owner shall provide for posting updates if there are significant changes in the model by July 15, August 15, and September 15 of each year. Comments by stakeholders on the local planning models and assumptions that are provided to the Transmission Provider SPM Planning Contact by July 1, or August 1 or September 1 with respect to updates, shall be forwarded to the applicable Transmission Owner by July 8, August 8, or September 8, respectively. The Transmission Provider shall address any unresolved stakeholder issues through the SPM process.

Each Transmission Owner shall also provide to the Transmission Provider by June 1 of each year any updates to the posted transmission planning criteria, or a notification that the posted documents have not changed. In the event a Transmission Owner has additional significant updates to the posted transmission planning criteria, the
Transmission Owner shall provide such updates for posting by July 15, August 15, and September 15 of each year.

The Transmission Provider shall post on its website the lists of newly proposed projects, criteria and assumptions, and supporting base power flow models or links to supporting base power flow models, as provided by the Transmission Owners. Initial comments by stakeholders to the proposed projects should be provided to the Transmission Provider SPM Planning Contact 45 days after the posting of local plans otherwise comments may be made pursuant to Section 1.C.2.c.ii. The Transmission Provider SPM Planning Contact shall be identified on the Transmission Provider’s website page devoted to Expansion Planning. The Transmission Provider shall provide to the applicable Transmission Owner within five working days of receipt, a copy of all stakeholder comments received within 45 days of the posted information regarding Transmission Owner planning criteria and assumptions, models applied, and list of proposed projects. The Transmission Provider shall address any unresolved stakeholder issues through the SPM process. Each Transmission Owner must participate in SPMs in the respective Planning sub-region as indicated in the Transmission Providers meeting schedule. Such SPMs shall provide input to and review of the results of the needs assessments and adequacy of plans proposed by the Transmission Owners, or by stakeholders to the planning process, or by the Transmission Provider, to best meet the needs of the sub-region.

Transmission Owners identified in Attachment FF-4, must submit to the Transmission Provider, on an annual basis and at a time to be determined by the Transmission Provider,
which shall be prior to the beginning of each regional planning cycle, all proposed transmission plans for both transferred and non-transferred transmission facilities. The submitted projects of such Transmission Owners shall be considered potential alternatives to system needs identified, and as such must be submitted when initially identified as a potential system solution, in order to permit the evaluation of such projects along with other potential alternatives that may be proposed by stakeholders or the Transmission Provider, in the SPM processes. Such alternatives may include transmission, generation, and demand-side resources. The Transmission Provider will review and evaluate such alternatives on a comparable basis and select the most appropriate solution. Comparability includes the ability of the Transmission Provider to obtain contractual assurances that the selected solution will be implemented by the required in-service dates. Contractual commitments associated with the construction of an MTEP Appendix A approved project by MISO Transmission Owner(s) and/or Selected Developer(s) are provided for by the ISO Agreement, this Tariff, and the Selected Developer Agreement.

Contractual commitments associated with generation solutions require that a generator interconnection agreement be filed with the Commission pursuant to Attachment X of this Tariff by the time the alternative transmission solution would need to be committed to in order to ensure installation on the required need date. Contractual commitments associated with demand-side resource solutions require demonstration to the Transmission Provider of an executed contract between LSE and End-Use Customers. Such demand-side contracts must be in place by the time that the transmission solution
would otherwise need to be committed to in order to ensure a timely solution to the identified planning need, and must span the five year planning horizon to ensure the ability to provide adequate lead time for an alternative transmission solution should the demand contracts terminate. Notwithstanding the provisions of Section VII of the ISO Agreement regarding the Transmission Provider review of Transmission Owner plans, no proposed project of a Transmission Owner that has elected to integrate their local planning processes into the Transmission Provider’s processes, as indicated on Attachment FF-4, shall be recommended in the MTEP for implementation until completion of the annual needs analysis carried out in the annual MTEP cycle, as described in Section I.C. of this Attachment FF, except as provided for in Section I.D.1.c. of this Attachment FF.

c. Out-of-Cycle Review of Transmission Owner Plans: In the event that a Transmission Owner determines that system conditions warrant the urgent development of system enhancements that would be jeopardized unless the Transmission Provider performs an expedited review of the impacts of the project, Transmission Provider shall use a streamlined approval process for reviewing and approving projects proposed by the Transmission Owners so that decisions will be provided to the Owner within thirty (30) days of the projects submittal to the MISO unless a longer review period is mutually agreed upon.

2. Transmission Owners Filing Separate Attachment K: Some Transmission Owners as listed on the last page of Attachment FF-5 have developed individual open, local planning processes for their facilities, that comply with the Planning Principles of the Order 890 Final
Rule. These Transmission Owners have an Attachment K that describes how the Transmission Owner will comply with the Order No. 890 Planning Principles for all transmission facilities that they plan for, regardless of whether those facilities are ultimately transferred to the functional control of the Transmission Provider. With the exception of Sections I.D.1.a and I.D.1.b., the provisions of this Attachment FF remain applicable to all Transmission Owners notwithstanding the filing by any Transmission Owner of an Attachment K pursuant to the Order 890 Final Rule.

E. Interregional Coordination and Cost Allocation: The MTEP shall be developed in accordance with the principles of interregional coordination through collaboration with representatives from adjacent transmission providers, their designated regional planning organizations, or regional transmission organizations, as provided for in this Attachment FF, or as otherwise provided for in existing joint agreements between the Transmission Provider and other regional entities that engage in planning activities. The Transmission Provider has developed region-specific interregional coordination and cost allocation provisions with regard to the following neighboring transmission planning regions:

- PJM Interconnection, L.L.C. (“PJM”), as provided for under Article IX and other applicable provisions of the Joint Operating Agreement between the Transmission Provider and PJM, as may be amended from time to time, including revisions the effective date of which is pending Commission approval in Docket No. ER13-1943-000;

- Southeastern Regional Transmission Planning (“SERTP”), as provided for under Section X of this Attachment FF, the effective date of which is pending Commission approval in Docket No. ER13-1923-000; and
Southwest Power Pool ("SPP"), as provided for under Article IX and other applicable provisions of the Joint Operating Agreement between the Transmission Provider and SPP, as may be amended from time to time, including revisions the effective date of which is pending Commission approval in Docket No. ER13-1938-000;

The Transmission Provider also has planning coordination provisions as part of its coordination agreement with Manitoba Hydro.

The following interregional coordination provisions shall continue to apply with regard to interregional coordination activities between the Transmission Provider and the Mid Continent Area Power Pool ("MAPP") transmission planning region. Moreover, the following interregional coordination provisions shall remain in effect for interregional coordination activities between the Transmission Provider and the SERTP transmission planning region until the Commission approves and grants an effective date for the SERTP interregional coordination and cost allocation filing pending in Docket No. ER13-1923-000.

1. Initial Contact: The Transmission Provider will initiate a meeting with representatives of adjacent transmission providers, their designated regional planning organizations, or regional transmission organizations with which existing joint agreements are not already established with the Transmission Provider ("Regional Planning Coordination Entities" or "RPCEs"), in order to establish a Joint Planning Committee.

2. Joint Planning Committee. The Transmission Provider shall offer to form a Joint Planning Committee ("JPC") with the RPCE. The JPC shall be comprised of representatives of the Transmission Provider and the RPCE in numbers and functions to
be identified from time to time. The JPC may combine with or participate in similarly established joint planning committees amongst multiple RPCEs or established under joint agreements to which the Transmission Provider is a signatory, for the purpose of providing for broader and more effective inter-regional planning coordination. The JPC shall have a Chairman. The Chairman shall be responsible for: the scheduling of meetings; the preparation of agendas for meetings; the production of minutes of meetings; and for chairing JPC meetings. The Chairmanship shall rotate amongst the Transmission Provider and the RPCEs on a mutually agreed to schedule, with each party responsible for the Chairmanship for no more than one planning study cycle in succession. The JPC shall coordinate planning of the systems of the Transmission Provider and the RPCEs, including the following:

a. Coordinate the development of common power system analysis models to perform coordinated system planning studies including power flow analyses and stability analyses. For studies of interconnections in close electrical proximity at the boundaries among the systems of the Transmission Provider and the RPCEs the JPC or its designated working group will coordinate the performance of a detailed review of the appropriateness of applicable power system models.

b. Conduct, on a regular basis, a Coordinated Regional Transmission Planning Study (CRTPS), as set forth in Section E.4.d.

c. Coordinate planning activities under this Section 8, including the exchange of data and developing necessary report and study protocols.
d. Maintain an Internet site and e-mail or other electronic lists for the communication of information related to the coordinated planning process. Such sites and lists may be integrated with those existing for the purpose of communicating the open and transparent planning processes of the Transmission Provider.

e. Meet at least semi-annually to review and coordinate transmission planning activities.

f. Establish working groups as necessary to address specific issues, such as the review and development of the regional plans of the RPCE and the Transmission Provider, and localized seams issues.

g. Establish a schedule for the rotation of responsibility for data management, coordination of analysis activities, report preparation, and other activities.

3. Data and Information Exchange. The Transmission Provider shall make available to each RPCE the following planning data and information. Unless otherwise indicated, such data and information shall be provided annually. The Transmission Provider shall provide such data in accordance with the applicable CEII policy, and maintain data and information received from each RPCE in accordance with their applicable confidentiality policies.

a. Data required for the development of power flow cases, and stability cases, incorporating up to a ten year load forecasts as may be requested, including all critical assumptions that are used in the development of these cases.
b. Fully detailed planning models (up to the next ten (10) years as requested) on an annual basis and updates as necessary to perform coordinated studies that reflect system enhancement changes or other changes.

c. The regional plan documents, any long-term or short-term reliability assessment documents, and any operating assessment reports produced by the Transmission Provider and the RPCE.

d. The status of expansion studies, system impact studies and generation interconnection studies, such that the Transmission Provider and the RPCE have knowledge that a commitment has been made to a system enhancement as a result of any such studies.

e. Transmission system maps for the Transmission Provider and the RPCE bulk transmission systems and lower voltage transmission system maps that are relevant to the coordination of planning between or among the systems.

f. Contingency lists for use in load flow and stability analyses, including lists of all contingency events required by applicable NERC or Regional Entity planning standards, as well as breaker diagrams for the portions of the Transmission Provider and the RPCE transmission systems that are relevant to the coordination of planning between or among the systems. Breaker diagrams to be provided on an as requested basis.

g. The timing of each planned enhancement, including estimated completion dates, and indications of the likelihood that a system enhancement will be completed and whether the system enhancement should be included in system expansion studies, system impact studies and generation interconnection studies, and as requested the status of
related applications for regulatory approval. This information shall be provided at the completion of each planning cycle of the Transmission Provider, and more frequently as necessary to indicate changes in status that may be important to the RPCE system.

h. Quarterly identification of interconnection requests that have been received and any long-term firm transmission services that have been approved, that may impact the operation of the Transmission Provider or the RPCE system.

i. Quarterly, the status of all interconnection requests that have been identified.

j. Information regarding long-term firm transmission services on all interfaces relevant to the coordination of planning between or among the systems.

k. Load flow data initially will be exchanged in PSS/E format. To the extent practical, the maintenance and exchange of power system modeling data will be implemented through databases. When feasible, transmission maps and breaker diagrams will be provided in an electronic format agreed upon by the Transmission Provider and the RPCE. Formats for the exchange of other data will be agreed upon by the Transmission Provider and the RPCE.

4. Coordinated System Planning. The Transmission Provider shall agree to coordinate with the RPCEs studies required to assure the reliable, efficient, and effective operation of the transmission system. Results of such coordinated studies will be included in the Coordinated System Plan. The Transmission Provider shall agree to conduct with the RPCEs such coordinated planning as set forth below
a. Single Entity Planning. The Transmission Provider shall engage in such transmission planning activities, including expansion plans, system impact studies, and generator interconnection studies, as necessary to fulfill its obligations under the Tariff. Such planning shall conform to applicable reliability requirements of NERC, applicable regional reliability councils, and any successor organizations thereto. Such planning shall also conform to any and all applicable requirements of Federal or State regulatory authorities. The Transmission Provider will prepare a regional transmission planning report that documents the procedures, methodologies, and business rules utilized in preparing and completing the report. The Transmission Provider shall agree to share the transmission planning reports and assessments with each RPCE, as well as any information that arises in the performance of its individual planning activities as is necessary or appropriate for effective coordination among the Transmission Provider and the RPCEs on an ongoing basis. The Transmission Provider shall provide such information to the RPCEs in accordance with the applicable CEII policy and shall maintain such information received from the RPCEs in accordance with their applicable confidentiality policies.

b. Analysis of Interconnection Requests. In accordance with the procedures under which the Transmission Provider provides interconnection service, the Transmission Provider will agree to coordinate with each RPCE the conduct of any studies required in determining the impact of a request for generator or merchant transmission interconnection. Results of such coordinated studies will be included in the
impacts reported to the interconnection customers as appropriate. Coordination of studies shall include the following:

i. When the Transmission Provider receives a request under its interconnection procedures for interconnection, it will determine whether the interconnection potentially impacts the system of a RPCE. In that event, the Transmission Provider will notify the RPCE and convey the information provided in the interconnection queue posting. The Transmission Provider will provide the study agreement to the interconnection customer in accordance with applicable procedures.

ii. If the RPCE determines that it may be materially impacted by an interconnection on the Transmission Provider System, the RPCE may request participation in the applicable interconnection studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the interconnection on the RPCE System, and who will perform the studies. The Transmission Provider will strive to minimize the costs associated with the coordinated study process undertaken by agreement with the RPCE.

iii. Any coordinated studies associated with requests for interconnection to the Transmission Provider’s system will be performed in accordance with the study timeline requirements and scope of the applicable generation interconnection procedures of the Transmission Provider.
iv. The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider, or by providing input to the studies to be performed by the Transmission Provider. The study cost estimates indicated in the study agreement between the Transmission Provider and the interconnection customer, will reflect the costs, and the associated roles of the study participants including the RPCE. The Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation, and responsibilities in the study. If the RPCE agrees to perform any aspects of the study, the RPCE must comply with the timelines and schedule of the Transmission Provider’s interconnection procedures.

v. The Transmission Provider will collect from the interconnection customer the costs incurred by the RPCE associated with the performance of such studies and forward collected amounts, no later than thirty (30) days after receipt thereof, to the RPCE. Upon the reasonable request of the RPCE, the Transmission Provider will make their books and records available to the requestor pertaining to such requests for collection and receipt of collected amounts.

vi. The Transmission Provider will report the combined list of any transmission infrastructure improvements on either the RPCE and/or the
Transmission Provider’s system required as a result of the proposed interconnection.

vii. Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the proposed interconnection shall be accomplished under the terms of the applicable OATT, Transmission Service Guidelines, controlling agreements, and consistent with applicable Federal or State regulatory policy and applicable law.

viii. Each transmission provider will maintain separate interconnection queues. The JPC will maintain a composite listing of interconnection requests for all interconnection projects that have been identified as potentially impacting the systems of the Transmission Provider and coordinating RPCEs. The JPC will post this listing on the Internet site maintained for the communication of information related to the coordinated system planning process.

c. Analysis of Long-Term Firm Transmission Service Requests. In accordance with applicable procedures under which the Transmission Provider provides long-term firm transmission service, the Transmission Provider will coordinate the conduct of any studies required to determine the impact of a request for such service. Results of such coordinated studies will be included in the impacts reported to the transmission service customers as appropriate. Coordination of studies will include the following:
i. The Transmission Provider will coordinate the calculation of ATC values associated with the service, based on contingencies on their systems that may be impacted by the granting of the service.

ii. When the Transmission Provider receives a request for long-term firm transmission service, it will determine whether the request potentially impacts the system of the RPCE. If the Transmission Provider determines that the RPCE system is potentially impacted, and that the RPCE would not receive a transmission service request to complete the service path, the transmission provider will notify the RPCE and convey the information provided in the posting.

iii. If the RPCE determines that its system may be materially impacted by granting the service, it may contact the Transmission Provider and request participation in the applicable studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the requested service on the RPCE system, and will strive to minimize the costs associated with the coordinated study process. The JPC will develop screening procedures to assist in the identification of service requests that may impact systems of the JPC members other than the transmission provider receiving the request.

iv. Any coordinated studies for request on the transmission Provider’s system will be performed in accordance with the study timeline and scope.
requirements of the applicable transmission service procedures of the Transmission Provider.

v. The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider or by providing input to the studies to be performed by the Transmission Provider. The study cost estimates indicated in the study agreement between the Transmission Provider and the transmission service customer will reflect the costs and the associated roles of the study participants. The Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation and responsibilities in the study.

vi. The Transmission Provider will collect from the transmission service customer, and forward to the RPCE, the costs incurred by the RPCE with the performance of such studies.

vii. The Transmission Provider receiving the request will identify any transmission infrastructure improvements required as a result of the transmission service request.

viii. Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the transmission service request shall be accomplished under the terms of the applicable OATT, Transmission Service Guidelines, controlling agreements, and
consistent with applicable Federal or State regulatory policy and applicable law.

d. Coordinated Regional Transmission Planning Study: The Transmission Provider agrees to participate in the conduct of a periodic Coordinated Regional Transmission Planning Study (CRTPS). The CRTPS shall have as input the results of ongoing analyses of requests for interconnection and ongoing analyses of requests for long-term firm transmission service. The Parties shall coordinate in the analyses of these ongoing service requests in accordance with Sections E.4.b and E.4.c. The results of the CRTPS shall be an integral part of the expansion plans of each Party. Construction of upgrades on the Transmission System of the Transmission Provider that are identified as necessary in the CRTSP shall be under the terms of the Owners Agreement of the Transmission Provider, applicable to the construction of upgrades identified in the expansion planning process. Coordination of studies required for the development of the Coordinated System Plan will include the following:

i. Every three years, the Transmission Provider shall participate in the performance of a CRTPS. Sensitivity analyses will be performed, as required, during the off years based on a review by the JPC of discrete reliability problems or operability issues that arise due to changing system conditions.

ii. The CRTPS shall identify all reliability and expansion issues, and shall propose potential resolutions to be considered by The Transmission Provider and the coordinating RPCEs.
iii. As a result of participation in the CRTPS, except as provided for in Section II.A.1., the Transmission Provider is not obligated in any way to construct, finance, operate, or otherwise support any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS. Any decision to proceed with any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS shall be based on the applicable reliability, operational and economic planning criteria established for the Transmission Provider as applicable to the development of the MTEP and set forth in this Attachment FF.

iv. As a result of participation in the CRTPS, the RPCEs are not entitled to any rights to financial compensation due to the impact of the transmission plans of the Transmission Provider upon the RPCE system, including but not limited to its decisions whether or not to construct any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS.

v. The JPC will develop the scope and procedure for the CRTPS. The scope of the CRTPSs performed over time will include evaluations of the transmission systems against reliability criteria, operational performance criteria, and economic performance criteria applicable to the Transmission Provider and the RPCEs.
vi. In the conduct of the CRTPS, the Transmission Provider and the coordinating RPCEs will use planning models that are developed in accordance with the procedures to be established by the JPC. Exchange of power flow models will be in a format that is acceptable to the coordinating parties.

vii. Stakeholder Review Processes. The Transmission Provider, in coordination with coordinating RPCEs shall review the scope and results of the CRTPS with impacted stakeholders, and shall modify the study scope as deemed appropriate by the Transmission Provider in agreement with the coordinating RPCEs, after receiving stakeholder input. Such reviews will utilize the existing planning stakeholder forums of the coordinating parties including as applicable joint Sub Regional Planning Meetings.

II. Development Process for MTEP Projects: The Transmission Provider will develop the MTEP biennially or more frequently. The MTEP will identify expansion projects for inclusion in the MTEP according to the factors set forth in Appendix B of the ISO Agreement and Section I.C of this Attachment FF. For purposes of assigning cost responsibility, expansion projects in the MTEP shall be categorized pursuant to the following criteria.

A. Reliability Needs: Reliability projects are identified either in the periodically performed Baseline Reliability Study, or in Facilities Studies associated with the request
processes for new transmission access. Transmission access includes requests for both new transmission delivery service and new generation interconnection service.

1. Baseline Reliability Projects: Baseline Reliability Projects are Network Upgrades identified in the base case as required to ensure that the Transmission System is in compliance with applicable national Electric Reliability Organization (“ERO”) reliability standards and reliability standards adopted by Regional Reliability Organizations and applicable within the Transmission Provider Region. Baseline Reliability Projects include projects that are needed to maintain reliability while accommodating the ongoing needs of existing Market Participants and Transmission Customers. Baseline Reliability Projects may consist of a number of individual facilities that in the judgment of the Transmission Provider constitute a single project for cost allocation purposes. The Transmission Provider shall collaborate with Transmission Owning members, other transmission providers, Transmission Customers, and other stakeholders to develop appropriate planning models that reflect expected system conditions for the planning horizon. The planning models shall reflect the projected load growth of existing network customers and other transmission service and interconnection commitments, and shall include any transmission projects identified in Service Agreements or interconnection agreements that are entered into in association with requests for transmission delivery service or transmission interconnection service, as determined in Facilities Studies associated with such requests. The Transmission Provider shall test the MTEP for
adequacy and security based on commonly applicable national Electric Reliability Organization (“ERO”) standards, and under likely and possible dispatch patterns of actual and projected Generation Resources within the Transmission System and of external resources, including dispatch reflective of Long-Term Transmission Rights of Transmission Customers, and shall produce an efficient expansion plan that includes all Baseline Reliability Projects determined by the Transmission Provider to be necessary through the planning horizon of the MTEP. The Transmission Provider shall obtain the approval of the Transmission Provider Board, as set forth in Section VI, for each MTEP published.

2. New Transmission Access Projects: New Transmission Access Projects are defined for the purposes of Attachment FF as Network Upgrades identified in Facilities Studies and agreements pursuant to requests for transmission delivery service or transmission interconnection service under the Tariff. New Transmission Access Projects include projects that are needed to maintain reliability while accommodating the incremental needs associated with requests for new transmission or interconnection service, as determined in Facilities Studies associated with such requests. New Transmission Access Projects may consist of a number of individual facilities, which in the judgment of the Transmission Provider constitute a single project for cost allocation purposes. New Transmission Access Projects are either Generation Interconnection Projects or Transmission Delivery Service Projects as defined in Sections II.A.2.a. and II.A.2.b. The Transmission Provider shall consider the Baseline Reliability
Projects already determined to be needed in the most current MTEP, as well as any other base-case needs not associated with the request for new service that may be identified during the impact study process when determining the need for New Transmission Access Projects. Any identified base-case needs determined in the impact study process that are not a part of the Baseline Reliability Projects already identified in the most current MTEP shall become new Baseline Reliability Projects and shall be included in the next MTEP. New Transmission Access Projects identified in Facilities Studies and agreements pursuant to requests for transmission delivery service or transmission interconnection service under this Tariff shall be included in the next MTEP.

a. Generation Interconnection Projects: Generation Interconnection Projects are New Transmission Access Projects that are associated with interconnection of new, or increase in generating capacity of existing, generation under Attachment X to this Tariff.

b. Transmission Delivery Service Projects: Transmission Delivery Service Projects are New Transmission Access Projects that are needed to provide for requests for new Point-To-Point Transmission Service, or requests under Module B of the Tariff for Network Service or a new designation of a Network Resource(s).

B. Market Efficiency Projects: Market Efficiency Projects are Network Upgrades: (i) that are proposed by the Transmission Provider, Transmission Owner(s), ITC(s), Market Participant(s), or regulatory authorities; (ii) that are found to be eligible for inclusion in the
MTEP or are approved pursuant to Appendix B, Section VII of the ISO Agreement after June 16, 2005, applying the factors set forth in Section I.C. of this Attachment FF; (iii) that, except if qualifying as an Interregional Market Efficiency Project under Section IX of the MISO-PJM Joint Operating Agreement, have a Project Cost of $5 million or more; (iv) that, except if qualifying as an Interregional Market Efficiency Project under Section IX of the MISO-PJM Joint Operating Agreement, involve facilities with voltages of 345 kV or higher\(^1\); and that may include any lower voltage facilities of 100kV or above that collectively constitute less than fifty percent (50%) of the combined project cost, and without which the 345 kV or higher facilities could not deliver sufficient benefit to meet the required benefit-to-cost ratio threshold for the project as established in Section II.B.1.e, or that otherwise are needed to relieve applicable reliability criteria violations that are projected to occur as a direct result of the development of the 345 kV or higher facilities of the project; (v) that are not determined to be Multi-Value Projects; (vi) that are found to have regional benefits under the criteria set forth in Section II.B.1 of this Attachment FF. In the event that a Network Upgrade qualifies as an Interregional Market Efficiency Project under Section IX of the MISO-PJM Joint Operating Agreement, the cost threshold of Section II.B(iii) does not apply, and the voltage threshold of Section II.B.(iv) shall be 100 kV or higher.\(^2\)

1. Criteria to Determine Whether a Project Should be Included as a Market Efficiency Project: The Transmission Provider shall employ multiple future scenarios and multi-year analysis including sensitivity analyses guided by input from the Planning

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\(^1\) Transformer voltage is defined by the voltage of the low-side of the transformer for these purposes.

\(^2\) A transformer is considered to operate above 100 kV when at least two sets of transformer terminals operate at voltages above 100 kV.
Advisory Committee to evaluate the anticipated benefits of a proposed Market Efficiency Project in order to determine if such a project meets the criteria for inclusion in the regional plan as a Market Efficiency Project eligible for regional cost sharing. Sensitivity analyses shall include, among other factors, consideration of: (i) variations in amount, type, and location of future generation supplies as dictated by future scenarios developed with stakeholder input and guidance; (ii) alternative transmission proposals; (iii) impacts of variations in load growth; and (iv) effects of demand response resources on transmission benefits.

The Transmission Provider shall perform this inclusion analysis as follows:

a. The Transmission Provider shall utilize a weighted futures, no loss ("WFNL") metric to analyze the anticipated annual economic benefits of construction of a proposed Market Efficiency Project to Transmission Customers in each of the Cost Allocation Zones, as defined in Attachment WW, based upon adjusted production cost ("APC") savings. APC savings will be calculated as the difference in total production cost of the Resources in each Cost Allocation Zone adjusted for import costs and export revenues with and without the proposed Market Efficiency Project as part of the Transmission System. The WFNL metric for each Cost Allocation Zone shall be calculated using the weighted APC savings determined for each future scenario included in the analysis.

i. The WFNL metric shall utilize the future scenarios determined and identified by the Transmission Provider through the planning process, with input from all stakeholders. The weights applied to the results of each future scenario
shall also be determined by the Transmission Provider with input from all stakeholders.

b. Project benefit evaluations will include benefits for the first 20 years of project life after the projected in-service date, with a maximum planning horizon of 25 years from the approval year. The annual benefit for a proposed Market Efficiency Project shall be determined as the sum of the WFNL values for each Cost Allocation Zone, as defined in Attachment WW. The total project benefit shall be determined by calculating the present value of annual benefits for the multiple year scenarios and multi-year evaluations.

c. The costs applied in the benefit to cost ratio shall be the present value, over the same period for which the project benefits are determined, of the annual Network Upgrade Charges for the project as determined in accordance with the formula in Attachment GG.

d. The present value calculation for both the annual benefits and annual costs will apply a discount rate representing the after-tax weighted average cost of capital of the Transmission Owners that make up the Transmission Provider Transmission System.

e. The Transmission Provider shall employ a benefit to cost ratio test to evaluate a proposed Market Efficiency Project. Only projects that meet a benefit to cost ratio of 1.25 or greater shall be included in the MTEP as a Market Efficiency Project and be eligible for regional cost sharing.

f. The benefits of the project used to determine the associated cost allocations as a percentage of project cost shall be determined one time at the time that the project is
presented to the Transmission Provider Board for approval. Estimated Project Cost will be used to estimate the benefit to cost ratio and the eligibility for cost sharing at the time of project approval. To the extent that the Commission approves the collection of costs in rates for Construction Work in Progress (“CWIP”) for a constructing Transmission Owner, costs will be allocated and collected prior to completion of the project.

g. The aforementioned Market Efficiency Project inclusion criteria shall be used for the exclusive purpose of determining whether projects are eligible for regional cost sharing in accordance with Section III.A.2.f below. These criteria shall not affect the existing criteria set forth in Appendix B of the ISO Agreement for determining whether projects are eligible for inclusion in the MTEP. Moreover, the costs of projects included in the MTEP, but not eligible for regional cost sharing, shall continue to be eligible for inclusion in the calculation of Transmission Owner revenue requirements under Attachment O of this Tariff.

C. Multi-Value Projects: A Multi-Value Project is one or more Network Upgrades that address a common set of Transmission Issues and satisfy the conditions listed in Sections II.C.1, II.C.2, and II.C.3 of Attachment FF. All Network Upgrades associated with a Multi-Value Project including any lower voltage facilities that may be needed to relieve applicable reliability criteria violations that are projected to occur as a direct result of the development of the Multi-Value Project; may be cost shared per Section III.A.2.g of Attachment FF except for (i) any Network Upgrade cost associated with constructing an underground or underwater transmission line above and beyond the cost of a feasible alternative overhead transmission line that provides comparable regional benefits, and (ii) any DC transmission line and associated terminal equipment
when scheduling and dispatch of the DC transmission line is not turned over to the Transmission Provider's markets, real-time control of the DC transmission line is not turned over to the Transmission Provider's automatic generation control system and/or the DC transmission line is operated in a manner that requires specific users to subscribe for DC transmission service.

1. A Multi-Value Project must be evaluated as part of a Portfolio of projects, as designated in the transmission expansion planning process, whose benefits are spread broadly across the footprint.

2. A Multi-Value Project must meet one of the three criteria outlined below:
   a. Criterion 1. A Multi-Value Project must be developed through the transmission expansion planning process for the purpose of enabling the Transmission System to reliably and economically deliver energy in support of documented energy policy mandates or laws that have been enacted or adopted through state or federal legislation or regulatory requirement that directly or indirectly govern the minimum or maximum amount of energy that can be generated by specific types of generation. The MVP must be shown to enable the transmission system to deliver such energy in a manner that is more reliable and/or more economic than it otherwise would be without the transmission upgrade.
   b. Criterion 2. A Multi-Value Project must provide multiple types of economic value across multiple pricing zones with a Total MVP Benefit-to-Cost ratio of 1.0 or higher where the Total MVP Benefit-to-Cost ratio is described in Section II.C.7 of this Attachment FF. The reduction of
production costs and the associated reduction of LMPs resulting from a
transmission congestion relief project are not additive and are considered a
single type of economic value.

c. Criterion 3. A Multi-Value Project must address at least one Transmission
Issue associated with a projected violation of a NERC or Regional Entity
standard and at least one economic-based Transmission Issue that provides
economic value across multiple pricing zones. The project must generate
total financially quantifiable benefits, including quantifiable reliability
benefits, in excess of the total project costs based on the definition of
financial benefits and Project Costs provided in Section II.C.7 of
Attachment FF.

3. All of the following conditions must be satisfied in order for a project to be
classified as a Multi-Value Project:

a. Facilities associated with the transmission project must not be in service,
under construction, or approved for construction by the Transmission
Provider Board prior to July 16, 2010 or the date a Transmission Owner
becomes a signatory member of the ISO Agreement, whichever is later.
This Section II.C.3.a shall not preclude the Multi-Value Project
classification of a Competitive Transmission Project that makes a Selected
Developer(s) eligible to become a Transmission Owner.

b. The transmission project must be evaluated through the Transmission
Provider's transmission planning process and approved for construction by
the Transmission Provider Board prior to the start of construction, where
collection does not include preliminary site and route selection activities.
c. The transmission project must not contain any transmission facilities listed
in Attachment FF-1 of this Tariff.
d. The total capital cost of the transmission project must be greater than or
equal to $20,000,000.00.
e. The transmission project must include, but not necessarily be limited to, the
construction or improvement of transmission facilities operating at voltages
above 100 kV. A transformer is considered to operate above 100 kV when
at least two sets of transformer terminals operate at voltages above 100 kV.
f. Network Upgrades driven solely by an Interconnection Request, as defined
in Attachment X of the Tariff, or a Transmission Service request will not be
considered Multi-Value Projects.

4. Any transmission project that qualifies as a Multi-Value Project shall be
classified as an MVP irrespective of whether such project is also a Baseline
Reliability Project and/or Market Efficiency Project.

5. The specific types of economic value provided by a Multi-Value Project
include the following:
   a. Production cost savings where production costs include generator
      startup, hourly generator no-load, generator energy and generator
      Operating Reserve costs. Production cost savings can be realized
      through reductions in both transmission congestion and transmission
energy losses. Productions cost savings can also be realized through reductions in Operating Reserve requirements within Reserve Zones and, in some cases, reductions in overall Operating Reserve requirements for the Transmission Provider.

b. Capacity losses savings where capacity losses represent the amount of capacity required to serve transmission losses during the system peak hour including associated planning reserve.

c. Capacity savings due to reductions in the overall Planning Reserve Margins resulting from transmission expansion.

d. Long-term cost savings realized by Transmission Customers by accelerating a long-term project start date in lieu of implementing a short-term project in the interim and/or long-term cost savings realized by Transmission Customers by deferring or eliminating the need to perform one or more projects in the future.

e. Any other financially quantifiable benefit to Transmission Customers resulting from an enhancement to the Transmission System and related to the provisions of Transmission Service.

6. Any project to facilitate like-for-like capital replacements of plant originally installed as part of a Multi-Value Project where replacement is due to aging, failure, damage or relocation requirements where such replacement is not the result of negligence by the constructing Transmission Owner will be treated as a Multi-Value Project. The minimum project cost limitation for Multi-Value Projects
described in Section II.C.3.d of Attachment FF will not apply to the like for-like capital replacement projects described in this Section.

7. The following Total MVP Benefit-to-Cost Ratio will be applied to any Multi-Value Project justified solely on the basis of Sections II.C.2.b or II.C.2.c of this Attachment FF to ensure such project qualifies as a Multi-Value Project:

\[
\text{Total MVP Benefit-to-Cost Ratio} = \frac{\text{financial benefits}}{\text{Project Costs}}.
\]

For the purpose of this calculation, Financial Benefits will be set equal to the present value of all financially quantifiable benefits provided by the project projected for the first 20 years of the project's life and Project Costs will be set equal to the present value of the annual revenue requirements projected for the first 20 years of the project's life.

8. The aforementioned Multi-Value Project inclusion criteria shall be used for the exclusive purpose of determining whether projects are eligible for regional cost sharing in accordance with Section III.A.2.g below. These criteria shall not affect the existing criteria set forth in Appendix B of the ISO Agreement for determining whether projects are eligible for inclusion in the MTEP. Moreover, the costs of projects included in the MTEP, but not eligible for regional cost sharing, shall continue to be eligible for inclusion in the calculation of Transmission Owner revenue requirements under Attachment O of this Tariff.

D. Market Participant Funded Projects: Market Participant funded projects (MPFPs) are defined as Network Upgrades fully funded by one or more market participants but owned and operated by an incumbent Transmission Owner. These projects apply to those Network

Effective On: March 11, 2020
Upgrades that are neither currently included in the MTEP Appendix A nor targeted for approval within the current planning cycle.

The development of the MPFPs will follow specified process steps that are detailed in the Transmission Provider’s Transmission Planning Business Practices Manual (“TPBPM”). These process steps shall include, at a minimum, the following:

1. **Consistent with the MTEP process the submittal deadline for a proposed MPFP project shall be September 15 of the current planning cycle and the proposed MPFP shall be submitted to the Transmission Provider planning contact, indicated on the MPFP submittal form posted on the Planning page of the Transmission Provider web site.**

2. **An MPFP proposed by a Market Participant shall follow the same analysis and approval timeline as an MTEP Target Appendix A project for the current planning cycle.**

3. **In the event that multiple Market Participants submit project proposals that are electrically similar, Transmission Provider shall make a determination in collaboration with the affected Transmission Owner(s) as to whether the projects are effectively the same project. Such consideration shall include whether the proposals have the same terminal stations, substantially address the same market congestion issues or otherwise serve similar system purposes, and can each be physically accommodated together with the other similar proposals. If the projects are determined to be effectively the same project, the priority for the...**
E. Identification of Potential Impacts of a Market Efficiency Project or Multi-Value Project on Neighboring Transmission Planning Region(s)

As part of the evaluation of any proposed Market Efficiency Project or Multi-Value Project, the Transmission Provider will determine whether the proposed Market Efficiency Project or Multi-Value Project causes any violations of NERC reliability standards on the transmission system(s) of the adjacent neighboring transmission planning region(s). If the Transmission Provider’s evaluation identifies any such violations of NERC reliability standards, the Transmission Provider will contact and coordinate with the other potentially affected adjacent neighboring transmission planning region(s) on any further evaluation.

F. Targeted Market Efficiency Projects:

A Targeted Market Efficiency Project is an upgrade that is identified in a Targeted Market Efficiency Project Study initiated by the Joint RTO Planning Committee as provided for under Article IX of the Joint Operating Agreement between the Transmission Provider and PJM and that satisfies the criteria for a Targeted Market Efficiency Project as set forth in Article IX of the Joint Operating Agreement between the Transmission Provider and PJM. Any Targeted Market Efficiency Project that is recommended by the Joint RTO Planning Committee under Article IX of the Joint Operating Agreement between the Transmission Provider and PJM shall be presented to the Transmission Provider Board for approval in the MTEP.
G. Treatment of Storage as a Transmission-Only Asset (SATOA)

1. SATOA May Be Included in MTEP as a Solution to a Transmission Issue

A storage facility proposed as a Storage as Transmission Only Asset (“SATOA”) may be considered in the transmission planning process as a solution to a Transmission Issue. A SATOA may be any one of the transmission project types described in Sections II.A through II.D and II.F of this Attachment FF that meet the definitions, criteria, or factors applicable to those project types. A SATOA is eligible for cost recovery consistent with the cost recovery for its project type under Attachment FF, including cost recovery under Attachment FF, Section III.A.2.k.

   a. Comparative Evaluations of Proposed SATOA.

The Transmission Provider will evaluate the appropriateness of proposed SATOAs as solutions to Transmission Issues identified in the development of the MTEP comparably to any other transmission asset. Considerations will include:

   i. Ability of the proposed SATOA to address the Transmission Issue (e.g., loading, voltage, stability) in all hours that the Transmission Issue is determined to exist, with a life-cycle cost that is comparable to other proposed solutions or as otherwise needed to address the Transmission Issue, and after consideration of the comparability in system performance to other proposed solutions, including any non-transmission alternatives consistent with the provisions of Section I.D.1.b.
ii. The minimum and maximum Capacity required to address the Transmission Issue to ensure that excess storage Capacity is not treated as a transmission asset. Cost recovery under transmission rates is limited to the cost of the maximum Capacity determined to be needed to address the Transmission Issue and will be pro-rated on that basis if a SATOA of higher Capacity is proposed, selected for inclusion in Appendix A of MTEP, and installed.

iii. Assurance of sufficient Energy and/or reactive capability (MWh/MVAR) to charge or discharge Energy for any period identified as necessary in the planning study.

iv. Assessment of system reliability impacts applicable to inverter-based facilities on the same basis and in a manner comparable to such analysis in the Generator Interconnection Procedures applicable to storage Resources as inverter-based facilities.

v. Life-cycle cost comparisons, including consideration of the period that is required to address the Transmission Issue, which may be less than the life cycle of alternatives, and including the factors described in Section II.G.1.b.

vi. Additional considerations that may support comparative evaluation to other solutions to the Transmission Issue, such as lead-time to develop, right of way or substation impacts, expandability, operational flexibility, or others.
b. Life Cycle, Degradation, and Cost Assumptions

Selection of the proposed SATOA as the preferred solution will consider similar cost and effectiveness considerations as applied to any other proposed transmission solution. The entity proposing the SATOA shall provide the planning estimate of the SATOA’s:

i. Direct capital cost;

ii. Expected useful life;

iii. Equipment replacement schedules and associated life-cycle costs and other ongoing costs to maintain the SATOA at its required Capacity and Energy capability necessary to address the Transmission Issue identified, or otherwise comparable to a traditional wires solution; and

iv. Other cost and performance information as the Transmission Provider may determine is necessary to compare cost and performance with other proposed solutions to the Transmission Issue identified.

c. Selection of proposed SATOA as a Preferred Solution in MTEP

To be selected for inclusion in the MTEP, in addition to the requirements of Section II.G.1.a., the proposed SATOA must:

i. Demonstrate a basis to be recommended for inclusion in Appendix A of the MTEP as a transmission asset by:

   a. Unique characteristics or circumstances of the proposed SATOA necessary to meet the identified Transmission System performance...
requirements and not otherwise available at comparable costs from other proposed solutions, including speed of operation, lead-time to implement, right-of-way or other property considerations.

b. A need to resolve the Transmission Issue(s) through the storage facility’s functioning as a SATOA instead of as a Resource that participates in the Transmission Provider’s markets.

ii. Meet the criteria to be designated in the MTEP as one of the transmission project types consistent with the provisions of Sections II.A through II.D and II.F of this Attachment FF, or as eligible for cost recovery pursuant to Section III.A.2.k.

d. Consideration of Impacts on Resources in the Interconnection Queue

If the Transmission Provider or stakeholder identifies a potential impact to newly interconnecting Generation Resource(s) in the interconnection study process, the Transmission Provider will assess whether the proposed SATOA will impact the newly-interconnecting Generation Resource(s). Such assessment may include targeted contingency analyses applying NERC TPL and applicable regional and local planning criteria to evaluate the incremental impact of the proposed SATOA on interconnection queue projects in proximity to the SATOA in the MTEP model to compare loading and other system performance impacts attributable to the addition of the SATOA. If such assessment demonstrates that the necessary operating mode of the proposed SATOA would cause the need for additional system mitigation, the cost of such mitigation will be included in the evaluation of the proposed SATOA against other potential transmission solutions.

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2. Development of Operating Guides Associated with SATOA Selected for MTEP

Operation of SATOA in real time will be under the functional control of the Transmission Provider as provided for in Rate Schedule 1 (Transmission Owners Agreement), Article Three, Section I.A. For each SATOA included in the MTEP, the Transmission Provider will develop an Operating Guide specifying the operating practices applicable to the SATOA and consistent with the system performance requirements determined through the planning study supporting the selection of the SATOA for inclusion in the MTEP. The Operating Guide will include limitations on the operation of the SATOA above the maximum Capacity determined to be needed to address the Transmission Issue, consistent with Section II.G.1.a.ii.

3. Storage as Non-Transmission Alternatives

As provided for under Section I.D.1.b, storage facilities that are not proposed as SATOA may be considered as alternatives to transmission assets to address system needs when participating as generation or demand-side resources.

4. SATOA Participation in Markets

SATOA may only participate in the Transmission Provider’s markets to the extent necessary to receive Energy from the Transmission System and to inject Energy into the Transmission System to provide the services for which the SATOA was included in the MTEP. SATOA may not otherwise participate in the Energy and Operating Reserve Markets and/or the Planning Resource Auction.

5. Transmission Service Associated with SATOA Operation

No Transmission Service charges are applicable to the operation of a SATOA.

6. Responsibility for Market-Derived Costs and Revenues Associated with SATOA
a. Accounting for Costs Incurred in the Market

Costs resulting from Market Activities of a SATOA directed under the Transmission Provider’s functional control shall be collected through transmission rates in a manner consistent with the treatment of costs associated with the transmission project type that the SATOA is included as in Appendix A of the MTEP pursuant to Section II.G.1.c.ii. As an example, costs for charging a SATOA battery storage device may be included in transmission rates in a manner consistent with the inclusion in transmission rates as a Baseline Reliability Project if the battery storage device operates to serve as a Baseline Reliability Project.

b. Credit Back of Market Revenues

Revenues collected from Market Activities of a SATOA directed under the Transmission Provider’s functional control shall be credited back through transmission rates in a manner consistent with the treatment of costs associated with the project category in transmission rates.

7. Removal

No SATOA may be removed from service permanently unless the removal is submitted into the annual MTEP planning process as a proposed project removal, reviewed by the Transmission Provider for its impact on Transmission System performance, and accepted by the Transmission Provider based on such review.

III. Designation of Cost Responsibility for MTEP Projects: Based on the planning analysis performed by the Transmission Provider, which shall take into consideration all
appropriate input from Market Participants or external entities, including, but not limited to, any indications of a willingness to bear cost responsibility for an enhancement or expansion, the recommended MTEP shall, for any enhancement or expansion that is included in the plan, designate: (i) the Market Participant(s) in one or more pricing zones that will bear cost responsibility for such enhancement or expansion, as and to the extent provided by any applicable provision of the Tariff, including Attachments N, X, or any applicable cost allocation method ordered by the Commission; or, (ii) in the event and to the extent that no provision of the Tariff so assigns cost responsibility, the Market Participant(s) or Transmission Customer(s) in one or more pricing zones from which the cost of such enhancements or expansions shall be recovered through charges established pursuant to Attachment GG of this Tariff, or as otherwise provided for under this Attachment FF.

Any designation under clause (ii) of the preceding sentence shall be determined as provided for in Section III.A of this Attachment FF. For all such designations, the Transmission Provider shall calculate the cost allocation impacts to each pricing zone. The results will be reviewed for unintended consequences by the Transmission Provider and the Tariff Working Group and any such identified consequences shall be reported to the Planning Advisory Committee, and the OMS.

A. Allocation of Costs Within the Transmission Provider Region

1. Default Cost Allocation: Except as otherwise provided for in this Attachment FF, or by any other applicable provision of this Tariff and consistent with the ISO Agreement, the responsibility for Network Upgrades included in the approved MTEP will be addressed in accordance with the provisions of the ISO Agreement.
2. Cost Allocation: The Transmission Provider will designate and assign cost responsibility on a regional, and sub-regional basis for Network Upgrades identified in the MTEP subject to the grand-fathered project provisions of Section III.A.2.b.

a. Market Participant’s Option to Fund: Notwithstanding the Transmission Provider’s assignment of cost responsibility for a project included in the MTEP, one or more Market Participants may elect to assume cost responsibility for any or all costs of a Network Upgrade that is included in the MTEP. Provided however, in the event the Market Participant is also a Transmission Owner such election of the option to fund must be made on a consistent, non-discriminatory basis.

b. Grandfathered Projects: The cost allocation provisions of this Attachment FF shall not be applicable to transmission projects identified in Attachment FF-1, which is based on the list of projects designated as Planned Projects in the MTEP approved by the Transmission Provider Board on June 16, 2005 (MTEP 05) and some additions of proposed projects that the Transmission Provider has determined to be in the advanced stages of planning.

c. Baseline Reliability Projects: Costs of Baseline Reliability Projects shall be recovered pursuant to Attachment O of this Tariff by the Transmission Owner(s) and/or ITC(s) developing such projects, such that the Transmission Owner(s) and/or ITC(s) developing a Baseline Reliability Project shall be responsible for all of the costs of the portion of the
Baseline Reliability Project that is physically located in the Transmission Owner’s and/or ITC’s pricing zone, subject to the requirements of the ISO Agreement.

d. Generation Interconnection Projects: Costs of Generation Interconnection Projects that are not determined by the Transmission Provider to be Baseline Reliability Projects, Market Efficiency Projects, or Multi-Value Projects and the Network Upgrade costs associated with advancing a Baseline Reliability Project, Market Efficiency Project, or Multi-Value Project associated with a generator interconnection will be paid for by the Interconnection Customer(s) in accordance with Attachment X.

For Generation Interconnection Projects interconnecting to the American Transmission Company LLC transmission system, such costs will be subject to the provision of Attachment FF – ATCLLC.

1) For Network Upgrades to facilities in voltage classes at or above 345 kV, the Interconnection Customer shall be repaid 10 percent of the costs of the Generation Interconnection Project funded by the Interconnection Customer once Commercial Operation is achieved.

The Transmission Owner(s) constructing the Generation Interconnection Project will repay 10% of the Generation Interconnection Project costs associated with Network Upgrade facilities in a voltage class of 345 kV or greater to the
Interconnection Customer under repayment terms consistent with the schedules and other terms of Attachment X.

The 10% of the Project Cost associated with Network Upgrade facilities of voltage class 345 kV or above and repaid to the Interconnection Customer shall be allocated on a system-wide basis and recovered pursuant to Attachment GG of this Tariff.

2) An Interconnection Customer may be required to contribute to the cost of Shared Network Upgrades, as defined in Attachment X to the Tariff, that are funded by another Interconnection Customer as a Generation Interconnection Project pursuant to Attachment X. Each Interconnection Customer with one or more Shared Network Upgrade(s) identified in Appendix A of its Generator Interconnection Agreement shall make a one-time payment under Schedule 26-B to the Transmission Provider in accordance with the terms in the Generator Interconnection Agreement. The one-time payment will reflect the cost of the Shared Network Upgrade assigned to the Interconnection Customer as determined by the Transmission Provider.

All revenue collected by the Transmission Provider through Schedule 26-B shall be distributed to the appropriate Interconnection Customer(s).
3) The Interconnection Customer shall be entitled, pursuant to Section 46 of this Tariff, to any Financial Transmission Rights or other rights to the extent provided for under this Tariff, for any Network Upgrade costs funded by or charged to the Interconnection Customer and not subject to repayment under the provisions of this Section III.A.2.d. In the event that a Generation Interconnection Project defers or displaces a Baseline Reliability Project, the costs of the Generation Interconnection Project up to the costs of the deferred or displaced Baseline Reliability Project shall be allocated consistent with the cost allocation for the Baseline Reliability Project.

4) International Transmission/Michigan Electric Transmission Company:

   (a) For those Generation Interconnection Projects for which International Transmission Company or Michigan Electric Transmission Company, LLC, (“International” or “METC”) as Transmission Owners will be a signatory to the interconnection agreement under the terms of Attachment X of this Tariff or any successor provision of the Tariff executed by the parties after the effective date of this Attachment FF Section III.A.2.d.4, this Attachment FF Section III.A.2.d.4 shall apply.
(b) Generation Interconnection Projects: The cost of Network Upgrades for Generation Interconnection Projects that are not determined by the Transmission Provider to be Baseline Reliability Projects shall be reimbursed by the Transmission Owner as provided in this Section III.A.2.d.4. All costs of Network Upgrades for Generation Interconnection Projects will initially be paid by the Interconnection Customer in accordance with the terms of the Interconnection Agreement entered into pursuant to Attachment X of this Tariff. To the extent the Interconnection Customer demonstrates at the time of Commercial Operation of the Generating Facility one of the following:

i. Generating Facility has been designated as a Network Resource in accordance with the Tariff, or

ii. Contractual commitment has been entered into with a Network Customer for capacity, or in the case of an Intermittent Resource, for energy, from the Generating Facility for a period of one (1) year or longer.
The Interconnection Customer will receive up to one hundred percent (100%) reimbursement of reimbursable costs within ninety (90) days of the Commercial Operation Date, such reimbursement prorated by the percentage of the Generating Facility capacity or annual available energy output contracted for and as demonstrated to the satisfaction of the Transmission Provider.

If the Interconnection Customer is unable to demonstrate to the satisfaction of the Transmission Provider at the time of Commercial Operation of the Generating Facility that the Generating Facility has met the repayment obligations set forth in Attachment FF Sections III.A.2.d.4.b.i. or III.A.2.d.4.b.ii. the Interconnection Customer shall be directly assigned 100% of the costs of the Generation Interconnection Project. The Transmission Owner may effect this direct assignment of costs by either foregoing any repayment of costs funded by the Interconnection Customer, or by electing to repay 100% of the costs under repayment terms consistent with the schedules and other terms of Attachment X.

The Interconnection Customer shall be entitled, pursuant to Section 46 of this Tariff, to any Financial Transmission

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Rights or other rights to the extent provided for under this Tariff, for any Network Upgrade costs funded by or charged to the Interconnection Customer and not subject to repayment under the provisions of this Attachment FF Section III.A.2.d.4. In the event that a Generation Interconnection Project defers or displaces a Baseline Reliability Project, the costs of the Generation Interconnection Project up to the costs of the deferred or displaced Baseline Reliability Project shall be allocated consistent with the cost allocation for the Baseline Reliability Project.

(c) For all amounts to be reimbursed by a Transmission Owner to an Interconnection Customer in accordance with this Attachment FF Section III.A.2.d.4, the Transmission Owner will reimburse the sums received from the Interconnection Customer in cash together with any applicable interest, in accordance with the terms of the Interconnection Agreement.

(d) Allocation of Generation Interconnection Reimbursement. For all amounts reimbursed by a Transmission Owner to an Interconnection Customer under
this Attachment FF Section III.A.2.d.4, the reimbursement will be allocated as follows:

i. Projects of Voltage Below 345 kV: 50% of the applicable Project Cost for Generation Interconnection Projects with a voltage class below 345 kV shall be allocated on a sub-regional basis to all Transmission Customers in designated pricing zones. The designated pricing zones and the sub-regional allocation of the Project Cost shall be determined on a case-by-case basis in accordance with a Line Outage Distribution Factor Table (“LODF Table”) developed by the Transmission Provider which is similar in form to that attached hereto as Attachment FF-2. The LODF Table is based on Transmission System topology and Line-Outage Distribution Factors associated with the project under consideration and is used to determine the pricing zones to be included in the sub-regional allocation of the Project Cost. The percentage of the sub-regional
allocation assigned to each designated pricing zone shall be determined based on the relative share between pricing zones of the sum of the absolute value of the product of the Line-Outage Distribution Factor on each Branch Facility in a pricing zone and the length in miles of the Branch Facility.

The remaining fifty percent (50%) of the reimbursement will not be subject to any regional or sub-regional cost allocation, but will be recovered by that Transmission Owner under its Attachment O transmission rate formula under this Tariff.

ii. Projects of Voltage 345 kV and Higher:

10% of the applicable Project Cost for Generation Interconnection Projects with a voltage class of 345 kV or higher shall be allocated on a system-wide basis to all Transmission Customers and recovered through a system-wide rate. 40% of the applicable Project Cost for Generation Interconnection Projects with a voltage class
of 345 kV or higher shall be allocated on a sub-regional basis to all Transmission Customers in designated pricing zones. The designated pricing zones and the sub-regional allocation of the Project Cost shall be determined on a case-by-case basis in accordance with a Line Outage Distribution Factor Table ("LODF Table") developed by the Transmission Provider similar in form to that attached hereto as Attachment FF-2. The LODF Table is based on Transmission System topology and Line-Outage Distribution Factors associated with the project under consideration and is used to determine the pricing zones to be included in the sub-regional allocation of the Project Cost. The percentage of the sub-regional allocation assigned to each designated pricing zone shall be determined based on the relative share between pricing zones of the sum of the absolute value of the product of the Line-Outage Distribution Factor on
each Branch Facility in a pricing zone and the length in miles of the Branch Facility.

The remaining fifty percent (50%) of the reimbursement will not be subject to any regional or sub-regional cost allocation, but will be recovered by that Transmission Owner under its Attachment O transmission rate formula under this Tariff.

e. Transmission Delivery Service Projects: Costs of Transmission Delivery Service Projects shall be assigned and recovered in accordance with Attachment N of this Tariff.

f. Market Efficiency Projects: Costs of Market Efficiency Projects shall be allocated as follows:

i) Twenty percent (20%) of the Project Cost of the Market Efficiency Project shall be allocated on a system-wide basis to all Transmission Customers and recovered through a system-wide rate.

ii) Eighty percent (80%) of the costs of the Market Efficiency Projects shall be allocated to all Transmission Customers in each of the Cost Allocation Zones, as defined in Attachment WW. The cost allocated to each Cost Allocation Zone shall
be based on the relative benefit determined for each Cost Allocation Zone that has a positive present value of annual benefits over the evaluation period using the methodology for project benefit determination of Section II.B.1.

iii) Excessive Funding or Requirements: The Transmission Provider shall seek to identify and manage the development of, as a part of the planning process for Market Efficiency Projects, portfolios of projects that tend to provide benefits throughout each Cost Allocation Zone, as defined in Attachment WW, over the planning horizon. The Transmission Provider shall analyze on an annual basis whether the project portfolios developed in accordance with this goal and the criteria in Section III. A.2.f unintentionally result in unjust or unreasonable annual capital funding requirements for any Transmission Owner or rate increases for Transmission Customers in designated pricing zones; or otherwise result in undue discrimination between the Transmission Customers, Transmission Owners, or any Market Participants; any such identified consequences shall be reported to the Planning Advisory Committee and to the Organization of MISO States. After discussing such assessments with the aforementioned stakeholder bodies, and...
taking into consideration the cumulative experience in applying this Attachment FF, the Transmission Provider will make a determination as to whether Tariff modifications are required, and if so file such modifications.

g. Multi-Value Projects: Costs of Multi-Value Projects will be allocated as follows:

i) One-hundred percent (100%) of the annual revenue requirements of the Multi-Value Projects shall be allocated on a system-wide basis to Transmission Customers that withdraw energy, including External Transactions sinking outside the Transmission Provider's region, and recovered through an MVP Usage Charge pursuant to Attachment MM.

h. Targeted Market Efficiency Projects: The cost of a Targeted Market Efficiency Project shall be allocated as follows:

i) Targeted Market Efficiency Projects are interregionally cost allocated between the Transmission Provider and PJM per Section 9.4.4.2.5 of the Joint Operating Agreement between the Transmission Provider and PJM.

ii) One hundred percent (100%) of the Transmission Provider's share of the cost of a Targeted Market Efficiency Project shall be allocated to all Transmission Pricing Zones that
receive a positive congestion contribution benefit from the Targeted Market Efficiency Project. The share of such cost allocated to each Transmission Pricing Zone shall be in proportion to the relative positive congestion contribution benefit accruing from the Targeted Market Efficiency Project to the Transmission Pricing Zone over the evaluation period of Section 9.4.4.1.5(iv)(d) of the Joint Operating Agreement between the Transmission Provider and PJM. To determine the relative positive contribution benefit accruing to each Transmission Pricing Zone, the Transmission Provider will use the data resulting from the Targeted Market Efficiency Project study conducted pursuant to Section 9.3.7.2(c) of the Joint Operating Agreement and apply a congestion contribution formula to each load node and generator node in the Commercial Model equal to the multiplication of the Shadow Price of the flowgate, shift factor of the load node or generator node to the flowgate, and the amount of load or generation at the node. This formula will be applied for all hours in the Day Ahead market where the Reciprocal Coordinated Flowgate experienced congestion. The congestion contribution of each load node or generator node on the Reciprocal Coordinated Flowgate will be calculated
for each congested interval during the evaluation period of
Section 9.4.4.1.5(iv)(d) of the Joint Operating Agreement
between the Transmission Provider and PJM. Summing all
of the congestion contributions will yield the relative benefits
of the upgrade to each load node or generator node.

Aggregating the load node or generator node congestion
contributions for each Transmission Pricing Zone gives the
net benefits of the upgrade to each Transmission Pricing
Zone, providing the basis for cost allocation of the
Transmission Provider’s share of the cost of the Targeted
Market Efficiency Project.

iii) Provided, however, that no cost for the Targeted Market
Efficiency Project shall be allocated to a Transmission
Pricing Zone if the positive congestion contribution benefit
from the Targeted Market Efficiency Project to that
Transmission Pricing Zone is calculated to be less than a
threshold of either: (1) $5,000 total or (2) less than one
percent (1%) of the Transmission Provider’s cost of the
Targeted Market Efficiency Project. Any costs that are not
allocated to a Transmission Pricing Zone because they fall
within this threshold will be collected by a reallocation to the
remaining Transmission Pricing Zones that receive positive
congestion contribution benefits from the Targeted Market Efficiency Project in proportion to the share of positive congestion contribution benefits each Transmission Pricing Zone is calculated to receive from the Targeted Market Efficiency Project.

iv) Provided, further, that no cost for a Targeted Market Efficiency Project that is approved in any MTEP by the Transmission Provider Board during the Second Planning Area’s Transition Period shall be allocated to a Transmission Pricing Zone located in the Second Planning Area if the Targeted Market Efficiency Project terminates wholly outside of MISO or terminates exclusively in the First Planning Area. Any costs that are not allocated to a Transmission Pricing Zone in the Second Planning Area as a result of this subsection shall be collected by a reallocation to the remaining Transmission Pricing Zones that receive positive congestion contribution benefits from the Targeted Market Efficiency Project in proportion to the share of positive congestion contribution benefits each Transmission Pricing Zone is calculated to receive from the Targeted Market Efficiency Project.
i. Market Participant Funded Projects (MPFPs): Costs of MPFPs will be allocated as follows: One-hundred percent (100%) of the cost of a Market Participant Funded Project (MPFP) shall be assigned to the Market Participant that proposed the project, subject to the provisions of this Attachment FF Section II.D.3, unless other cost sharing arrangement is agreed to between the Market Participant and the incumbent Transmission Owner.

j. Treatment of Projects that meet both Baseline Reliability Project Criteria and/or New Transmission Access Project Criteria, and the Market Efficiency Project Criteria: If the Transmission Provider determines that a project designated as a Market Efficiency Project also meets the criteria to be designated as a Baseline Reliability Project and/or a New Transmission Access Project, the cost of such project shall be allocated in accordance with the Market Efficiency Project allocation procedures.

k. Other Projects: Unless otherwise agreed upon pursuant to Section III.A.2.a. of this Attachment FF, the costs of Network Upgrades that are included in the MTEP, but do not qualify as Baseline Reliability Projects, New Transmission Access Projects, Targeted Market Efficiency Projects, Market Efficiency Projects, or Multi-Value Projects shall be eligible for recovery pursuant to Attachment O of this Tariff by the Transmission Owner(s) and/or
ITC(s) paying the costs of such project, subject to the requirements of the ISO Agreement.

l. Withdrawal from MISO: A Transmission Owner that withdraws from the MISO as a Transmission Owner shall remain responsible for all financial obligations incurred pursuant to this Attachment FF while a Member of the MISO and payments applicable to time periods prior to the effective date of such withdrawal shall be honored by the MISO and the withdrawing Member.

m. New Transmission Owners: A new Transmission Owner joining the MISO will be responsible for the following financial obligations:

a. New Transmission Owners will not be responsible for any portion of Baseline Reliability Projects, Generation Interconnection Projects, Transmission Delivery Service Projects, Targeted Market Efficiency Projects, or Market Efficiency Projects that were approved prior to their entry date.

b. For Multi-Value Projects approved prior to the new Transmission Owner’s entry date, the load interconnected to the Transmission Owner’s Transmission System will be responsible for one-hundred percent (100%) of the MVP usage charge described in Attachment MM for the years
following the Transmission Owner’s entry date applied to
the Monthly Net Actual Energy Withdrawals for Load
interconnected to the Transmission Owner’s Transmission
System.

n. Only a Transmission Owner shall be authorized to construct and/or
own transmission facilities associated with a Baseline Reliability
Project. For projects jointly developed between Transmission
Owners and other parties the portion constructed and owned by a
Transmission Owner may qualify as a Baseline Reliability Project,
Market Efficiency Project, and/or Multi Value Project.

IV. Merchant Transmission Project Data Requirements: A proposed merchant
transmission developer assumes all financial risk and funding requirements for developing its
transmission project(s) and constructing the proposed transmission facility(ies). In order for a
proposed merchant transmission developer’s facility to be interconnected to the Transmission
System, it is first necessary for the impacted Transmission Owner and the Transmission Provider
to analyze the reliability and operational impact of the proposed new merchant transmission
facility(ies) on the Transmission System to determine if the new merchant transmission facilities
can be reliably supported by the Transmission System, and if not, what Network Upgrades
funded by the merchant transmission developer would be required to reliably support the
proposed merchant transmission facility(ies). In order to perform the required reliability and
operational analyses, the merchant transmission developer must provide the following data to the Transmission Provider:

1. Each transmission circuit and substation, including new facilities, associated with the merchant transmission proposal;
2. Nominal operating voltage level in kV and voltage characteristics (i.e., AC or DC) for each transmission circuit associated with the merchant transmission proposal;
3. Typical and maximum MW power flow schedules, in each direction, for all proposed DC transmission circuits associated with the merchant transmission proposal;
4. Normal and emergency summer and winter load ratings for each transmission circuit associated with the merchant transmission proposal;
5. Maximum allowable positive sequence impedance for each AC transmission circuit associated with the merchant transmission proposal, when applicable;
6. List of all transmission buses associated with the merchant transmission proposal, including nominal operating voltage level in kV, voltage characteristics, and terminating transmission branches and shunts;
7. Proposed substation one-line diagrams for all new substations associated with the merchant transmission proposal, including circuit breaker and bus configuration details;
8. Load ratings, winding connections, impedances, tap data, and any other relevant information for load carrying equipment and facilities associated with the merchant transmission proposal, as applicable;
9. Modeling files to model proposed facilities and relevant new contingencies in power flow, stability, short-circuit and other relevant study models; and
(10) Any other data determined pertinent to the study by the Transmission Provider and/or interconnecting Transmission Owners for the specific merchant transmission facility proposal.

V. Designation of Entities to Construct, Implement, Own, Operate, Maintain, Repair, Restore, and/or Finance MTEP Projects: With the exception of Competitive Transmission Projects, for each project included in the recommended MTEP Appendix A and prior to approval by the Transmission Provider Board, the plan shall designate one or more Transmission Owners to construct, own, operate, maintain, repair, restore, and finance the recommended project, based on the planning analysis performed by the Transmission Provider and based on other input from participants, including, but not limited to, any indications of a willingness to bear cost responsibility for the project; and applicable provisions of the ISO Agreement. Regarding Competitive Transmission Projects, upon the determination of the Selected Developer(s) for such projects, as set forth in Section VIII of this Attachment FF, the Transmission Provider shall update the approved MTEP Appendix A by identifying the Selected Developer(s) for each Competitive Transmission Project. Should the facilities from such Competitive Transmission Projects not be approved by state regulatory authorities as Competitive Transmission Facilities, but instead as upgrades to existing transmission facilities, as defined in Section VIII.A.2 of this Attachment FF, the Transmission Provider shall update MTEP Appendix A by designating the appropriate Transmission Owner(s) to construct, own, operate, maintain, repair, restore, and finance such facilities in accordance with the ISO Agreement.
VI. Implementation of the MTEP:

A. If the Transmission Provider and any Transmission Owner’s planning representatives, or other designated entity(ies), cannot reach agreement on any element of the MTEP, the dispute may be resolved through the dispute resolution procedures provided in the Tariff, or in any applicable joint operating agreement, or by the Commission or state regulatory authorities, where appropriate. The MTEP shall have as one of its goals the satisfaction of all regulatory requirements as specified in Appendix B or Article IV, Section I, Paragraph C of the ISO Agreement.

B. The Transmission Provider shall present the MTEP, along with a summary of relevant alternative projects that were not selected, to the Transmission Provider Board for approval on a biennial basis, or more frequently if needed. The proposed MTEP shall include specific projects already approved as a result of the Transmission Provider entering into Service Agreements with Transmission Customers where such agreements provide for identification of needed transmission construction, timetable, cost, and Transmission Owner or other parties’ construction responsibilities.

C. Approval of the MTEP by the Transmission Provider Board certifies it as the Transmission Provider plan for meeting the transmission needs of all stakeholders subject to any required approvals by federal or state regulatory authorities. The Transmission Provider shall provide a copy of the MTEP to all applicable federal and state regulatory authorities. The affected Transmission Owner(s), Selected Developer(s), or other designated entity(ies), shall make a good faith effort to design, certify, and build the designated facilities to fulfill the approved MTEP. However, in the event that an MTEP Appendix A project approved by the
Transmission Provider Board is being challenged through the dispute resolution procedures under this Tariff or in court proceedings, the obligation of the Transmission Owners, or other designated entity(ies), to build that specific project (subject to required approvals) is waived until the approved project emerges from the dispute resolution procedures. In the event that selection of the Selected Developer(s) to construct a project is being challenged through the Dispute Resolution Process under Attachment HH of the Tariff, the obligation of the Selected Developer(s) to construct the project pursuant to the Selected Developer Agreement is not waived. The Transmission Provider Board shall allow the Transmission Owners, or other designated entity(ies), to optimize the final design of specific facilities and their in-service dates if necessary to accommodate changing conditions, provided that such changes comport with the approved MTEP and provided that any such changes are accepted by the Transmission Provider through the Variance Analysis process described in Section IX of this Attachment FF, as necessary. Any disagreements concerning such matters shall be subject to the dispute resolution procedures of this Tariff.

D. The Transmission Provider shall assist the affected Owner(s), Selected Developer(s), or other designated entity(ies), in justifying the need for, and obtaining certification of, any facilities required by the approved MTEP by preparing and presenting testimony in any proceedings before state or federal courts, regulatory authorities, or other agencies as may be required. The Transmission Provider shall publish annually, and distribute to all Members and all appropriate state regulatory authorities, a five-to-ten-year planning report of forecasted transmission requirements. Annual reports and planning reports shall be available to the general public upon request.
VII. Multi-Value Project Costs and Benefits Review and Reporting

A. Frequency and Reporting of Multi-Value Project Review: Every three (3) years, as provided below and in the Business Practices Manual for Transmission Planning, the Transmission Provider shall conduct a review of the cumulative costs and benefits associated with MVPs, and shall disseminate the results of such reviews to its stakeholders. The Transmission Provider shall use the review process and results to identify potential modifications to the MVP methodology and its implementation for projects to be approved at a future date.

1. Triennial Full MVP Review: Beginning with the MTEP for 2014 (“MTEP 14”), and every third year thereafter, the Transmission Provider shall conduct a full MVP review, as provided in Section VII.B of this Attachment FF.

2. Annual Limited MVP Review: Beginning with the MTEP for 2015 (“MTEP 15”), and each year thereafter when there is no full MVP review, the Transmission Provider shall conduct a limited MVP review, as provided in Section VII.C of this Attachment FF.

3. Calculation of Costs and Benefits: The Triennial Full MVP Reviews and the Annual Limited MVP Reviews shall calculate costs and benefits on a forward-looking basis over both twenty (20)-year and forty (40)-year periods. The costs calculation shall use updated project costs and in-service dates provided in the latest MTEP quarterly status report, and the benefits calculation shall use updated future scenarios from the latest MTEP planning cycle. The results of the costs
and benefits calculation shall be provided for each Local Resource Zone as defined in RAR. If the Local Resource Zones as defined in accordance with RAR are modified, the Transmission Provider, working with stakeholders, may define different Local Resource Zones for purposes of reporting the results of the review. The definition of different Local Resource Zones in connection with reporting the results of the review will be detailed in the Business Practices Manual for Transmission Planning.

4. Dissemination of the Results of the Full and Limited MVP Reviews: Within a reasonable time after completion of each MVP review, the Transmission Provider shall disseminate the results of and supporting analysis for the MVP review through: (a) publication in the MTEP; (b) posting on the appropriate section of the Transmission Provider’s public website; and (c) presentation to the appropriate stakeholder committees.

B. **Scope of Full Multi-Value Project Review:** Each full MVP review shall at a minimum include the following:

1. Quantitative Benefits: Analysis of the quantifiable economic benefits resulting from the addition of MVPs, including, but not limited to:
   a. Congestion and Fuel Savings: Savings from increased access to lower cost Resources;
   b. Decreased Operating Reserves: Savings associated with lower Operating Reserve requirements;
   c. Decreased System Planning Reserve Margin: Savings associated with
deferred generation investment due to a reduction in the system-wide Planning Reserve Margin; and
d. Decreased Transmission Line Losses: Savings associated with deferred generation investment due to a reduction in the Capacity required to serve transmission losses during peak hours, to the extent that MVPs reduce such losses.

2. Public Policy and Other Qualitative Benefits: Analysis of the public policy and other qualitative benefits accruing from MVPs, such as newly interconnected wind units; and an increase in the percentage of the Transmission Provider’s Energy needs being supplied by wind and/or other renewable resources, and wind curtailments.

3. Historical Data: Provision, beginning with the MTEP for 2017 (“MTEP 17”), and based on the historical data available to the Transmission Provider for the five (5) prior years, of information on certain additional market trend metrics including, but not limited to:

   a. Congestion costs;

   b. Energy prices;

   c. Fuel costs;

   d. Planning Reserve Margin requirements;

   e. Number of newly interconnected Resources, by Resource type; and

   f. The share of the Transmission Provider’s Energy supplied, by Resource type.
C. **Scope of Limited Multi-Value Project Review:** Each limited MVP review shall at a minimum include the items described in Sections VII.B.1 and VII.B.3 of this Attachment FF, as well as project costs and in-service dates, based on the latest available data for the current year, in preparation for the next full MVP review.

VIII. **COMPETITIVE TRANSMISSION PROCESS**

This section of Attachment FF of the Tariff describes the processes and requirements associated with identifying Competitive Transmission Facilities contained within a Market Efficiency Project or Multi-Value Project approved by the Transmission Provider Board in MTEP Appendix A; certifying entities as Qualified Transmission Developers, whether they are existing Transmission Owners or non-incumbent transmission developers; solicitation of Proposals from Qualified Transmission Developers to construct, implement, own, operate, maintain, repair, and restore the Competitive Transmission Facilities; evaluation of Proposals; and designation of a Selected Proposal and Selected Developer(s) pursuant to Section VIII of Attachment FF of the Tariff.
VIII.A. APPLICABILITY

Except as otherwise provided in Sections VIII.A.1 and VIII.A.2 of this Attachment FF, the Competitive Developer Selection Process shall be applicable to all transmission facilities and substation facilities included in an Eligible Project.

VIII.A.1. State or Local Rights of First Refusal:

The Transmission Provider shall comply with any Applicable Laws and Regulations granting a right of first refusal to a Transmission Owner. The Transmission Owner will be assigned any transmission project within the scope, and in accordance with the terms, of any Applicable Laws and Regulations granting such a right of first refusal. These Applicable Laws and Regulations include, but are not limited to, those granting a right of first refusal to the incumbent Transmission Owner(s) or governing the use of existing developed and undeveloped right of way held by an incumbent utility.

VIII.A.2. Upgrades to Existing Transmission Facilities:

A Transmission Owner shall have the right to develop, own, and operate any upgrade to a transmission facility owned by the Transmission Owner, in accordance with this Tariff and the ISO Agreement.

VIII.A.2.1. Upgrades to Existing Transmission Lines: Upgrades to existing transmission line facilities include any expansion, replacement, or modification, for any purpose, made to existing transmission line facilities that are classified as transmission plant and owned by one or more Transmission Owners,
for reasons including, but not limited to:

(a) Increasing the load capability of the transmission line or an associated circuit;

(b) Increasing the nominal operating voltage of the transmission line or an associated circuit;

(c) Installing additional plant on an existing overhead or underground transmission line facility, such as, but not limited to:
   
   i. plant associated with an additional circuit installed on spare structure positions;

   ii. additional structures to increase a sag limit or for other purposes;

   iii. a sectionalizing switch installed on an existing transmission line circuit regardless of whether or not it is installed on an existing structure; and

   iv. any other plant additions to existing transmission line facilities.

(d) Any requirement or request to relocate transmission line facilities owned by an incumbent Transmission Owner where the purpose of the relocation is not part of the core scope of a Competitive Transmission Project, including, but not limited to, relocations driven by aesthetics, highway expansion projects, other infrastructure expansion projects, projects to improve the reliability or performance of the Transmission

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System, projects to reduce the cost to operate and maintain the Transmission System, projects to interconnect new generation and load, and projects to accommodate the relocation of an existing substation;

(e) Any requirement or request to relocate existing transmission line facilities owned by an incumbent Transmission Owner to accommodate Competitive Transmission Line Facilities associated with a Competitive Transmission Project, where such construction of the Competitive Transmission Line Facilities requires or requests use of the incumbent Transmission Owner’s right-of-way and, as a result, also requires or requests transfer of the existing transmission facilities to alternative right-of-way or an alternative position on the same right-of-way based on either mutual consent of the incumbent Transmission Owner and Selected Developer(s) and/or the outcome of a state regulatory proceeding or court action;

(f) Functionally equivalent capital replacement of any portion of an existing transmission line facility due to aging, deterioration, damage, poor performance, aesthetics, high operating and maintenance costs, or other similar reasons;

(g) Replacing one or more existing components of any existing transmission line facility, such as, but not limited to:

i. replacing existing conductors with higher capacity conductors or better performing conductors;
ii. replacing existing structures;

iii. replacing insulators rated at a specific voltage with insulators rated at a higher voltage;

iv. replacing aging or defective components associated with the existing transmission line;

(h) Improving the performance or characteristics of the existing transmission line for any reason;

(i) Converting an existing overhead transmission line to an underground transmission line on the same right-of-way and/or converting an existing underground transmission line to an overhead transmission on the same right-of-way;

(j) Improving land and land rights booked under the Commission’s Uniform System of Accounts, Account Nos. 105, 350, and/or 380; or

(k) Any other modifications to existing transmission facilities.

VII.A.2.1.1. Installation of additional transmission circuits on existing transmission lines:

   If a Competitive Transmission Project includes developing a new transmission circuit and either the project scope or subsequent state or local regulatory proceedings determine that all or a portion of the circuit must be installed on an existing transmission line that is part of the Transmission System (i.e., co-located with existing transmission circuits on the same structures), the following rules will be used to determine what
constitutes an upgrade:

(a) If the structures associated with the existing transmission line are multi circuit structures and have spare positions to accommodate installation of one or more additional transmission circuit(s), installation of the new transmission circuit(s) on these spare structure positions will be considered an upgrade.

(b) If the structures associated with the existing transmission line can be expanded to accommodate installation of one or more additional transmission circuit(s), expansion of the structure and installation of the new transmission circuit(s) will be considered an upgrade.

(c) If the structures associated with the existing transmission line are not multi circuit structures and cannot be expanded to accept additional circuits, do not have sufficient spare structure positions available to accommodate the new transmission circuit(s), or have spare structure positions that are reserved for future use by the incumbent Transmission Owner and not available for the new transmission circuit(s) in question, it will be necessary to rebuild the existing transmission line to accommodate one or more additional transmission circuits. Under this scenario, acquisition of additional right-of-way (if necessary), removal of the existing transmission line plant, construction of new transmission line structures, and transfer or replacement of the existing transmission
line conductors, insulators, and shield wires will be considered an upgrade. Installation of new conductors and insulators associated with the new transmission circuit(s) will not be considered an upgrade. Therefore, the incumbent Transmission Owner will have the right of first refusal to engineer, construct, own, operate, restore, maintain, and collect revenue on all transmission plant associated with rebuilding the existing transmission line that is booked to Account Nos. 350, 352, 353, 354, 355, 357, 359, and 359.1 of the Commission’s Uniform System of Accounts in accordance with such Uniform System of Accounts. Furthermore, the incumbent Transmission Owner will have the right of first refusal to engineer, construct, own, operate, restore, maintain, and collect revenue on all plant associated with existing transmission circuits that is booked to Account Nos. 356 and 358 of the Commission’s Uniform System of Accounts in accordance with such Uniform System of Accounts. In addition, the incumbent Transmission Owner will have the right of first refusal to engineer, construct, own, operate, maintain, and collect revenue on all shield wires associated with the existing transmission line that is booked to Account No. 356 of the Commission’s Uniform System of Accounts in accordance with such Uniform System of Accounts, except for any shield wire that consists of fiber optic cable and is
intended to facilitate communications to support protection of the new transmission circuit(s) where the associated protective relay schemes at all terminals associated with the new transmission circuit(s) will be owned by the Selected Developer(s) in accordance with the provisions of Attachment FF that govern whether or not substation improvements are considered an upgrade. The Selected Developer(s) will have the right to engineer, design, own, operate, restore, maintain, and collect revenue on all plant associated with the new transmission circuit(s) that is booked to Account Nos. 356 and 358 of the Commission’s Uniform System of Accounts in accordance with such Uniform System of Accounts and any shield wire that consists of fiber optic cable and is intended to facilitate communications to support protection of the new transmission circuit(s) where the associated protective relay schemes at all terminals associated with the new transmission circuit(s) will be owned by the Selected Developer(s) in accordance with the provisions of Attachment FF that govern whether or not substation improvements are considered an upgrade. In such cases where an incumbent Transmission Owner and a Selected Developer(s) both own plant associated with a rebuilt existing transmission line, each party will have the right to allocate their respective costs (i.e., revenue requirements for its
portion of the investment) in accordance with the cost allocation provisions of this Tariff for Multi-Value Projects or Market Efficiency Projects as appropriate. Furthermore, such parties shall, in good faith, develop, negotiate, and execute a joint-use agreement for these facilities that governs responsibilities (including who incurs associated costs) for permitting, engineering, construction, operations, maintenance, restoration, and facility access and file such executed agreement with the Commission, and submit a copy to the Transmission Provider. However, there is no obligation on the incumbent Transmission Owner to provide project implementation and/or operations and maintenance services to the Selected Developer(s) for the Selected Developer’s portion of the facility, nor is there any obligation on the Selected Developer(s) to provide project implementation and/or operation and maintenance services to the incumbent Transmission Owners for the incumbent Transmission Owner’s portion of the facility, other than the mutual coordination of activities.

**VIII.A.2.2. Upgrades to Existing Substations:**

Upgrades to existing substations include any expansions, replacements or modifications made, in part or in whole, to any existing

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substation or portion thereof that is owned by one or more Transmission Owners, and where some or all of the plant within the existing substation is classified as transmission plant. These upgrades include, but are not limited to:

(a) Replacing facilities and/or equipment within an existing substation footprint;
(b) Installing additional plant within an existing substation footprint;
(c) Modifying facilities and/or equipment within an existing substation footprint;
(d) Expanding an existing substation footprint within the existing substation site boundaries and installing additional plant within the expanded area;
(e) Acquiring additional land adjacent to the existing substation in conjunction with installation of additional plant within the boundaries of this additional land, including facilities to interconnect such plant to the existing substation plant; and
(f) Developing an additional footprint near the existing substation to facilitate effective expansion of the existing substation as further described below in Section VIII.A.2.2.1.

**VIII.A.2.2.1. Expansion of an existing substation by developing an additional footprint near the existing substation:**

Construction of a new substation footprint near an existing substation to
facilitate expansion of the existing substation is considered an upgrade and is necessary when the transmission project calls for expansion of the existing substation and there is not sufficient space for such expansion.

Upgrades through development of a second substation footprint can be accomplished in one of two ways. First, a second substation footprint can be developed near the existing substation footprint, and the two substation footprints will function electrically as a single substation and will be interconnected by bus extensions or connectors. An example would be expanding an existing substation that is landlocked by public roadways by developing a second substation footprint on the other side of one of the roads and then installing an overhead single span connector which would function as a substation bus to interconnect the two substation footprints.

Second, an existing substation could be retired for many reasons such as but not limited to: lack of room for future expansions, physical conditions such as soil subsidence, earthquake reinforcement requirements, to prevent flood damage, regulatory/public necessity/economic reasons, and other similar factors. A new substation could be developed nearby on a different site and all transmission circuits into the existing substation could be rerouted to the new site, which is essentially the relocation of an existing substation. These scenarios represent upgrades to an existing substation when the intent of the transmission project produced by the transmission planning process is to expand the existing substation rather
than develop a new substation or to relocate an existing substation for reasons not related to implementation of a regionally cost shared transmission project.

VIII.B. COMPETITIVE DEVELOPER QUALIFICATION PROCESS

This section of Attachment FF of the Tariff describes the processes and requirements associated with certifying entities as Qualified Transmission Developers, whether they are existing Members or non-incumbent transmission developers.

VIII.B.1. Qualified Transmission Developers:

Only Qualified Transmission Developers may submit Proposals in response to a Request for Proposals posted by the Transmission Provider for a Competitive Transmission Project. The Transmission Provider will maintain a list of Qualified Transmission Developers on its website that will be updated within thirty (30) Calendar Days of the conclusion of the annual Competitive Developer Qualification Process.

VIII.B.2. Annual Prequalification Process:

In January of each year, the Transmission Provider will open a prequalification window for entities that are not currently listed as Qualified Transmission Developers, including existing Members, Non-incumbent Developers, and Non-owner Members, by posting on its website a Transmission Developer Application template and invitation to submit a Transmission Developer Application. To become a Qualified Transmission
Developer, each Transmission Developer Applicant must submit a Transmission Developer Application using the template(s) posted with the invitation and further described in the applicable Business Practices Manuals, by the deadline specified in the invitation, but no less than thirty (30) Calendar Days from the date the invitation was posted. The Transmission Developer Applicant shall submit its completed Transmission Developer Application by the day specified as the deadline in accordance with the requirements in the applicable Business Practices Manual. The Transmission Developer Applicant shall also submit a non-refundable transmission developer application fee, as further described in the applicable Business Practices Manuals, in the amount of $20,000.00 by 5:00 PM EPT on the day specified as the Transmission Developer Application deadline to cover the cost of processing, reviewing, and determining whether the Transmission Developer Applicant does or does not satisfy all the qualification requirements required by Sections VIII.B.4(a) – (g) and VIII.B.4.1 – VIII.B4.4 of this Attachment FF to be certified as a Qualified Transmission Developer. A Transmission Developer Applicant may rely on the resources, capabilities, or competencies of an Affiliate to satisfy the qualification requirements contained in Sections VIII.B.4.1 – VIII.B.4.4 provided that the Transmission Developer Applicant: (a) clearly identifies in the Transmission Developer Application which prequalification requirements the Transmission Developer Applicant will rely on its Affiliate to satisfy; (b) clearly identifies the resources, capabilities, and/or competencies of the Affiliate the Transmission Developer Applicant intends to rely on to satisfy each prequalification requirement; and (c) includes with its Transmission Developer Application submission a
Statement of Support executed by the Affiliate on which the Transmission Developer Applicant will rely for such support.

VIII.B.2.1. Completed Transmission Developer Applications:

To the extent the Transmission Provider finds the Transmission Developer Application deficient of information or data required by the Transmission Developer Application template(s), the Transmission Provider will notify the Transmission Developer Applicant of the deficiencies by e-mail within thirty (30) Calendar Days of the Transmission Provider’s receipt of the respective Transmission Developer Application. The Transmission Developer Applicant shall have thirty (30) Calendar Days from the date the Transmission Provider’s deficiency notification was sent to submit the additional data required to the Transmission Provider. No additional Transmission Developer Application cure period will be allowed for the purposes of gaining Qualified Transmission Developer status.

VIII.B.2.2. Transmission Developer Application Review:

The Transmission Provider will review each Transmission Developer Application that has been cured of any identified deficiencies and will notify each Transmission Developer Applicant of the Transmission Provider’s decision to certify or not certify the
Transmission Developer Applicant as a Qualified Transmission Developer within one-hundred eighty (180) Calendar Days of the Transmission Provider’s receipt of the respective Transmission Developer Application.

The Transmission Provider will certify those Transmission Developer Applicants that meet the qualification requirements specified in Sections VIII.B.2 and VIII.B.4 of this Attachment FF and the applicable Business Practices Manuals. If the Transmission Provider does not certify a Transmission Developer Applicant, it will provide the Transmission Developer Applicant with a written explanation detailing its determination within thirty (30) Calendar Days after notification.

The Competitive Transmission Executive Committee shall have the exclusive and final authority to approve or reject Transmission Developer Applications and certify Transmission Developer Applicants as Qualified Transmission Developers.

VIII.B.3. **Biennial Recertification Process:**

Each Qualified Transmission Developer that intends to remain qualified must recertify its Qualified Transmission Developer status during the prequalification window in every second calendar year after the year in which such Qualified Transmission Developer was last certified or recertified as a Qualified Transmission Developer by the Transmission Provider. In January of each year, on the date the Transmission Provider
opens the Annual Prequalification Process as specified in Section VIII.B.2 of this Attachment FF, the Transmission Provider will send a notification to each Qualified Transmission Developer that is required to recertify its status during that year.

VIII.B.3.1. Recertification Submission Requirements:

Each Qualified Transmission Developer that is sent a recertification notification shall submit, within thirty (30) Calendar Days after the recertification notification is sent, an affidavit in a form to be provided by the Transmission Provider, executed by an authorized representative of the Qualified Transmission Developer. The affidavit shall contain: (1) a statement confirming, to the best of the Qualified Transmission Developer’s knowledge, that it continues to meet the requirements for initial qualification as set forth in Sections VIII.B.4, VIII.B.4.1, VIII.B.4.2, VIII.B.4.3, and VIII.B.4.4 of this Attachment FF; and (2) a completed checklist indicating whether the Qualified Transmission Developer, or any parent or affiliate whose resources are relied upon for recertification, have experienced certain changes since the date that the Qualified Transmission Developer last submitted a Transmission Developer Application or recertification affidavit. The specific changes shall be identified in the recertification notice and may include, but are not limited to: (1) merger, reorganization, or a change in the identity of any parent or affiliate providing support; (2) changes to the Qualified Transmission Developer's legal name, state of domicile, or MISO membership status; (3) bankruptcies, liquidations, receiverships or general assignments; (4) any new legal or regulatory violations that would be required to be reported in a Transmission Developer
Application pursuant to Section VIII.B.4.3 of this Attachment FF; and (5) any specific changes that the Transmission Provider identifies as necessary to evaluate a Qualified Transmission Developer’s continued qualifications.

A properly completed and executed affidavit stating that the Qualified Transmission Developer and, if applicable, its supporting parent or affiliate, has not experienced any of the changes listed by the Transmission Provider in the recertification affidavit form shall be deemed a completed recertification application.

If a Qualified Transmission Developer identifies in its affidavit that any of the changes specified in the recertification affidavit form accompanying the recertification notice have occurred, initial disclosure shall not create any presumption of disqualification. Upon receipt of an executed affidavit indicating that a listed change has occurred, the Transmission Provider shall provide the Qualified Transmission Developer with further instructions for submitting information and explanations to enable the Transmission Provider to evaluate the effect of the identified changes on the Qualified Transmission Developer’s continued qualifications. Such further instructions shall be tailored to the disclosed change and shall be due no later than thirty (30) Calendar Days after the date that the additional information request was sent to the Qualified Transmission Developer.

Should a Qualified Transmission Developer fail to submit a properly completed recertification affidavit or any information in response to the Transmission Provider’s request for further information within the applicable submission periods specified in this Section VIII.B.3.1 of this Attachment FF, the
Transmission Provider shall notify the Qualified Transmission Developer by e-mail within five (5) Business Days of the deadline specified in the renewal notification or request for further information of any deficiencies that the Transmission Provider has identified. The Qualified Transmission Developer will have five (5) Business Days from the date of notification of deficiency to cure the identified deficiencies by submitting the required information. Should a Qualified Transmission Developer fail to cure the identified deficiency during this five (5) Business Day period, the Transmission Provider will deem that the Qualified Transmission Developer has requested to voluntarily terminate its certification as a Qualified Transmission Developer in accordance with Section VIII.B.5 of this Attachment FF.

VIII.B.3.2. Review of Recertification Submissions.

The Transmission Provider shall review each Qualified Transmission Developer’s recertification submission, any supporting information and explanations, and the annual financial information submitted pursuant to Section VIII.B.8 of this Attachment FF. The Transmission Provider shall determine whether the information included in the submission warrants recertification or termination of a Qualified Transmission Developer’s status under the standards established in Section VIII.B.1 through VIII.B.4.4 of this Attachment FF. The Transmission Provider will notify each Qualified Transmission Developer
as to whether or not such entity has been recertified, within one-hundred eighty (180) Calendar Days of the date the Transmission Provider sent the recertification notification.

In the event that the Competitive Transmission Executive Committee terminates or determines not to recertify a Qualified Transmission Developer, the Transmission Provider shall provide that entity with a written explanation detailing its determination within thirty (30) Calendar Days of such notification. If the Transmission Provider either terminates or does not recertify a Qualified Transmission Developer, such entity may seek re-qualification during any subsequent annual qualification process as described in Section VIII.B.2. of this Attachment FF. The Competitive Transmission Executive Committee shall have the exclusive and final authority to recertify or terminate a Qualified Transmission Developer’s Qualified Transmission Developer status.

VIII.B.4. Requirements for Qualified Transmission Developer Status:

To be certified as a Qualified Transmission Developer, the requirements set forth in Sections VIII.B.4, VIII.B.4.1, VIII.B.4.2, VIII.B.4.3, and VIII.B.4.4 of this Attachment FF must be satisfied. A Transmission Developer Applicant may elect to satisfy one or more of these requirements by referencing and/or utilizing the qualifications, capabilities, and/or competencies of one or more Affiliates instead of, or in addition to, those of the
Transmission Developer Applicant. Should a Transmission Developer Applicant elect to reference and/or utilize the qualifications, capabilities, and/or competencies of one or more Affiliates, the Transmission Developer Applicant must: (a) clearly identify in the Transmission Developer Application each Tariff requirement that the Transmission Developer Applicant intends to rely on an Affiliate to satisfy; and (b) include in the Transmission Developer Application an executed Statement of Support for each such Affiliate that acknowledges that the Transmission Developer Applicant is relying on the specified qualifications, capabilities, and/or competencies of the Affiliate. A Transmission Developer Applicant may elect to satisfy one or more of the requirements of VIII.B.4.3(a) and VIII.B.4.3(b) of this Attachment FF by submitting documentation pertaining to an Affiliate provided that the Transmission Developer Applicant also submits such documentation pertaining to itself, included an executed Statement of Support in the Transmission Developer Application for each such Affiliate, and has clearly identified which information and documentation pertains to the Affiliate and which information and documentation pertains to itself.

The general requirements applicable to Qualified Transmission Developers include the following:

(a) The Transmission Developer Applicant shall be a Transmission Owner or a Non-owner Member in good standing at the time the Transmission Developer Application is acted on by the Transmission Provider and shall maintain such status.
(b) The Transmission Developer Applicant shall either: (i) submit a written commitment, signed by an authorized representative of the Transmission Developer Applicant, to execute the ISO Agreement should it be designated as a Selected Developer and to list any Competitive Transmission Facilities for which it is designated a Selected Developer, pursuant to the Selected Proposal, in Appendix H of the ISO Agreement (i.e. the list of transmission facilities transferred to MISO’s functional control for the purposes of planning and operation); or (ii) state that it is already a signatory to the ISO Agreement and submit a written commitment, signed by an authorized representative of the Transmission Developer Applicant, that it will list any Competitive Transmission Facilities for which it is designated as a Selected Developer for, pursuant to the Selected Proposal, in Appendix H of the ISO Agreement. The execution of the ISO Agreement must take place after the Competitive Transmission Facilities have been constructed but prior to their energization and the addition of the Competitive Transmission Facilities to Appendix H of the ISO Agreement must take place after the Competitive Transmission Facilities have been energized;

(c) The Transmission Developer Applicant shall submit a written commitment, signed by an authorized representative of the Transmission Developer Applicant, to comply with all Applicable Laws and Regulations, codes, and standards governing the engineering, design,
construction, operation, and maintenance of transmission facilities
including, but not limited to, federal laws; applicable state and local laws;
applicable state and local building codes; federal regulatory requirements;
applicable state and local regulatory requirements; applicable state and
local licensing authorities; the National Electric Safety Code; the National
Electric Code; Applicable Reliability Standards; and Good Utility Practice
should the Transmission Developer Applicant be designated as a Selected
Developer for one or more Competitive Transmission Facilities;

(d) The Transmission Developer Applicant shall either: (i) submit a written
commitment, signed by an authorized representative of the Transmission
Developer Applicant, to register with NERC in accordance with NERC’s
registration guidelines as the transmission owner (TO), transmission
operator (TOP), and transmission planner (TP), as those terms are defined
by NERC, for all Competitive Transmission Facilities that the
Transmission Developer Applicant, if designated as the Selected
Developer, will own; or (ii) demonstrate that the Transmission Developer
Applicant is already registered with NERC, in accordance with NERC’s
registration guidelines, as the transmission owner (TO), transmission
operator (TOP), and transmission planner (TP), as those terms are defined
by NERC;

(e) The Transmission Developer Applicant shall submit a written
commitment, signed by an authorized representative of the Transmission
Developer Applicant, that if designated as the Selected Developer, the Transmission Developer Applicant shall either: (i) contract with the interconnecting Local Balancing Authority(s) to include the Competitive Transmission Facilities within the boundaries of the interconnecting LBA and demonstrate to the satisfaction of the Transmission Provider and per agreement by the interconnecting LBA that applicable LBA-related tasks associated with the proposed Competitive Transmission Facilities that may be delegated to an LBA by the Balancing Authority Agreement will be carried out either by the LBA or the Transmission Developer Applicant if designated as a Selected Developer; or ii) execute the Balancing Authority Agreement, register with NERC as a Balancing Authority (BA), and be designated as the Local Balancing Authority for any proposed Competitive Transmission Facilities, unless the Transmission Developer Applicant is already registered with NERC as a BA and designated as an LBA for one or more of the existing transmission facilities that may interconnect directly with any Competitive Transmission Facilities associated with the Competitive Transmission Project(s) that the Transmission Developer may be awarded;

(f) The Transmission Developer Applicant shall make a written commitment, signed by an authorized representative of the Transmission Developer Applicant, that, if designated as a Selected Developer, it shall comply with the FERC Form 715 Part 4 TRPC, Transmission Planning Criteria and...
Guidelines on file with FERC and established by each incumbent Transmission Owner whose existing transmission facilities will interconnect directly with the Competitive Transmission Facilities; and 

(g) The Transmission Developer Applicant must make a written commitment, signed by an authorized representative of the Transmission Developer Applicant, that, if it is designated as a Selected Developer, it shall comply with current requirements and standards regarding the interconnection of transmission facilities published by each Transmission Owner or non-Member to which Competitive Transmission Facilities will interconnect including, but not limited to, those standards and requirements required for compliance with the applicable NERC Facilities Design, Connections, and Maintenance (“FAC”) Reliability Standards.

VIII.B.4.1. Project Implementation Requirements:

Each Transmission Developer Applicant shall submit documentation to demonstrate to the Transmission Provider that the Transmission Developer Applicant has or can obtain sufficient capabilities and competencies to satisfy the following project implementation requirements for Competitive Transmission Projects:

(a) Project management;

(b) Routing and siting studies including public outreach;

(c) Preliminary and detailed engineering and surveying;
(d) Material and equipment procurement;

(e) Construction; and

(f) Commissioning.

There are two general methods that a Transmission Developer Applicant may use to demonstrate it will have sufficient capabilities and competencies to perform project implementation tasks if chosen as the Selected Developer for a Competitive Transmission Project. First, the Transmission Developer Applicant may provide evidence that it currently develops transmission projects by listing data, pursuant to templates developed by the Transmission Provider, regarding the transmission facilities it owns and the infrastructure and resources it has in place to perform the project implementation activities to develop such transmission facilities, where infrastructure and resources may include, but not necessarily be limited to, employees, contractors, tools, equipment, buildings, vehicles, policies, processes, and procedures. Second, a Transmission Developer Applicant can provide a detailed business implementation plan describing how it would acquire the capabilities and competencies to perform the specific project implementation tasks listed above, including plans for: (i) retaining personnel or contractors; (ii) utilizing infrastructure and resources owned and operated by an affiliate company; (iii) qualifying personnel and contractors utilized; (iv) acquiring required tools, equipment, and vehicles; (v) development of project management, engineering, material, and construction standards and practices to be followed for specific
types of facilities; (vi) route and site studies (including public outreach); and (vii) procuring adequate capital to develop transmission projects.

In the event that a Transmission Developer intends to demonstrate its project implementation qualifications by obtaining the requisite capabilities and competencies by contracting with third parties, the Transmission Developer Applicant shall submit either as part of its business implementation plan or in separate documentation an explanation of the capabilities and competencies that the Transmission Developer Applicant possesses at the time of application and those capabilities and competencies for which the Transmission Developer Applicant intends to contract in order to demonstrate its ability to satisfy the foregoing project implementation requirements for Competitive Transmission Projects. For each capability or competency that the Transmission Developer Applicant does not possess but intends to procure through contracting with third parties, the Transmission Developer Applicant shall provide a detailed contracting plan that contains a detailed description of the steps the Transmission Developer Applicant intends to take to procure needed capabilities or competencies if it is chosen as the Selected Developer for a Competitive Transmission Project.

The Transmission Developer Applicant shall not be required to have executed contracts with third parties to obtain all required capabilities or competencies at the time of application in order to prequalify as a Transmission Developer. However, the Transmission Developer Applicant bears the burden of identifying the capabilities or competencies it possesses and those for which it
must contract with third parties and that the Transmission Developer Applicant has a realistic contracting plan for obtaining those capabilities.

The Transmission Developer Applicant shall include a written certification signed by an authorized representative of the Transmission Developer Applicant stating that the information in the submission is true and accurate.

VIII.B.4.2 Operations, maintenance, repair, and replacement requirements:

Each Transmission Developer Applicant shall submit documentation that demonstrates to the Transmission Provider that the Transmission Developer Applicant possesses or can obtain sufficient capabilities and competencies to adequately perform the following operations, maintenance, testing, inspection, repair, and replacement tasks for any Competitive Transmission Facilities associated with a Competitive Transmission Project once such facilities are in service and part of the Transmission System:

(a) Forced outage response for transmission line circuits;

(b) Forced outage response for substations;

(c) Switching for transmission line circuits;

(d) Switching for substations;

(e) Transmission line emergency repair;

(f) Substation emergency repair and testing;

(g) Transmission line preventative and/or predictive maintenance, including vegetation management;
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FERC Electric Tariff
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66.0.0, 71.0.0

(h) Substation preventative and/or predictive maintenance including equipment testing;

(i) Maintenance and management of spare parts, spare structures, and/or spare equipment inventories for substations and/or transmission lines, as applicable, including description of any agreements to share spare equipment, spare parts, and/or spare structures with other transmission entities;

(j) Real-time operations monitoring and control capabilities;

(k) Major facility replacements or rebuilds required as a result of catastrophic destruction or natural aging through normal wear and tear, including financial strategy to facilitate timely replacements and/or rebuilds; and

(l) Once a Transmission Developer, the Transmission Provider may require additional demonstration of qualifications to operate, maintain, restore, test, inspect, and replace specific Competitive Transmission Facilities associated with specific Competitive Transmission Projects for a specific Request for Proposals.

There are two general methods that a Transmission Developer Applicant may use to demonstrate it will have sufficient capabilities and competencies to perform operations and maintenance services if chosen as the Selected Developer for a Competitive Transmission Project. First, Transmission Developer Applicant may provide evidence that it currently owns and/or operates and maintains
electric transmission facilities by listing data, pursuant to templates developed by the Transmission Provider, regarding the transmission facilities it owns and/or operates and maintains and the infrastructure and resources it has in place to perform the operations and maintenance activities for such transmission facilities, where infrastructure and resources may include, but not necessarily be limited to, employees, contractors, tools, equipment, buildings, spare materials and equipment, vehicles, policies, processes, and procedures. Second, a Transmission Developer Applicant can provide a detailed business implementation plan describing how it would acquire the capabilities and competencies to perform the specific operations and maintenance tasks listed above, including plans for: (i) retaining personnel or contractors; (ii) utilizing infrastructure and resources owned and operated by an affiliate company; (iii) qualifying personnel and contractors utilized; (iv) acquiring required tools, equipment, and vehicles; (v) development of maintenance standards and practices to be followed for specific types of facilities; (vi) developing standards governing where personnel, equipment, and spare parts/equipment will be maintained with respect to potential future facilities (e.g., maximum distance between facility and local office, etc.); (vii) emergency response times; and (viii) maintaining adequate capital procurement capabilities to rebuild facilities following major catastrophic outages (including property insurance and risk mitigation strategies).

In the event that a Transmission Developer Applicant intends to demonstrate its operations and maintenance, repair and replacement qualifications
by obtaining the requisite capabilities and competencies by contracting with third parties, the Transmission Developer Applicant shall submit, either as part of its business implementation plan or in separate documentation, an explanation of the capabilities and competencies that the Transmission Developer Applicant possesses at the time of application and those capabilities and competencies for which the Transmission Developer Applicant intends to contract in order to demonstrate its ability to implement the foregoing project operation, maintenance, repair, and replacement requirements for Competitive Transmission Projects. For each capability or competency that the Transmission Developer Applicant does not possess but intends to procure through contracting with third parties, the Transmission Developer Applicant shall provide a detailed contracting plan that contains a detailed description of the steps the Transmission Developer Applicant intends to take to procure needed capabilities or competencies if it is chosen as the Selected Developer for a Competitive Transmission Project.

The Transmission Developer Applicant shall not be required to have executed contracts with third parties to obtain all required capabilities or competencies at the time of application in order to prequalify as a Qualified Transmission Developer. However, the Transmission Developer Applicant bears the burden of identifying the capabilities or competencies it possesses and those for which it must contract with third parties and that the Transmission Developer Applicant has a realistic contracting plan for obtaining those capabilities.
The Transmission Developer Applicant shall include a written certification signed by an authorized representative of the Transmission Developer Applicant stating that the information in the submission is true and accurate.

VIII.B.4.3.  **Legal Requirements:**

Each Transmission Developer Applicant shall submit the following information and demonstrate to the Transmission Provider that the information submitted represents an acceptable level of risk to rely on the Transmission Developer Applicant, if designated a Selected Developer, to successfully implement a Competitive Transmission Project and own and operate the associated transmission facilities once in service. The information submitted must include written certification signed by an authorized representative of the Transmission Developer Applicant stating that the submitted information is accurate:

(a) A summary of legal and/or regulatory violations during the past five (5) years or, if the Transmission Developer Applicant has been in business for less than five years, the number of years for which the Transmission Developer Applicant has been in business, by the Transmission Developer Applicant found by federal or state courts, federal regulatory agencies, state public utility commissions, other regulatory agencies, or attorneys general. This includes, but is not limited to, the Federal Energy Regulatory Commission, North
American Electric Reliability Corporation Reliability Standards,
Securities Exchange Commission (“SEC”) regulations, U.S.
Commodity Futures Trading Commission (“CFTC”) regulations,
and other applicable requirements.

(b) A summary of any and all instances in which the Transmission
Developer Applicant is currently under investigation or is a
defendant in a proceeding involving an attorney general or any
state or federal regulatory agency, for violation of any laws,
including regulatory requirements, during the past five years or, if
the Transmission Developer Applicant has been in business for
less than five years, the number of years for which the
Transmission Developer Applicant has been in business. The
Transmission Developer Applicant shall include an affidavit
signed by an authorized officer of the Transmission Developer
Applicant’s company stating that the information in the submission
is true and accurate and that the Transmission Developer Applicant
will comply with all applicable requirements in this Tariff, the
Business Practices Manuals, or other applicable Transmission
Provider documents or agreements.

VIII.B.4.4 Financial Requirements:
Each Transmission Developer Applicant shall submit the following information and demonstrate to the Transmission Provider that the information submitted represents an acceptable level of risk to rely on the Transmission Developer Applicant to successfully implement a Competitive Transmission Project and own and operate the associated transmission facilities once in service. The information submitted must include written certification signed by an authorized representative of the Transmission Developer Applicant stating that the submitted information is accurate:

(a) A proposed financial plan demonstrating adequate capital resources (e.g., current assets, revolving lines, commercial paper, letter of credit, stock or bond issuance or other sources of liquidity) are available to the Transmission Developer Applicant to allow for Competitive Transmission Projects to be implemented on schedule and associated Competitive Transmission Facilities to be operated and maintained appropriately after the facilities are in service.

(b) The credit rating(s) for the Transmission Developer Applicant from Moody’s Investor Services, Inc., Standard and Poor’s Rating Group and/or other Nationally Recognized Statistical Rating Organization (“NRSRO”) as recognized by the Securities and Exchange Commission (“SEC”). In the event the Transmission Developer Applicant is rated by more than one NRSRO, then the lowest rating will be the benchmark for consideration of demonstrating and maintaining an investment grade credit rating. For
example, an investment grade rating is considered to be a rating of Baa3 or above from Moody’s Investor Services, Inc. or BBB- or above from Standard and Poor’s Rating Group (equivalent ratings will be used for other rating agencies). The focus of the review will be on the entity’s unsecured, senior long-term debt ratings (not supported by third-party enhancements). If unsecured, senior long-term debt ratings are not available, the Transmission Provider may consider Issuer Ratings.

In the event the Transmission Developer Applicant does not have an investment grade rating, the Transmission Provider will consider the other information the Transmission Developer Applicant has submitted to evaluate its financial capability to construct the transmission facility in a timely manner, and to maintain and operate it reliably for the long term.

(c) General financial information, including two (2) years of audited financial statements with notes to the financials and a signed commitment by an authorized representative of the Transmission Developer Applicant that it is not aware of any material events or circumstances that would likely result in a material adverse weakness in financial strength throughout project implementation of future Competitive Transmission Projects that it might be awarded after it is certified as a Transmission Developer. In the event the Transmission Developer Applicant does not have two (2) years of audited financial statements and has not submitted two (2) years of audited financial statements from an Affiliate providing an executed
Statement of Support, the Transmission Developer Applicant must submit an audited balance sheet dated within the last ninety (90) days. It must also submit pro forma financials for the next fiscal year which include an income statement, balance sheet, and statement of cash flows.

(d) A summary of any history of bankruptcy, dissolution, merger, or acquisition of the Transmission Developer Applicant, or any predecessors in interest for the current calendar year and the five (5) calendar years immediately preceding its submission of the Transmission Developer Application. This information must also be submitted for any Affiliate providing a Statement of Support to satisfy any of the requirements in Section VIII.B.4.4 of this Attachment FF.

VIII.B.5. **Voluntary Termination of Qualified Transmission Developer Status:**

A Qualified Transmission Developer that desires to voluntarily terminate its’ status as a Qualified Transmission Developer, may do so at any time by notifying the Transmission Provider. Upon such notification, the Transmission Provider will update the Qualified Transmission Developer list within thirty (30) Calendar Days of the notification. Failure of a Qualified Transmission Developer to timely submit a recertification affidavit pursuant to Section VIII.B.3.1 of this Attachment FF of the Tariff shall be deemed a voluntary termination under this Section VIII.B.5 of this Attachment FF. A terminated Qualified Transmission Developer may become a Qualified Transmission Developer again by following the process outlined in Section VIII.B.2 of this Attachment.
FF of the Tariff for Transmission Developer Applicants seeking Qualified Transmission Developer status in subsequent annual qualification processes.

VIII.B.6. **Confidential Treatment of Competitive Developer Qualification Information:**

All information submitted with Transmission Developer Applications and recertification submittals will be considered Confidential Information, except for the name of the organization to be posted on the Qualified Transmission Developer list, and will not be publicly posted or shared with any individual except for employees of the Transmission Provider and/or contractors of the Transmission Provider that have executed appropriate non-disclosure agreement(s).

VIII.B.7. **Alternative Dispute Resolution:**

Any Transmission Developer Applicant who is not approved as a Qualified Transmission Developer by the Transmission Provider may request alternative dispute resolution under Attachment HH of the Tariff within thirty (30) Calendar Days of receiving the Transmission Provider’s written explanation detailing its determination to deny the Transmission Developer Application. Any entity that is not recertified as a Qualified Transmission Developer by MISO, or a Qualified Transmission Developer whose Qualified Transmission Developer status is terminated, may request alternative dispute resolution under Attachment HH of the Tariff within thirty (30) Calendar Days.
of receiving the MISO’s written explanation detailing its determination to not recertify or to terminate the entity’s Qualified Transmission Developer status.

**VIII.B.8. Ongoing Responsibilities of Qualified Transmission Developers:**

Each Qualified Transmission Developer has an ongoing duty to provide the Transmission Provider with notification as soon as reasonably practical should any of the changes specified in Section VIII.B.3.1 of this Attachment FF occur and a copy or link to their audited financial statements annually, within thirty (30) Calendar Days of such statements being prepared. The Competitive Transmission Executive Committee shall have the exclusive and final authority to make determinations regarding the continued qualifications of Qualified Transmission Developers based upon the information received in accordance with this Section VIII.B.8.

**VIII.C. REQUEST FOR PROPOSALS**

Should Appendix A of a Transmission Provider Board approved MTEP contain Eligible Projects, the Transmission Provider will review each such Eligible Project to determine whether or not it contains any Competitive Transmission Facilities. The Transmission Provider will release a Request for Proposals (RFP) for each Competitive Transmission Project pursuant to Section VIII.C of this Attachment FF and the applicable Business Practices Manuals. If Appendix A of a Transmission Provider Board approved MTEP contains only one (1) Competitive Transmission Project, the Transmission Provider will release an RFP within sixty (60) Calendar Days of the date the Transmission Provider Board approved the Competitive Transmission Facilities for inclusion in Appendix A of the MTEP. If Appendix A of a
Transmission Provider Board approved MTEP contains multiple Competitive Transmission Projects, the Transmission Provider shall have the option to stagger the release of each RFP associated with the multiple Competitive Transmission Projects.

If the Transmission Provider elects to stagger the release of RFPs, the Transmission Provider shall take the following actions following the date that the Transmission Provider Board approved the Competitive Transmission Facilities for inclusion in Appendix A of the MTEP: (1) Within ten (10) Business Days publicly post on its website a statement indicating that the Transmission Provider will stagger the RFP release dates; (2) Within thirty (30) Calendar Days post a schedule listing the planned release dates for each RFP, with the first RFP being released within sixty (60) Calendar Days of the date the respective MTEP was approved by the Transmission Provider Board. In determining the schedule of RFP releases when staggering is used, the Transmission Provider will consider the timing impacts of the Competitive Developer Selection Process with respect to the in-service dates of the Competitive Transmission Projects. In all events, the schedule of RFP releases developed by the Transmission Provider shall provide that all RFPs are released not later than three hundred and sixty five (365) Calendar Days after the date the Transmission Provider Board approved the Competitive Transmission Facilities for inclusion in Appendix A of the MTEP. If the Transmission Provider elects not to stagger the release of RFPs, the Transmission Provider shall release each RFP within sixty (60) Calendar Days of the date the respective MTEP was approved by the Transmission Provider Board.

VIII.C.1. Minimum Contents of a RFP:

Each RFP shall include, at a minimum, a listing of each Competitive Transmission
Facility contained within the Competitive Transmission Project, the Proposal Submission Deadline, the applicable items specified in Sections VIII.C.1 and VIII.C.2 of this Attachment FF to the Tariff, any applicable items specified in the Transmission Provider’s Business Practices Manuals, and a list of the current transmission facility interconnection standards and requirements, established by the Transmission Owner(s) and established by any transmission owner(s) that are not a Member who have chosen to provide interconnection standards and requirements to the Transmission Provider, to which the Competitive Transmission Project will interconnect. The Transmission Provider reserves the right to specify any additional information in a RFP including, but not limited to, any additional information for specific Competitive Transmission Line Facilities and/or Competitive Substation Facilities. The Transmission Provider shall include in each RFP a list of any aspects, or elements of the Competitive Transmission Project that the Transmission Provider anticipates at the time of posting to be particularly important for the success of the Competitive Transmission Project. This information shall be provided for informational purposes only and shall not alter the criteria and/or weightings applicable to evaluation of the Proposals pursuant to Sections VIII.E through VIII.E.3 of this Attachment FF.

If and to the extent a RFP contains any Critical Energy Infrastructure Information (CEII), the Transmission Provider will redact such CEII for public posting and create a non-public RFP containing the CEII which will be available to entities and individuals that have executed the appropriate CEII and non-disclosure agreements required by the Transmission Provider. Information on how to request the non-public RFP will be provided in the publicly posted RFP. Pursuant to Section VIII.A.1 of this Attachment FF, only Competitive Transmission Facilities
eligible under state law will be included in the Competitive Transmission Project where (i) all other Competitive Transmission Facilities and (ii) upgrades as described in Section VIII.A.2 of this Attachment FF will be assigned to the applicable incumbent Transmission Owner in accordance with the ISO Agreement.

**VIII.C.1.1 Requirements for Competitive Transmission Line Facilities:**

Each RFP that includes one or more Competitive Transmission Line Facilities will specify, at a minimum, the following items for each Competitive Transmission Line Facility:

(a) Expected in-service date;

(b) Nominal operating voltage level in kV and voltage characteristics (*i.e.*, three-phase AC, bipolar DC, etc.) for each transmission circuit;

(c) Terminating substations and buses for each transmission circuit;

(d) Minimum required normal and emergency load ratings for both summer and winter seasons for each transmission circuit; and

(e) Maximum allowable positive sequence impedance for each transmission circuit when determined applicable by planning studies performed by the Transmission Provider.

**VIII.C.1.2 RFP Requirements for Competitive Substation Facilities:**

Each RFP that includes one or more Competitive Substation Facilities will
specify, at a minimum, the following information for each Competitive Substation Facility:

(a) Expected in-service date;

(b) List of all transmission buses within the Competitive Substation Facility, including nominal operating voltage level in kV and voltage characteristics;

(c) List of all major equipment and facilities within the Competitive Substation Facility and associated terminating buses including power transformers, voltage regulators, phase angle regulators, series reactors, series capacitors, shunt reactors, shunt capacitors, static VAR compensators, DC converters, transmission line circuit terminals, generator terminals, and loads;

(d) Limitations on and/or requirements for bus configurations when determined applicable by planning studies performed by the Transmission Provider including required load ratings of circuit breakers, disconnects, bus sections and other load carrying equipment under alternative bus configurations;

(e) Required load ratings for all load carrying equipment and facilities identified in item (f) above;

(f) Winding connection and tap requirements for power transformers, voltage regulators, phase angle regulators and load tap changers when determined necessary by planning studies performed by the
Transmission Provider;

(g) Impedance requirements for power transformers, phase angle
regulators, series reactors and series capacitors when determined
necessary by planning studies performed by the Transmission
Provider; and

(h) Limitations on and/or requirements for protection systems when
determined applicable by a planning driver or Applicable
Reliability Standard or in order to ensure a compatible
interconnection with existing protection systems associated with
existing transmission facilities to which the Competitive
Transmission Facilities will interconnect.

VIII.D. PROPOSALS

Proposals may be submitted only in response to an RFP issued by the Transmission
Provider and only by entities that are certified as a Qualified Transmission Developer at the time
such Proposal is submitted. Once submitted and unless withdrawn pursuant to Section VIII.D.8
of this Attachment FF, Proposals shall be held open as offers capable of acceptance by the
Transmission Provider until such time as the Transmission Provider announces the identity of the
Selected Developer and designates an Alternate Selected Developer pursuant to Sections
VIII.E.2 and VIII.H of this Attachment FF.

VIII.D.1. Proposal Submission Deadline:

Effective On: March 11, 2020
Proposals shall be submitted to the Transmission Provider no later than 5:00 PM EPT on the Proposal Submission Deadline. The Proposal Submission Deadline will be the date specified in the RFP which shall not exceed one hundred and sixty-five (165) Calendar Days from the date the RFP was issued by the Transmission Provider, unless such date falls on a Saturday, Sunday, or holiday in which case the Proposal Submission Deadline shall be the next Business Day that is not a holiday.

VIII.D.2. Proposal Deposit:

An initial deposit of $100,000.00 shall be submitted to the Transmission Provider, as further described in the RFP, in conjunction with the submission of each Proposal prior to the Proposal Submission Deadline. Only one (1) proposal deposit is required for each Proposal, regardless of the number of RFP Respondents and Proposal Participants involved with the Proposal.

Each deposit submitted to the Transmission Provider will be held in an interest-bearing account.

VIII.D.3. RFP Administration and Proposal Evaluation Expenses:

RFP Respondents shall, on a pro rata basis, be responsible for paying the actual costs incurred by the Transmission Provider, including the costs of the expert consultant(s) engaged to assist the Transmission Provider, in administering the Competitive Developer Selection Process for the specific RFP that the RFP Respondent(s) responded to through its Proposal submission. The Transmission Provider
will track all costs, including the Transmission Provider’s time and the costs of the expert consultant(s), in administering the Competitive Developer Selection Process for each specific RFP.

The Transmission Provider shall evaluate all Proposals submitted in response to a specific RFP together and apply each of their respective proposal deposits equally to the cost of administering the Competitive Developer Selection Process for that specific RFP, except for Proposals that were found to be deficient by the Transmission Provider and were refunded 90% of the proposal deposit under Section VIII.D.10 of Attachment FF of the Tariff. Any shortfall will be billed by the Transmission Provider on a pro rata basis to each Proposal submitted in response to the RFP. Each respective RFP Respondent(s) is responsible for paying the pro rata share allocated to its Proposal(s) within thirty (30) Calendar Days of receiving notice of such shortfall. If a RFP Respondent fails to pay the expenses allocated to any of the Proposals it submitted within sixty (60) Calendar Days of the monthly invoice remittance date, those Proposals shall be disqualified from further consideration and evaluation by the Transmission Provider. Furthermore, the RFP Respondent may lose its Qualified Transmission Developer designation at the sole discretion of the Transmission Provider as they are no longer in good standing with the Transmission Provider pursuant to Section VIII.B.4.a of Attachment FF of the Tariff.

Any funds remaining after the Transmission Provider has completed the Competitive Developer Selection Process, including the issuance of refunds to Proposals that were withdrawn pursuant to Section VIII.D.8 of Attachment FF of the Tariff or deemed deficient pursuant to Section VIII.D.10 of Attachment FF of the Tariff, will be

Effective On: March 11, 2020
refunded by the Transmission Provider on a pro rata basis to each Proposal within seventy-five (75) Calendar Days following the designation of the Selected Proposal, including any interest actually earned on such deposits.

VIII.D.4. Proposal Submission Format:

Proposals shall be submitted to the Transmission Provider prior to the Proposal Submission Deadline. Proposals shall be submitted to the Transmission Provider in accordance with the requirements specified in the RFP and Business Practices Manuals (e.g. the location, format, number of copies, use of submission templates, etc.). Proposals may be submitted in one of two different forms: (i) a Single-Developer Proposal; or (ii) a Joint-Developer Proposal. The Transmission Provider may provide template(s) for Proposal submissions and, if provided, RFP Respondents shall utilize the template(s) in submitting their Proposals. Any questions or inquiries regarding an issued RFP from the date the RFP was issued through the date that the selection report for the Competitive Transmission Project is publically posted shall be solely directed to the Transmission Provider through the contacts listed in the RFP and not to the interconnecting incumbent Member(s).

VIII.D.4.1. Single-Developer Proposal:

A Single-Developer Proposal is a Proposal submitted by a single RFP Respondent that would become the sole Selected Developer for the Competitive Transmission Project, should its Single-Developer Proposal be designated as the Selected Proposal by the Transmission Provider.
VIII.D.4.2. Joint-Developer Proposal:

A Joint-Developer Proposal is a Proposal submitted jointly by two or more RFP Respondents that would each be designated as Selected Developers for the Competitive Transmission Project, should the Joint-Developer Proposal be designated as the Selected Proposal by the Transmission Provider. The Joint-Developer Proposal shall only be submitted once to the Transmission Provider by one of the RFP Respondents. Each RFP Respondent of a Joint-Developer Proposal shall commit to execute the Joint Functional Control Agreement if their Proposal is selected and either: (i) acknowledge and agree to be jointly and severally liable for all aspects of the submitted Joint-Developer Proposal; or (ii) clearly specify the aspects of the Competitive Transmission Project that each RFP Respondent will be solely liable, such that all aspects of the submitted Joint-Developer Proposal are accounted for. If at least one of the RFP Respondents does not commit to being jointly and severally liable for all aspects of the submitted Joint-Developer Proposal, the existence of any grounds that would trigger Variance Analysis, including default and termination of the Selected Developer Agreement, with respect to any one RFP Respondent shall trigger Variance Analysis of the entire Joint-Developer Proposal, pursuant to Attachment FF Section IX of the Tariff.

VIII.D.4.3. Proposal Participants:
RFP Respondents may convey an interest of the Competitive Transmission Project to one or more Proposal Participant(s) at any time, provided however that (i) the RFP Respondent(s) identified and disclosed in its Proposal the Proposal Participants to which an interest will be conveyed; (ii) RFP Respondent(s) convey such an interest on substantially the same terms as disclosed in the Proposal; (iii) the Aggregate ATRR for the Competitive Transmission Project shall not exceed the Aggregate ATRR contained in the Proposal; (iv) each RFP Respondent and each Proposal Participant to which an interest will be conveyed has each executed the Joint Functional Control Agreement and provided a written agreement committing to any applicable cost-containment measures contained in the Proposal; (v) each RFP Respondent and each identified Proposal Participant has each executed the ISO Agreement, to the extent that the entity is not already a Member, but no later than the date the Competitive Transmission Facilities are energized; and (vi) each RFP Respondent and each identified Proposal Participant has listed the Competitive Transmission Facilities for which it owns or has been conveyed an ownership interest in Appendix H of the ISO Agreement (i.e. the list of transmission facilities transferred to MISO’s functional control for the purposes of planning and operation). If a Proposal identifies one or more Proposal Participants, the RFP Respondent(s) that convey such an interest shall acknowledge and agree to be responsible for all aspects of the Competitive Transmission Project, notwithstanding any default of any Proposal Participant’s obligations, whether
identified in the Proposal or under any contractual agreement(s) between the Proposal Participant and the respective RFP Respondent(s). Except as provided in Section VIII.D.5 of Attachment FF of the Tariff, the Transmission Provider shall only evaluate the capabilities and resources of the RFP Respondent(s) when evaluating a Proposal.

VIII.D.5. Proposal Content Requirements:

Each Proposal shall include all data and information required by the RFP, applicable Business Practices Manuals, and Tariff including, but not limited to, the items specified below in Section VIII.D.5 of Attachment FF of the Tariff. RFP Respondents may include additional data and information in the Proposal if they believe it is relevant and useful to the evaluation of their Proposal. If and to the extent RFP Respondents are utilizing any resources, capabilities, or competencies from an Affiliate, those resources, capabilities, or competencies shall be clearly identified in the Proposal and the RFP Respondent shall submit an “Acknowledgement of Support” signed by an authorized agent of the Affiliate expected to provide such support and the RFP Respondent. An “Acknowledgement of Support” may also be provided, but is not required, from any other entity on which RFP Respondent(s) intends to rely for such support.

VIII.D.5.1. General Proposal Information:

VIII.D.5.1.1. Identification of RFP Respondents:
Each Proposal shall clearly identify each RFP Respondent involved in the Proposal and identify a primary and secondary point of contact for the Proposal that will represent the RFP Respondent(s) in any communications and actions with the Transmission Provider.

Each Joint-Developer Proposal shall clearly and specifically identify each RFP Respondent’s respective roles and responsibilities (including the respective percentage of responsibility) to finance, construct, implement, own, operate, maintain, repair, and restore the Competitive Transmission Project in such a manner that one hundred percent (100%) of the responsibilities are identified and disclosed in the Proposal. Any agreements between or among the RFP Respondents governing the division of roles and responsibilities shall also be submitted with the Proposal.

Furthermore, each RFP Respondent involved in a Joint-Developer Proposal shall commit to executing the Joint Functional Control Agreement if their Proposal is selected and include either: (i) an agreement to be jointly and severally liable for all aspects of the Joint-Developer Proposal; or (ii) clearly specify the aspects of the Competitive Transmission Project that each RFP Respondent will be solely liable, such that all aspects of the submitted Joint-Developer Proposal are accounted for. If at least one of the RFP Respondents does not commit to being jointly and severally liable for all aspects of the Joint-Developer Proposal, the existence of any grounds that would trigger Variance Analysis, including default and termination of the Selected Developer Agreement,
with respect to any one RFP Respondent shall trigger Variance Analysis of the entire Joint-Developer Proposal, pursuant to Attachment FF Section IX of the Tariff.

VIII.D.5.1.2. Identification of Proposal Participants:

Each Proposal shall clearly identify whether the RFP Respondent(s) plan to convey an interest of the Competitive Transmission Project to one or more Proposal Participant(s). If a RFP Respondent contemplates any conveyance of interest of the Competitive Transmission Project to one or more Proposal Participant(s), it shall clearly and specifically (i) identify each Proposal Participant in the Proposal; (ii) identify the type and amount of any conveyed interest in the Proposal; (iii) provide any agreements between or among the RFP Respondent and the Proposal Participants regarding the conveyed interest in the Competitive Transmission Project; (iv) provide a written commitment from the RFP Respondent and each Proposal Participant to execute the Joint Functional Control Agreement; (v) disclose the expected timing of any such transfer of ownership or interest; (vi) provide a written agreement from the RFP Respondent and each Proposal Participant to execute the ISO Agreement, to the extent that the entity is not already a Member, but no later than the date the Competitive Transmission Facilities are energized, should the Transmission Provider designate the proposal as the Selected Proposal; and (vii) the RFP Respondent’s written agreement to be responsible for all aspects of the Competitive Transmission
Project notwithstanding, any default of any Proposal Participant’s obligations, whether identified in the Proposal or under any contractual agreement(s) between the Proposal Participant and the respective RFP Respondent(s).

VIII.D.5.2. **Project Implementation Schedule:**

Each Proposal shall contain a detailed project implementation schedule, driven by the required in-service date, for each Competitive Transmission Facility contained in the Competitive Transmission Project which shall include proposed schedules for route and site evaluation, regulatory permitting, land acquisition, engineering and design, land surveying, material procurement, construction, and commissioning/energization for all Competitive Transmission Facilities.

VIII.D.5.3. **Project Cost Estimate:**

Each Proposal shall contain a detailed project cost-estimate, based upon the reasonably descriptive facility design submitted in the Proposal, for each Competitive Transmission Facility in the Competitive Transmission Project. The cost-estimates developed by the Transmission Provider during the transmission planning process and utilized for project approval should be considered by RFP Respondents for informational purposes only and are not guaranteed to be accurate or complete in all respects. RFP Respondents shall create and rely on their own cost calculations when submitting Proposals.
VIII.D.5.4. Estimated Annual Transmission Revenue Requirements:

Each Proposal shall contain separate estimated annual transmission revenue requirements for each RFP Respondent and Proposal Participant involved with the Proposal beginning in the year costs would first be recovered under Attachment O and either Attachment MM or Attachment GG (including any incentives, such as to collect Construction Work In Progress (“CWIP”) in ratebase or pass-through pre-commercial expenses on a current basis), through the first forty (40) years that the Competitive Transmission Facilities included in the Competitive Transmission Project will be in service, in accordance with Attachment MM of the Tariff for Multi-Value Projects and Attachment GG of the Tariff for Market Efficiency Projects, including the supporting detail on the annual allocation factors for operations and maintenance, general and common depreciation expense, taxes other than income taxes, income taxes, and return used to estimate the annual revenue requirements.

If the Proposal involves more than one RFP Respondent or any Proposal Participants, the Proposal shall also include an estimated Aggregate ATRR beginning in the year costs would first be recovered under Attachment O and either Attachment MM or Attachment GG (including any incentives, such as to collect CWIP in ratebase or pass-through pre-commercial expenses on a current basis), through for the first forty (40) years the Competitive Transmission Facilities included in the Competitive Transmission Project will be in service representing the combined effect of each RFP Respondents’ and Proposal Participants’ individual annual transmission revenue requirements.
VIII.D.5.5. Binding Cost Caps:

Each Proposal shall contain information and details regarding any binding cost-caps that may be offered as part of the Proposal. If any binding cost caps are submitted as part of the Proposal, each RFP Respondent and Proposal Participant offering such binding cost cap shall also provide a draft term sheet or agreement that clearly describes in detail the nature of the cost cap being proposed, including all exclusions, exceptions, conditions, enforcement mechanisms, interaction with change orders, and such other information as is specified in the applicable Business Practices Manuals, as part of the Proposal submittal.

VIII.D.5.6. Binding Cost-Containment:

Each Proposal shall contain information and details regarding any binding cost-containment measures that may be offered as part of the Proposal. If any binding cost-containment measures are submitted as part of the Proposal, each RFP Respondent and Proposal Participant submitting such binding cost-containment measures shall also provide a draft term sheet or agreement that clearly describes in detail the nature of the cost-containment measures being proposed, including all exclusions, exceptions, conditions, enforcement mechanisms, interaction with change orders, and such other information as is specified in the applicable Business Practices Manuals, as part of the Proposal submittal.

VIII.D.5.7. Financial Information:
Each Proposal shall include a detailed financing plan for the Competitive Transmission Project. The financing plan shall conform to the format(s) specified in an RFP and must contain information pertaining to the following elements, if applicable, as further explained in the applicable Business Practices Manuals:

1) A description of capital resources available to fund Competitive Transmission Project implementation costs, which demonstrate that the RFP Respondent(s) can procure capital to fund at least one hundred percent (100%) of expected project implementation costs, including any contingencies projected by the RFP Respondent(s) to show an ability to cover risks associated with foreseeable cost overruns.

For each funding source the RFP Respondent(s) shall provide a description of how much capital is available, when the funds will be obtained, and what conditions must to be met to secure the funds. At a minimum, the RFP Respondent(s) shall identify each funding source by type with a brief description and state the costs for each funding sources. If the cost of funds information is not known at the time the RFP Response is submitted, the RFP Respondent(s) may submit a range or estimate and describe the limitations that prevent this information from being provided.

2) An exhibit or a high-level narrative description of the expected cash flows between the RFP Respondent(s) and the funding sources sufficient to explain the timing, form and volume of cash flows expected between each RFP Respondent and the identified funding sources.
3) An overview schedule of significant expenditures for project implementation sufficient to demonstrate that funds will be available when needed for significant expenditures.

4) A description of immediately available funds, that the RFP Respondent(s) shall have access to in order to address unforeseen contingencies that arise during project implementation.

5) Information describing the RFP Respondent’s plan to obtain Project Financial Security within the timeframe required by the Selected Developer Agreement in sufficient detail to demonstrate that the RFP Respondent(s) reasonably expect(s) to be able to satisfy this requirement if selected as the Selected Developer.

6) In the event that an RFP Respondent intends to rely on personnel, material, technical, financial, and/or other resources from an Affiliate in its Proposal, the RFP Respondent shall provide an Acknowledgment of Support executed by such Affiliate, which lists the personnel, material, technical, financial, and/or other resources that the RFP Respondent(s) desire(s) the Transmission Provider to consider in evaluating the Proposal to demonstrate that such Affiliate is aware of the RFP Respondent’s reliance on such Affiliate’s resources and will make such resources available if the RFP Respondent’s Proposal is selected.

7) The credit ratings, if applicable, of the RFP Respondent and any Affiliate providing an Acknowledgment of Support and general financial information including audited financial statements and notes for the RFP Respondent and any parent or Affiliate providing an Acknowledgment of Support, as well as pro
forma financial statements for each calendar year until the RFP Respondent(s) expect(s) to place all project facilities into service.

8) The RFP Respondent’s financial strategy to facilitate timely replacements and rebuilds for the life of the project to demonstrate that it reasonably can be relied upon to address catastrophic destruction and normal wear and tear.

VIII.D.5.8. Reasonably Descriptive Design:

Each Proposal shall contain a reasonably descriptive facility design for each Competitive Transmission Facility included in the Competitive Transmission Project. Reasonably descriptive facility designs represent descriptions of the core attributes and features of a design, not the detailed engineering and design calculations and documents.

VIII.D.5.8.1. Design for Competitive Transmission Line Facilities:

For each Competitive Transmission Line Facility, reasonably descriptive facility design proposals must include, if applicable, and as further described by the applicable RFP, the following:

(a) The estimated length of the Competitive Transmission Line Facility in miles and the basis for the estimate;
(b) The proposed conductor type, size, and, if applicable, bundling configuration;
(c) The proposed default or typical structure design attribute(s) (e.g., steel vs. wood vs. aluminum vs. concrete, monopole vs. H-frame
vs. lattice, single circuit vs. double circuit, self-supporting vs. guyed, structural calculation assumptions, etc.) to be used for tangent, running angle, in-line dead-end, and angle dead-end structures when feasible and/or for the majority of the Competitive Transmission Line Facilities;

(d) The estimated positive sequence line impedance and pi-equivalent shunt susceptance;

(e) The calculated normal and emergency seasonal thermal loading ratings, including the basis for such calculations;

(f) The proposed type of lightning protection system to be used when feasible and/or for the majority of the Competitive Transmission Line Facilities (e.g., shield wires vs. surge arresters, etc.) and key attributes (e.g., shielding angle, arrester location and type, etc.);

(g) The proposed grounding method to be used when feasible and/or for the majority of the Competitive Transmission Line Facilities (e.g., ground rods only, counterpoise, etc.) and key attributes (e.g., targeted structure footing grounding resistance, etc.);

(h) The proposed method to address or mitigate adverse impacts of galloping conductors and/or Aeolian vibration, if any (e.g., Stockbridge dampers, special conductors, etc.);

(i) The continuous rating of any load carrying switchgear installed on the Competitive Transmission Line Facilities; and
(j) The assumed communications systems to be used for the Competitive Transmission Line Facilities to facilitate protective relaying (e.g., fiber optic, power line carrier, microwave, etc.).

VIII.D.5.8.2. Design for Competitive Substation Facilities:

For each Competitive Substation Facility, reasonably descriptive facility design proposals shall include, if applicable, and as further described, by the applicable RFP, the following:

(a) A detailed one-line diagram;

(b) The proposed protection systems including protection schemes, any anticipated interaction with existing/other facilities and conceptual protection system design (including backup protection systems, if applicable). Remote system monitoring capability shall be described with major features listed (redundancy, monitored parameters, etc.);

(c) The detailed specifications for proposed power transformers;

(d) A description of other substation equipment items, including load ratings, voltage ratings, fault interrupting ratings, tap data, and impedances as applicable, where other substation equipment includes, but is not limited to, bus sections, circuit breakers, circuit switchers, switches, disconnects, regulating transformers, station service transformers, series and shunt capacitors, series and shunt...
reactors, static VAR compensators, DC conversion equipment,
instrument transformers (metering and relaying), wave traps, and
surge arresters;

(e) The proposed line terminal ratings and basis for calculation,
   including limiting element;

(f) The basis for load rating calculations on any equipment where
   nameplate continuous ratings are not used; and

(g) A description of the communication system for remote monitoring,
   control and data acquisition facilities, including monitoring and
   control points.

VIII.D.5.8.3. Additional reasonably descriptive facility design data:

A RFP may require submission of additional facility design data when
deemed necessary by the Transmission Provider. Proposals may also include
additional facility data when deemed necessary by RFP Respondents, including
but not limited to, optional facility design data listed in the Business Practices
Manuals, which may be considered by the Transmission Provider in the
evaluation and selection of Proposals.

VIII.D.5.9. Project Implementation:

Each Proposal shall contain a description of existing and/or planned project
implementation capabilities, relative to the applicable locations and jurisdictions where
the Competitive Transmission Facilities will be located, to be used by the RFP Respondent(s) to perform the following tasks, as applicable and as further described in the applicable RFP:

(a) Project management;
(b) Routing/siting evaluation studies for Competitive Transmission Facilities;
(c) Regulatory permitting;
(d) Right-of-way and land acquisition for Competitive Transmission Facilities;
(e) Engineering and surveying required for Competitive Transmission Facilities;
(f) Material procurement for Competitive Transmission Facilities;
(g) Construction of Competitive Transmission Facilities;
(h) Commissioning/energization of Competitive Transmission Facilities; and
(i) Safety during construction of the Competitive Transmission Facilities.

VIII.D.5.9.1. Additional Project Implementation Capabilities Data:

A RFP may require the submission of additional data, when deemed necessary by the Transmission Provider, related to the policies, processes, methods, capabilities, experience, and past performance the RFP Respondent(s) Proposals may also include additional information regarding project implementation capabilities when deemed necessary by RFP Respondents, including but not limited to, existing capabilities and past experience regarding
project implementation, which may be considered by the Transmission Provider in the evaluation and selection of Proposals.

VIII.D.5.10. Operations and Maintenance:

Each Proposal shall contain a description of existing and/or planned operations, maintenance, repair, and replacement capabilities, relative to the locations and applicable jurisdictions where the Competitive Transmission Facilities will be located, to be used by the RFP Respondent(s) to perform the following tasks, as applicable and as further described in the RFP:

(a) Forced outage response for transmission line circuits and substations;
(b) Switching for transmission line circuits and substations;
(c) Emergency repair and testing for transmission line circuits and substations;
(d) Preventative and/or predictive maintenance for transmission line circuits and substations, including vegetation management and equipment testing;
(e) Maintenance and management of spare parts, spare structures, and/or spare equipment inventories for substations and/or transmission lines, including description of any agreements to share spare equipment, spare parts, and/or spare structures with other transmission entities;
(f) Real-time operations monitoring and control capabilities, if the Competitive Transmission Project contains one or more Competitive Substation Facilities;
(g) Major facility replacements or rebuilds required as a result of catastrophic destruction or natural aging through normal wear and tear, including financial strategy to facilitate timely replacements and/or rebuilds; and

(h) Safety during operations and maintenance of the Competitive Transmission Facilities.

VIII.D.5.10.1. Local Balancing Authority:

Each Proposal shall contain a description regarding the RFP Respondent’s plan for incorporating the Competitive Transmission Facilities into a Local Balancing Authority Area.

VIII.D.5.10.2. Other Operations and Maintenance Capabilities Data:

A RFP may require the submission of additional data related to the policies, processes, methods, capabilities, experience, and past performance of the RFP Respondents regarding operations, maintenance, repair, and replacement when deemed necessary by the Transmission Provider.

Proposals may also include additional information regarding operations, maintenance, repair, and replacement capabilities when deemed necessary by RFP Respondents, including but not limited to, existing capabilities and past experience regarding operations, maintenance, repair and replacement, which may be considered by the Transmission Provider in the evaluation and selection of Proposals.
VIII.D.5.11. Participation in the Transmission Planning Process:

While not required, RFP Respondents and Proposal Participants who desire to have such participation considered in the evaluation of their Proposal shall state whether any RFP Respondent or Proposal Participant, or Affiliate of either, was identified by the Transmission Provider eligible to receive planning participation credit for such Competitive Transmission Project for which the Proposal is submitted. Any Proposal stating that an Affiliate of a RFP Respondent or Proposal Participant earned the planning participation credit shall also identify and describe the relationship between the RFP Respondent or Proposal Participant to the Affiliate.

VIII.D.5.12. Disclosure of Assignments or Potential Assignments:

Proposals shall include a declaration stating whether or not the RFP Respondent(s) will seek to assign the Competitive Transmission Facilities, Competitive Transmission Project, or Selected Developer Agreement pursuant to Article 14 of the pro forma Selected Developer Agreement. For all proposed assignments except assignments to Project Finance Entities pursuant to Article 14.4 of the Selected Developer Agreement, such declaration shall include the identity of the proposed assignee(s) and the material terms, including timing, of such proposed assignment.

VIII.D.5.13. Proposal Attestation:
Each RFP Respondent shall include an affidavit as part of the Proposal submission, signed by an officer of its organization, attesting that: (i) it understands that the Transmission Provider’s evaluation of Proposals and designation of a Selected Proposal is governed by the Tariff and the Business Practices Manuals; (ii) it agrees to be bound by the Tariff and to follow the applicable Business Practices Manuals; (iii) it has submitted the Proposal in good faith; (iv) the information submitted by the organization in the Proposal is true to the best of the RFP Respondent’s knowledge and belief; (v) it has complied with all Applicable Laws, and Regulations and Good Utility Practice in preparing the Proposal; and (vi) if selected, the Respondent agrees to be bound by its Proposal. Furthermore, each Proposal Participant shall include an affidavit as part of the Proposal signed by an officer of its organization attesting that: (i) the Aggregate ATRR for the Competitive Transmission Project and any required financial information about the Proposal Participant and its inputs into the Aggregate ATRR that has been submitted by the organization is true to the best of the Proposal Participant’s knowledge and belief; and (ii) either (a) that it agrees to execute the ISO Agreement and identify the Competitive Transmission Facilities associated with the Competitive Transmission Project in Appendix H of the ISO Agreement prior to closing on its conveyed interest should the Transmission Provider designate the Proposal as the Selected Proposal; or (b) prior to such closing it will demonstrate that it has already executed the ISO Agreement and it agrees to identify the Competitive Transmission Facilities associated with the Competitive Transmission Project in Appendix H of the ISO Agreement.
VIII.D.6. Additional Data Requests:

If, during the evaluation of Proposals, the Transmission Provider determines that additional information is required to evaluate the Proposals, the Transmission Provider will request, in writing, the additional data from all RFP Respondents, along with the timeframe that this data must be submitted. If the additional data is not submitted within the specified timeframe, the Proposal be deemed invalid and will not be evaluated or considered further by the Transmission Provider. This timeframe shall not be less than ten (10) Business Days from when the Transmission Provider issues the additional data request. This data request will not extend the evaluation timeframe defined in Section VIII.E.2 of Attachment FF of the Tariff.

VIII.D.7. Proposal Clarifications:

The Transmission Provider will have the right, but not the obligation, during the Competitive Developer Selection Process described in Section VIII of Attachment FF of the Tariff, to request a RFP Respondent(s) to provide clarifications to its submitted Proposal(s). The RFP Respondent(s) shall be responsible for any clarifications the Transmission Provider requires that relates to the Proposal Participants. In the event the RFP Respondent agrees to provide said clarification(s), the RFP Respondent shall provide said clarification(s) within five (5) Business Days of the Transmission Provider’s request. If the Transmission Provider accepts the RFP Respondent’s clarification(s), said clarification(s) shall immediately become a part of the submitted Proposal; or upon the Transmission Provider’s request, the RFP Respondent shall immediately update its
Proposal to reflect the accepted clarification(s). In the event that the RFP Respondent declines to provide the requested clarification(s), the Transmission Provider shall evaluate the Proposal without clarification.

VIII.D.8. Withdrawing Submitted Proposals:

Prior to the Proposal Submission Deadline, a RFP Respondent may withdraw a Proposal that was submitted to the Transmission Provider by informing the Transmission Provider as soon as practical in writing. Any deposits submitted to the Transmission Providers associated with the withdrawn Proposal will be returned in full and the withdrawn Proposal will not be considered or evaluated by the Transmission Provider.

A RFP Respondent may withdraw its submitted Proposal after the Proposal Submission Deadline by informing the Transmission Provider in writing, as soon as practical, but no later than such time that the Transmission Provider publicly announces the Selected Proposal for the RFP. Upon receiving a withdrawal notification, the Transmission Provider will stop its evaluation and consideration of the Proposal. A withdrawn Proposal will not relieve the RFP Respondent from its obligations for the pro rata costs associated with the full evaluation period nor will the RFP Respondent be afforded any refund other than those funds remaining once the Competitive Developer Selection Process has been completed for the RFP.

VIII.D.9. Confidential Treatment of Proposals:

The Transmission Provider will treat information and documents, or portions of
documents, received from RFP Respondents and/or Proposal Participants, whether received as Part of a Proposal, a response to a request for clarification or additional information pursuant to Sections VIII.D.6 and VIII.D.7 of this Attachment FF, or otherwise, as either Project confidential information pursuant to Section VIII.D.9.a, or non-confidential information pursuant to Section VIII.D.9.b, as set forth below.

VIII.D.9.a Confidential Information:

Except as provided in Section VIII.D.9.d, the Transmission Provider will not, without the prior written consent of the respective RFP Respondent and/or the Proposal Participant, publicly disclose or share any of the following confidential information with any individual except for employees of the Transmission Provider or an independent contractor of the Transmission Provider who require access to such information to perform their duties and have executed the Transmission Provider’s non-disclosure and/or CEII agreement:

(i) All detailed breakdowns of costs, including but not limited to, the itemized costs for labor and materials;

(ii) All details of an RFP Respondent and/or Proposal Participant’s financing arrangements;

(iii) All detailed design, routing, siting, or specialty construction techniques; and

(iv) Any other information or portions of documents that are clearly labeled and specifically designated as "CONFIDENTIAL,” except for: (1) the items specified in Section VIII.D.9.b of this Attachment FF; and (2) information and/or items
which the Transmission Provider is otherwise required to make publically available.

VIII.D.9.b Non-Confidential Information:

The following categories of information shall not be considered confidential or maintained as Confidential Information:

(i) The identity of RFP Respondents and Proposal Participants;

(ii) The high-level design for Competitive Transmission Facilities;

(iii) The total estimated cost of the Competitive Transmission Project;

(iv) The estimated forty (40) year Annual Transmission Revenue Requirement (“ATRR”);

(v) Information relating to any cost-containment measures, cost caps, and rate-incentives;

(vi) Information regarding the proposed in-service dates of the Competitive Transmission Facilities;

(vii) The final evaluation score assigned to each Proposal, with the names of the RFP Respondents and Proposal Participants redacted or masked;

(viii) All timetables and milestones agreed to between a Selected Developer(s) and the Transmission Provider in the Selected Developer Agreement;

(ix) All publically available information;
(x) Any information for which a RFP Respondent or Proposal Participant has provided consent to release; and

(xi) Any information the Transmission Provider is required to make publically available pursuant to Section VIII.D.9.d of this Attachment FF.

VIII.D.9.c Use of Non-Confidential Information–Post-Evaluation Report:

The Transmission Provider may use the non-confidential information of RFP Respondents and Proposal Participants to prepare the public post-evaluation selection report for a Competitive Transmission Project required by Section VIII.E.2 of this Attachment FF as is reasonably necessary to explain the basis for the Transmission Provider’s selection of a Selected Developer. In all cases, the Confidential Information and non-confidential information that was not disclosed in the post-evaluation selection report shall not otherwise be disclosed by the Transmission Provider except as required by Section VIII.D.9.d of this Attachment FF.

   i. Use of Selected Developer Non-Confidential Information

   The Transmission Provider may use the non-confidential information of the RFP Respondent(s) and Proposal Participants whose Proposal is selected to prepare a post-evaluation selection report that explains the basis for the Transmission Provider’s selection of the Selected Proposal pursuant to the comparative analysis required by Sections VIII.E, VIII.E.1, VIII.E.1.1, VIII.E.1.2, VIII.E.1.3, and VIII.E.1.4 of this Attachment FF to the Tariff. The Transmission Provider may use such information to the extent reasonably necessary to explain why the selection of the Selected Proposal is
proper based on the comparative analysis required by the Tariff, including discussions of features of the Selected Proposal that the Transmission Provider determined to be important in selecting the Selected Proposal.

ii. Use of Non-Confidential Information of RFP Respondents and Proposal Participants whose Proposals are Not Selected

The Transmission Provider may disclose the non-confidential information of RFP Respondents and Proposal Participants whose Proposals were not selected as the Selected Proposal only to the extent reasonably necessary to explain why the selection of the Selected Proposal is proper based on the comparative analysis required by Sections VIII.E, VIII.E.1, VIII.E.1.1, VIII.E.1.2, VIII.E.1.3, and VIII.E.1.4 of this Attachment FF to the Tariff. The Transmission Provider may disclose the non-confidential information contained in Section VIII.D.9.b(i) and VIII.D.9.b(ix)-(xi) without masking the identity(ies) of the entity(ies) to whom such non-confidential information pertains. The Transmission Provider may disclose the non-confidential information contained in Section VIII.D.9.b(ii)-(viii) for RFP Respondents and Proposal Participants whose Proposals were not selected as the Selected Proposal but must mask the identities of such parties, either through aggregation or the redacting of names, as appropriate for comparative purposes.

VIII.D.9.d Other Disclosures of Proposal Information:
The Transmission Provider will disclose any information submitted in Proposals or in response to a request for clarifications and or additional information, whether confidential or non-confidential, that it is otherwise required by or subject to another Tariff provision, Commission rule or order, or court order, or as ordered by state or federal agencies.

VIII.D.10. Proposal Validation – Review for Completeness:

The Transmission Provider will review each submitted Proposal for completeness and validate whether the RFP Respondent(s) is/are listed as a Qualified Transmission Developer. Within thirty (30) Calendar Days of the Proposal Submission Deadline, the Transmission Provider will notify each RFP Respondent if the Transmission Provider identifies that their Proposal is incomplete. Except when any of the RFP Respondents involved in a Proposal were not listed as a Qualified Transmission Developer on the date the Proposal was submitted, the RFP Respondent(s) will have a single Proposal Cure Period of ten (10) Business Days from the date of such notification to submit the requested information to cure any deficiencies in their Proposal. Proposals that are not complete at the end of the Proposal Cure Period will be deemed invalid and will not be evaluated or considered further by the Transmission Provider. Such Proposals will be refunded ninety percent (90%) of the initial proposal deposit specified in Section V.III.D.2 of Attachment FF of the Tariff, if such initial proposal deposit was submitted to the Transmission Provider. Proposals that include a RFP Respondent that was not listed as a Qualified Transmission Developer on the date the Proposal was submitted will also be deemed invalid and will not be evaluated or considered further by the Transmission Provider. The
Transmission Provider will provide a written explanation to RFP Respondents identifying why the Proposal has been disqualified.

VIII.D.11. Posting List of Completed Proposals:

The Transmission Provider will post a list of the completed Proposals submitted in response to an issued RFP on its website at the end of the Proposal Cure Period.

VIII.D.12. RFP Respondent’s Qualified Transmission Developer status:

RFP Respondents are required to maintain their status as a Qualified Transmission Developer throughout the duration of the Competitive Developer Selection Process. In the event that the Transmission Provider determines that an RFP Respondent has ceased to be a Qualified Transmission Developer, the Transmission Provider shall send a written notice of such fact to the RFP Respondent, which notice shall state the reason(s) for loss of Qualified Transmission Developer status. The RFP Respondent shall have thirty (30) Calendar Days from the Transmission Provider’s notification of loss of Qualified Transmission Developer status to remove the grounds for such loss of status. Any Proposal involving a RFP Respondent that ceases to be a Qualified Transmission Developer will be deemed invalid and will not be evaluated or considered further by the Transmission Provider if such failure remains uncured more than thirty (30) Calendar Days from the date of the notice to the RFP Respondent. A Proposal shall not be deemed invalid if the RFP Respondent cures the loss of Qualified Transmission Developer status within the thirty (30) Calendar Day period. If one or more RFP Respondents who have submitted a Joint-Developer Proposal pursuant to Section VIII.D.4.2 is
disqualified after the cure period, the Joint-Developer Proposal shall be disqualified unless all of the RFP Respondents have acknowledged and agreed to be jointly and severally liable for all aspects of the submitted Joint-Developer Proposal. If all RFP Respondents submitting a Joint Developer Proposal have acknowledged and agreed to be jointly and severally liable for all aspects of the submitted Joint-Developer Proposal, then the remaining RFP Respondents shall assume the obligations of the RFP Respondent that has failed to cure a loss of Qualified Transmission Developer status and the Joint-Developer Proposal shall not be disqualified. The Transmission Provider will provide a written explanation to RFP Respondents identifying why the Proposal has been disqualified or, in the event that all RFP Respondents involved in a Joint-Developer Proposal have acknowledged and agreed to be jointly and severally liable for all aspects of the submitted Joint-Developer Proposal, stating that the remaining RFP Respondents must assume the obligations of the RFP Respondent that has lost its Qualified Transmission Developer status.

VIII.E. EVALUATION OF PROPOSALS

The Transmission Provider will have one hundred and sixty-five (165) Calendar Days from the Proposal Submission Deadline to evaluate all completed Proposals. Only those Proposals that were submitted prior to the Proposal Submission Deadline and cured of any deficiencies pursuant to Section VIII.D.10 of Attachment FF of the Tariff and otherwise have not been withdrawn or deemed invalid will be evaluated by the Transmission Provider based on a comparative analysis using the evaluation criteria below and as further described in the Business Practices Manuals and applicable RFP. Specific methods used to evaluate various aspects of a Proposal shall be described in the Business Practices Manuals. This comparative analysis
evaluation will be conducted by Transmission Provider and/or independent consultants competent in the areas of finance, transmission facility design, transmission project implementation, and transmission operations, maintenance, repair, and replacement. In conducting the comparative analysis evaluation of Proposals, the Transmission Provider and any independent expert consultants will be overseen by the Competitive Transmission Executive Committee, which will have the exclusive and final authority to determine Selected Proposal. The Transmission Provider may decline to accept any or all Proposals that do not meet the Tariff’s requirements for the project classification in question or will not sufficiently address the Transmission Issue(s) the RFP was intended to address. If no Proposals are received from Qualified Transmission Developers or selected by the Transmission Provider, the Competitive Transmission Project will be assigned to the applicable Member(s), as defined below:

(a) Ownership and the responsibility to construct facilities which are connected to a single Member’s system belong to that Member;

(b) Ownership and the responsibilities to construct facilities which are connected between two (2) or more Members’ facilities belong equally to each Member, unless such Members otherwise agree; and

(c) Ownership and the responsibility to construct facilities which are connected between a Member(s)’ system and a system or systems that are not part of the Transmission Provider belong to such Members(s) unless the Member(s) and the non-Transmission Provider party or parties otherwise agree.

VIII.E.1. Proposal Evaluation Criteria:
In evaluating Proposals, the Transmission Provider will consider the following general aspects and weighting for each Competitive Transmission Project evaluated:

(a) **Competitive Transmission Line Projects:**

The following weights will be applied to Competitive Transmission Projects containing only Competitive Transmission Line Facilities:

(i) Cost and reasonably descriptive facility design quality: 30%

(ii) Project implementation capabilities: 35%

(iii) Operations, maintenance, repair, and replacement capabilities: 30%

(iv) Transmission Provider planning process participations: 5%

(b) **Competitive Substation Projects:**

The following weights will be applied to Competitive Transmission Projects containing only Competitive Substation Facilities:

(i) Cost and reasonably descriptive facility design quality: 30%

(ii) Project implementation capabilities: 30%

(iii) Operations, maintenance, repair, and replacement capabilities: 35%

(iv) Transmission Provider planning process participations: 5%

(c) **Mixed Competitive Transmission Facility Projects:**

The following weights will be applied to Competitive Transmission
Projects containing both Competitive Transmission Line Facilities and Competitive Substation Facilities:

(i) Cost and reasonably descriptive facility design quality: 35%

(ii) Project implementation capabilities: 30%

(iii) Operations, maintenance, repair, and replacement capabilities: 30%

(iv) Transmission Provider planning process participations: 5%

VIII.E.1.1. Cost and Reasonably Descriptive Facility Design:

When considering cost and reasonably descriptive facility design quality, the Transmission Provider shall evaluate, at a minimum and to the extent applicable, the following:

(a) Estimated project cost;

   (i) Estimated project cost(s), as set forth in Section VIII.D.5.3 of this Attachment FF;

   (ii) Cost estimate rigor, which shall include financial assumptions and supporting information to clearly demonstrate a thorough analysis in support of the cost estimate;

   (iii) Binding cost cap and/or cost-containment measures as described in Sections VIII.D.5.5 and VIII.D.5.6 of this Attachment FF if a Proposal contains any such measures
relating to the estimated project cost.

(b) Estimated annual transmission revenue requirement:

(i) The estimated annual transmission revenue requirement(s), as described in Section VIII.D.5.4 of this Attachment FF;

(ii) Estimated annual transmission revenue requirement rigor, which shall include financial assumptions and supporting information to clearly demonstrate a thorough analysis in support of the estimated annual transmission revenue requirement; and

(iii) Binding cost cap and/or cost-containment measures as described in Sections VIII.D.5.5 and VIII.D.5.6 of this Attachment FF if a Proposal contains any such measures relating to the estimated annual transmission revenue requirement(s).

(c) Electrical design:

(i) Reasonably descriptive facility electrical design quality;

and

(ii) Reasonably descriptive facility electrical design rigor, which shall include facility studies performed and other specific supporting data that clearly documents and supports consideration and attention given to the proposed reasonably descriptive facility electrical designs. For
reasonably descriptive facility electrical design, the Transmission Provider shall consider the items set forth in Sections VIII.D.5.8.1 through VII.D.5.8.3 of this Attachment FF, as each is applicable to the electrical design of Competitive Transmission Facilities discussed in the Proposal.

(d) Structural design:

(i) Reasonably descriptive facility structural design quality; and

(ii) Reasonably descriptive facility structural design rigor, which shall include facility studies performed and other specific supporting data that clearly documents and supports consideration and attention given to the proposed reasonably descriptive facility structural designs. For reasonably descriptive facility structural design, the Transmission Provider shall consider the items set forth in Sections VIII.D.5.8.1 through VII.D.5.8.3 of this Attachment FF, as each is applicable to the structural design of Competitive Transmission Facilities discussed in the Proposal.

VIII.E.1.2. Project Implementation Capabilities:
When considering project implementation capabilities, the Transmission Provider shall evaluate, at a minimum and to the extent applicable, the existing and/or planned capabilities, competencies, and processes regarding the following project implementation categories relative to the locations and jurisdictions where the Competitive Transmission Facilities associated with the Competitive Transmission Project are to be located, including:

(a) Project schedule and management:
   (i) Project implementation schedule, as required by Section VIII.D.5.2 of this Attachment FF; and
   (ii) Project management;

(b) Regulatory permitting and route/site evaluation:
   (i) Regulatory permitting; and
   (ii) Route and site evaluation;

(c) Right of way and land acquisition;

(d) Construction:
   (i) Engineering and surveying;
   (ii) Material procurement;
   (iii) Facility construction; and
   (iv) Final facility commissioning;

(e) Previous applicable experience and demonstrated ability;

(f) Financing and capital resource plan;
(g) The information and documentation from the detailed financing plan required by Sections VIII.D.5.7(1)-(7) of this Attachment FF; and

(h) Safety, as described in Section VIII.D.5.10(h) of this Attachment FF.

VIII.E.1.3. Operations, Maintenance, Repair, and Replacement Capabilities:

When considering operations, maintenance, repair and replacement capabilities, the Transmission Provider shall evaluate, at a minimum and to the extent applicable, the existing and/or planned capabilities, competencies, and processes regarding the following operations and maintenance categories relative to the locations and jurisdictions where the Competitive Transmission Facilities associated with the Competitive Transmission Project are to be located:

(a) Normal operations:
   (i) Real-time operations monitoring and control;
   (ii) Switching; and
   (iii) Plan for incorporating the Competitive Transmission Facilities into a Local Balancing Authority Area as required by Section VIII.D.5.10.1 of this Attachment FF.

(b) Non-normal operations:
   (i) Forced outage response;
   (ii) Emergency repair;
(iii) Capabilities to perform major facility replacements or rebuilds required to restore the Competitive Transmission Facilities as a result of catastrophic destruction, as required by Section VIII.D.5.10(g) of this Attachment FF; and

(iv) Financial capabilities and strategy to facilitate major facility replacements or rebuilds required to restore the Competitive Transmission Facilities as a result of catastrophic destruction, as required by Section VIII.D.5.7(8) of this Attachment FF.

(c) Maintenance activities:

(i) Spare parts;

(ii) Preventative and/or predictive maintenance and testing;

(iii) Capabilities to perform major facility replacements or rebuilds required as a result of natural aging through normal wear and tear, as required by Section VIII.D.5.10(g) of this Attachment FF; and

(iv) Financial capabilities and strategy to facilitate major facility replacements or rebuilds required as a result of normal wear and tear, as required by Section VIII.D.5.7(8) of this Attachment FF; and

(d) Safety, as described in Sections VIII.D.5.10(h) of this Attachment.

VIII.E.1.4. Transmission Provider Planning Process Participation:
Within thirty (30) Calendar Days after the date, the Transmission Provider Board approves an MTEP containing a Competitive Transmission Project, MISO will publicly post a list on its website identifying the entities that have meet the requirements to earn planning participation for such Competitive Transmission Project. Such determination shall be based on relevant planning studies performed by such entities and the results supplied to the Transmission Provider during the planning process, as well as documentation of transmission project ideas submitted by such entities to the Transmission Provider to address the same Transmission Issues being addressed by the Competitive Transmission Project for which an RFP will be issued. In evaluating Proposals, the Transmission Provider shall determine whether any RFP Respondent or Proposal Participant (including Affiliates) qualified to receive such credit. Credit shall be awarded for a Proposal where any RFP Respondent or Proposal Participant named in such Proposal, or an affiliate of either, qualifies to receive such credit.

VIII.E.2. Proposal Selection and Posting Selection Report:

The Transmission Provider will post the name of the Selected Developer(s) on its website within one hundred and sixty-five (165) Calendar Days of the Proposal Submission Deadline. Upon posting of the name of the Selected Developer(s), the obligation of RFP Respondents not named as the Selected Developer or notified that they have been designated as the Alternate Selected Developer(s) pursuant to Section VIII.H of this Attachment FF to hold their Proposals open shall cease. Within thirty (30)
Calendar Days after the designation of a Selected Proposal and the Selected Developer(s) for a Competitive Transmission Project, the Transmission Provider will post on its website a report in which it explains the basis for designating the Selected Proposal and Selected Developer(s) for each Competitive Transmission Project. The report will set forth the results of the comparative analysis undertaken by the Transmission Provider, the basis for Transmission Provider’s decision(s), and the date(s) by which state approval(s) to construct must be achieved based upon when construction must begin to timely meet the Transmission Issue(s) to be addressed by the Competitive Transmission Project and taking into account the project implementation schedule(s) provided by the Selected Developer(s) in its Selected Proposal.

VIII.E.3. Proposal Selection Dispute Resolution:

Any disputes regarding the developer selection will be referred to the Dispute Resolution Process under Attachment HH of this Tariff.

VIII.F. SELECTED DEVELOPER AGREEMENT

RFP Respondents identified in a Selected Proposal shall execute the pro forma Selected Developer Agreement, or request the submission of an unexecuted Selected Developer Agreement with the Commission, no later than sixty (60) Calendar Days after the Transmission Provider posted the name of the Selected Developer(s) on its website. The Selected Developer Agreement establishes the terms and conditions under which the Selected Developer will construct and implement the Competitive Transmission Facilities specified in its Selected
Proposal. The Selected Developer Agreement shall be executed by the Selected Developer and the Transmission Provider, by an authorized officer or equivalent official with the authority to bind their respective organizations. The Selected Developer(s) for each Competitive Transmission Project, including where the Selected Developer is a Member, will be required to sign the Selected Developer Agreement or request it be submitted unexecuted with the Commission. All executed Selected Developer Agreements that conform to the pro forma template in Appendix 1 of Attachment FF of the Tariff, will be reported to the Commission in the Transmission Provider’s next Electric Quarterly Report after the executed Selected Developer Agreement becomes effective on a non-provisional basis. Any request to file the Selected Developer Agreement unexecuted shall be filed with the Commission, together with an explanation of any matters as to which the Selected Developer and the Transmission Provider disagree, as soon as practicable, but no later than fifteen (15) Calendar Days after receiving the request to file the Selected Developer Agreement unexecuted. An unexecuted Selected Developer Agreement should contain terms and conditions deemed appropriate by the Transmission Provider for the Competitive Transmission Project. If the Selected Developer and the Transmission Provider agree to proceed with design, procurement, and construction of the Competitive Transmission Project under the agreed-upon terms of the unexecuted Selected Developer Agreement, they may proceed pending Commission action.

If the Selected Developer Agreement contains information determined to be confidential pursuant to Section VIII.D.9 of Attachment FF of the Tariff, the Transmission Provider will post and/or file publicly only a redacted version of the Selected Developer Agreement.
VIII.G. OBLIGATION TO CONSTRUCT COMPETITIVE TRANSMISSION PROJECT

The Selected Developer(s) will assume the responsibility and obligation to construct the Competitive Transmission Facilities it is selected to construct. If the Selected Developer(s) is/are financially incapable of carrying out its construction responsibilities, alternate construction arrangements shall be identified. Depending on the specific circumstances, such alternate arrangements shall include solicitation of Transmission Owners to take on financial and/or construction responsibilities. If the delay in construction adversely affects the Transmission System reliability, the Transmission Provider shall coordinate with and support the affected Transmission Owner(s) regarding any mitigation measures that may be required by the Applicable Reliability Standards.

However, in the event that a MTEP Appendix A Competitive Transmission Project approved by the Transmission Provider Board is being challenged through the Dispute Resolution process under Attachment HH of the Tariff or a court proceeding, the obligation of the Selected Developer(s) to build the specific Competitive Transmission Project (subject to required approvals) is waived until the Competitive Transmission Project emerges from the Dispute Resolution process or court proceedings as an approved Competitive Transmission Project. In the event that selection of the Selected Developer to construct a project is being challenged through the Dispute Resolution Process under Attachment HH of the Tariff, the obligation of the Selected Developer to construct the project pursuant to the Selected Developer Agreement is not waived.
VIII.H. ALTERNATE SELECTED DEVELOPER(S)

At the same time that the Transmission Provider posts the name of the Selected Developer(s) on its website, as specified in Attachment FF Section VIII.E.2, the Transmission Provider shall also notify the Alternate Selected Developer(s) that it has been selected as the Alternate Selected Developer. Upon this notification, each Alternate Selected Developer shall be required to hold their Proposal open for acceptance by the Transmission Provider for a period of one hundred (100) Calendar Days thereafter, unless released earlier by the Transmission Provider. The Transmission Provider shall release the Alternate Selected Developer from its obligation to hold its Proposal open promptly upon the Selected Developer(s) satisfying all conditions necessary for the Selected Developer Agreement to become effective.

If the Selected Developer does not execute the Selected Developer Agreement or request that the Selected Developer Agreement be filed unexecuted, and provide the required Project Financial Security within ninety (90) Calendar Days after the Transmission Provider posted the name of the Selected Developer(s) on its website, the Transmission Provider shall proceed to designate the Alternate Selected Developer(s) as the Selected Developer(s) for the Competitive Transmission Project. Should this be required, the Transmission Provider shall notify the Alternate Selected Developer(s) and publicly announce the Alternate Selected Developer(s) as the Selected Developer(s). The Alternate Selected Developer(s) shall then be required to assume the obligations of the Selected Developer for the Competitive Transmission Project and shall have the same period of time to execute or request the unexecuted filing of the Selected Developer Agreement and provide the required Project Financial Security as the originally designated Selected Developer(s).
VIII.I OBLIGATION TO NEGOTIATE INTERCONNECTION AGREEMENTS

The Selected Developer(s) and any Transmission Owner(s) whose facilities will interconnect to the Competitive Transmission Facilities that the Selected Developer is obligated to construct shall each take commercially reasonable efforts to finalize and execute any required Transmission-to-Transmission Interconnection Agreements at least one hundred and twenty (120) calendar days before the scheduled in service date of the Competitive Transmission Project.

IX. VARIANCE ANALYSIS

After the Transmission Provider Board approves an Eligible Project for inclusion in Appendix A of the MTEP, certain circumstances or events may significantly affect the cost, schedule, and or the ability of Selected Developers and Transmission Owners to complete and place into service the facilities comprising an Eligible Project for which they are responsible as specified in the MTEP. Under these circumstances or events, the Transmission Provider may need to perform a Variance Analysis in order to further understand the reasons for such circumstances or events and to evaluate any potential impacts that they may have on the successful completion of the Project or on the Transmission System.

IX.A. Applicability and Scope of Variance Analysis
The provisions set forth in this Section IX of Attachment FF are only applicable to Eligible Projects (and the facilities that comprise these projects) approved by the Transmission Provider Board for inclusion in Appendix A of the MTEP after December 1, 2015. These provisions become applicable upon: (i) the date the Transmission Provider Board approves the respective Eligible Project for facilities that are not Competitive Transmission Facilities; or (ii) the date the Selected Developer Agreement has been executed or filed unexecuted with the Commission for Competitive Transmission Facilities. Facilities comprising Eligible Projects shall remain subject to the provisions of Attachment FF Section IX until such facilities have been placed into service and placed under the Transmission Provider’s functional control.

IX.B. Variance Analysis Governance

The Competitive Transmission Executive Committee shall have the exclusive and final authority to oversee and implement Variance Analysis, including the decision to implement any of the appropriate Variance Analysis Outcomes pursuant to Section IX.E of this Attachment FF. Such exclusive and final authority shall: (1) be subject to the Dispute Resolution provisions of Section IX.G of this Attachment FF and to Attachment HH; and (2) shall not prejudice any rights or obligations the Transmission Provider, Selected Developer(s), and incumbent Transmission Owner(s) have to make filings before the Commission.

IX.C. Grounds for Variance Analysis

The following circumstances or events shall trigger the Transmission Provider’s Variance Analysis for facilities included in an Eligible Project.

Effective On: March 11, 2020
IX.C.1. Cost Increase

If the Transmission Provider determines that the estimated cost to complete an entity’s portion of an approved Eligible Project (e.g. the competitively bid facilities of the Competitive Transmission Project or the facilities assigned to an incumbent Transmission Owner included in an Eligible Project(s) either has exceeded or is projected to exceed the Baseline Cost Estimate as set forth in Section IX.C.1.1 by twenty-five percent (25%) or more, the Transmission Provider shall initiate a Variance Analysis.

The Transmission Provider will not consider any portion of cost increases under this section to the extent that the Selected Developer has agreed to internalize such costs through an accepted binding cost cap and/or cost-containment mechanism(s). However in the event that the accepted binding cost caps and/or binding cost-containment mechanism(s) are applied and the remaining estimated cost increase still has exceeded or is projected to exceed the threshold, the Transmission Provider shall initiate a Variance Analysis.

IX.C.1.1. Baseline Cost Estimate

The Baseline Cost Estimate for an entity’s portion of an Eligible Project shall be set as follows: (i) for Competitive Transmission Facilities the Baseline Cost Estimate shall be the project cost estimate provided in the Selected Proposal as agreed to in the Selected Developer Agreement;
and (ii) for the facilities assigned to an incumbent Transmission Owner included in the Eligible Project not eligible for the Competitive Transmission Process, as described in Attachment FF Section VIII.A of the Tariff, the Baseline Cost Estimate shall be the project cost estimate provided by the respective Transmission Owner through their status update provided upon achieving Milestone #2A pursuant to the Business Practices Manuals. The Baseline Cost Estimate for Competitive Transmission Facilities shall be adjusted appropriately based upon any approved change orders.

**IX.C.2. Schedule Delays**

If the Transmission Provider determines that the in-service date of facilities included in an approved Eligible Project has been or is projected to be delayed beyond the in-service date as established in MTEP Appendix A, the Transmission Provider shall meet with the Selected Developer(s), incumbent Transmission Owner(s), if applicable, interconnecting Transmission Owner(s), and any entities responsible for facilities to which the delayed facilities interconnect to discuss whether such delay creates a significant risk of one or more NERC reliability standards violations as well as any other material issues, including service obligations, economic or public policy needs that may be jeopardized as a result of the delay. If any such issues are identified, the Transmission Provider shall, in consultation with these entities, develop a plan, as
necessary, to address potential NERC reliability standards violations as well as any other issues that may be of material concern arising from the delay of the transmission facilities.

If the potential NERC reliability standards violations, or other issues of material concern, cannot be adequately addressed by the entity responsible for constructing the delayed facilities, the Transmission Provider will take appropriate action; including but not limited to, determining that Reassignment is necessary to complete the transmission solution as set forth in Section IX.E.3 of this Attachment FF.

IX.C.3. Default under the Selected Developer Agreement

If the Transmission Provider determines that a Selected Developer is in Default under a Selected Developer Agreement for an Eligible Project pursuant to the terms thereof.

IX.C.4 Inability to Complete Facilities

If the Transmission Provider makes a determination that a Selected Developer or an incumbent Transmission Owner will be unable to complete facilities for which it has been designated to construct; where such determination may be based on, but is not limited to the following:

a. A Selected Developer’s or an incumbent Transmission Owner’s inability to secure necessary approvals, permits, certificates, financing, resources,
needed expertise and/or third party support identified in the Selected Proposal, property rights, rights of way, or is otherwise unable or unlikely to construct the facilities;

b. A Selected Developer’s or an incumbent Transmission Owner’s notification to the Transmission Provider that it is unable or unwilling to proceed with construction of its facilities for which it has been designated to construct;

c. A Selected Developer or an incumbent Transmission Owner’s abandonment of the facilities it has been designated to construct;

d. A determination by the Transmission Provider that a Selected Developer is no longer a Qualified Transmission Developer; and

e. A determination by the Transmission Provider that reassignment is necessary pursuant to Section IX.E.3 of this Attachment FF.

In selecting the appropriate Variance Analysis Outcome to apply where the Transmission Provider has determined that a Selected Developer or an incumbent Transmission Owner will be unable to complete the facilities for which it has been designated to construct, the Transmission Provider will consider, but is not limited to considering the following, in addition to the general factors set forth in Section IX.D.2.1:

(i) The reasons that the Selected Developer or the Transmission Owner was unable or was unlikely to construct the facilities;
(ii) Whether the facilities are still needed;

(iii) Whether a Mitigation Plan, as further described in Section IX.E.2 of this Attachment FF, is available that could remedy the ground(s) for Variance Analysis, including consideration of the extent to which it will cost; and

(iv) Whether reassignment, as further described in Section IX.E.3 of this Attachment FF, is available, including the impacts of reassigning the facilities to another entity.

IX.C.5 Undisclosed Assignments

If the Transmission Provider determines that the Selected Developer has assigned the Competitive Transmission Facilities, Competitive Transmission Project, or Selected Developer Agreement to an entity not disclosed in its Proposal as required by Section VIII.D.5.13 or on terms materially different than those disclosed in the Proposal, except for assignments to a Project Finance Entity pursuant to Article 14.4 of the Selected Developer Agreement.

IX.D. Variance Analysis Procedure

Variance Analysis shall commence when the Transmission Provider makes an initial determination that one or more of the grounds for Variance Analysis as described in Section IX.C of this Attachment FF exists. The Transmission Provider will adhere to the following steps, as further detailed in the applicable Business Practices Manuals, in performing a Variance Analysis:
IX.D.1. Initial Inquiry and Confirmation of Grounds for Variance Analysis

Upon making an initial determination that one or more of the grounds for Variance Analysis as described in Section IX.C of this Attachment FF exists, the Transmission Provider shall notify the applicable Selected Developer or Transmission Owner in writing that Variance Analysis has commenced, including the ground(s) for commencing Variance Analysis, and a brief description of the Transmission Provider’s concerns. The applicable Selected Developer or incumbent Transmission Owner shall be provided an opportunity to be heard by the Transmission Provider and present to the Transmission Provider its position on whether the identified ground(s) for Variance Analysis exist and what outcome it believes is appropriate along with supporting facts and documentation. If the Transmission Provider determines that the ground(s) for Variance Analysis do not exist after considering the Selected Developer or Transmission Owner’s response and any other relevant information, the Transmission Provider shall terminate the Variance Analysis. If the Transmission Provider continues to believe that reasonable grounds for Variance Analysis exist after considering the Selected Developer or Transmission Owner’s response and any other relevant information, the Transmission Provider shall continue to commence Variance Analysis and so notify the Selected Developer or Transmissions Owner.

IX.D.2. Determination of Variance Analysis Outcome
If the Transmission Provider continues to believe that reasonable ground(s) for Variance Analysis exists pursuant to the process described in Section IX.D.1 of this Attachment FF, the Transmission Provider shall further investigate the circumstances or events and the relevant facts surrounding the facilities identified in Section IX.D.1 above. Upon completing its investigation, the Transmission Provider shall make a determination of which Variance Analysis Outcome to apply, as described in Section IX.E of this Attachment FF. In determining which Variance Analysis Outcome to apply, the Transmission Provider shall consider the general factors set forth in Section IX.D.2.1 and the appropriate factors of Sections IX.E of this Attachment FF.

**IX.D.2.1. General Factors in Variance Analysis Outcome Determination**

Before deciding to impose any Variance Analysis Outcome authorized by the Tariff in Sections IX.E of this Attachment FF, the Transmission provider shall consider the following factors:

A. The causes of, or reasons for, the circumstances or events triggering Variance Analysis, including the degree of fault of the applicable Selected Developer or incumbent Transmission Owner;

B. The potential impacts to the Transmission System and the MTEP, including potential reliability, economic, or public policy impacts;

C. The degree of completion of the Eligible Projects or facilities;

D. A comparison of the estimated costs of each outcome;

Effective On: March 11, 2020
E. A comparison of the degree to which each outcome will likely result in the successful completion of or increase the ability to complete the facilities and/or Eligible Projects; and

F. A comparison of the degree to which each outcome will alleviate the ground(s) for Variance Analysis.

IX.D.3. Implementation of Variance Analysis Outcome

Upon completing the procedures detailed in Section IX.D.2 of this Attachment FF, the Transmission Provider shall perform the following as further detailed in the Business Practices Manuals:

A. Inform the applicable Selected Developer(s) or incumbent Transmission Owner and any other affected parties of the Variance Analysis Outcome in writing;

B. Post a description of the Variance Analysis Outcome and the reason(s) it was selected on the Transmission Provider’s website, redacting any confidential information and or Critical Energy Infrastructure Information (CEII) as necessary. The Transmission Provider shall be authorized to publically disclose confidential information, limited in scope to the specific information needed to explain the reason(s) Variance Analysis was triggered and why the Transmission Provider selected the Variance Analysis Outcome for implementation;
C. Implement the Variance Analysis Outcome in coordination with the applicable Selected Developer(s), incumbent Transmission Owner(s), and any other affected parties;

D. If implementation of the Variance Analysis Outcome results in a mitigation plan to be placed into effect that alters the schedule, cost, design, or scope of a Competitive Transmission Facility, the Transmission Provider and Selected Developer shall amend the Selected Developer Agreement to include the requirements of the mitigation plan or the Transmission Provider shall file such plan with the Commission unexecuted; and

E. If implementation of the Variance Analysis Outcome results in Reassignment or Cancellation of Competitive Transmission Facilities, the Transmission Provider shall file a Notice of Termination with the Commission to terminate the Selected Developer Agreement pursuant to the provisions of the Selected Developer Agreement. In the event that the Transmission Provider files a Notice of Termination pursuant to Section IX.E of this Attachment FF or otherwise discusses confidential information in the course of administrative or judicial proceedings, the Transmission Provider may request that the information be treated as confidential and non-public pursuant to 18 C.F.R. §1b.20 and 388.112.

Effective On: March 11, 2020
IX.E. Variance Analysis Outcomes

In determining which Variance Analysis outcome to apply, the Transmission Provider shall apply the procedures specified in Section IX.D of this Attachment FF.

IX.E.1. No Action

The Transmission Provider may determine to take no action when Variance Analysis is triggered. In determining whether to take no action in Variance Analysis, the Transmission Provider will consider, but is not limited to, the following:

A. The causes of, or reasons for, the circumstances or events triggering Variance Analysis, including the degree of fault of the applicable Selected Developer or incumbent Transmission Owner;

B. The potential impacts to the Transmission System and the MTEP, including any potential reliability, economic, or public policy impacts;

C. The degree of completion of the Eligible Projects or facilities; and

D. The cost and impacts of implementing another Variance Analysis Outcome pursuant to Sections IX.E.2 through IX.E.4 of this Attachment FF as compared to taking no action.
IX.E.2. Mitigation Plan(s)

The Transmission Provider may allow a Selected Developer or incumbent Transmission Owner to alleviate the ground(s) for the Variance Analysis through a mitigation plan. If the Transmission Provider determines that a delay in the applicable facilities and/or Eligible Project’s in-service date may cause the Transmission Provider or one or more Transmission Owners, Selected Developers, or non-Members to violate any Applicable Reliability Standards, the Transmission Provider shall identify the potential violation(s) and direct the impacted entities to develop a mitigation plan in coordination with the Transmission Provider. The Transmission Provider, the impacted Transmission Owners(s) and/or Selected Developers, as applicable, shall take any and all reasonable actions necessary to meet the requirements of the mitigation plan and Applicable Reliability Standards.

Mitigation plans may also be utilized to address ground(s) for Variance Analysis arising under Sections IX.C.1 through IX.C.5 that do not involve a delay of the in-service date that potentially causes violations of Applicable Reliability Standards, should the Transmission Provider determine it is appropriate. In determining whether to require a mitigation plan, the Transmission Provider will consider the factors set forth in Sections IX.D.2.1 and IX.E.1 of this Attachment FF as well as, but not limited to:

A. The extent to which the ground(s) for Variance Analysis can be remedied through a mitigation plan, if successfully implemented,
including the extent to which cost can be restored to baseline and the required in-service date realized;

B. The willingness of the Selected Developer(s) or incumbent Transmission Owner(s) to implement the mitigation plan, including their willingness to bear the costs thereof;

C. The resources and ability of the Selected Developer(s) or incumbent Transmission Owner(s) to successfully implement the mitigation plan; and

D. Whether the Transmission Owner(s) that would receive the reassigned facilities would be better able to alleviate the ground(s) for Variance Analysis than the Selected Developer.

The mitigation measures may include, without limitation, any one or combination of the following components: (i) an updated implementation plan; (ii) an operating procedure; or (iii) alternative facilities and or projects to mitigate reliability violations. If a mitigation plan is used, the Transmission Provider and Selected Developer shall work together to amend the Selected Developer Agreement to reflect the mitigation plan. In the event that the Selected Developer or incumbent Transmission Owner refuses to execute the Transmission Provider’s proposed mitigation plan or offer a substitute plan reasonably acceptable to the Transmission Provider, the Transmission Provider may elect either to file its proposed mitigation plan with the Commission unexecuted, select an alternate
Variance Analysis Outcome or, in if the Selected Developer is a signatory to the ISO Agreement, proceed thereunder.

**IX.E.3. Reassignment**

The Transmission Provider may determine to reassign Competitive Transmission Facilities in accordance with Section IX.E.3.1 of this Attachment FF. Reassignment shall also be proper if a Selected Developer fails to maintain its Qualified Transmission Developer status after the expiration of any applicable cure period. If a Selected Developer is the incumbent Transmission Owner whose service area is the service area for which the facilities triggering Variance Analysis are located, the Transmission Provider shall seek recourse through the ISO Agreement or FERC, as appropriate. In all other cases, the Transmission Provider will consider the factors set forth in Sections IX.D.2.1, IX.E.1, and IX.E.2 of this Attachment FF as well as the following, in determining whether Reassignment is applied including but not limited to:

A. Whether a mitigation plan would be sufficient to alleviate the ground(s) for Variance Analysis;

B. The actions that the incumbent Transmission Owner(s), to whom the facilities would be reassigned to if the Transmission Provider selects the Reassignment Variance Analysis Outcome, would reasonably be required to take to successfully complete the facilities;

C. The incremental costs of the Reassignment Variance Analysis Outcome; and
D. The extent of any potential delay that the Reassignment Variance Analysis Outcome may cause and any potential impacts on reliability.

If the Transmission Provider selects the Reassignment Variance Analysis Outcome, the Selected Developer(s) shall be obligated to work cooperatively and in good faith with the Transmission Provider, the incumbent Transmission Owner(s), and the affected Transmission Owner(s) and/or non-MISO transmission owners, to implement the transition.

IX.E.3.1. Procedure for Reassignment

Reassigned facilities and or projects will be offered to the applicable Transmission Owner(s), as defined below:

A. Ownership and the responsibility to construct facilities which are connected to a single Transmission Owner’s system belong to that Transmission Owner;

B. Ownership and the responsibilities to construct facilities which are connected between two (2) or more Owners’ facilities belong equally to each Transmission Owner, unless such Transmission Owners otherwise agree; and

C. Ownership and the responsibility to construct facilities which are connected between a Transmission Owner(s)’ system and a system or systems that are not part of the Transmission Provider belong to such
Transmission Owner(s) unless the Transmission Owner(s) and the non-Transmission Provider party or parties otherwise agree.

If the applicable Transmission Owner(s) decline to construct the reassigned facilities and or Eligible Project, the Transmission Provider will reassign, as applicable, the facilities and/or Eligible Projects through the Competitive Transmission Developer Selection Process, as described in Section VIII of Attachment FF of the Tariff.

IX.E.4. **Cancellation of Facilities and or Projects**

The Transmission Provider may determine to cancel Eligible Projects and/or facilities comprising such projects. In determining whether to cancel Eligible Projects or facilities, the Transmission Provider will consider the factors set forth in Sections IX.D.2.1, IX.E.1, IX.E.2, and X.E.3 of this Attachment FF.

IX.F. **Variance Analysis Confidentiality**

The Transmission Provider shall not disclose to the public that a Variance Analysis has commenced until such time as it has confirmed its initial determination that a ground for Variance Analysis exists pursuant with Section IX.D.1 of this Attachment FF. Notwithstanding the preceding sentence, the Transmission Provider shall be allowed to disclose that it is commencing a Variance Analysis to third parties, including interconnecting Transmission Owners, Selected Developers, or non-Members from whom the Transmission Provider requires information to determine whether the
ground(s) for Variance Analysis exist. However, no confidential information will be disclosed when the Transmission Provider solicits information from third parties unless and to the extent such disclosure is needed to obtain information necessary to determine any potential NERC reliability standards violations, service obligation issues, and economic or public policy needs that may be jeopardized.

In the event that the Transmission Provider determines pursuant to Section IX.D.1 of this Attachment FF that ground(s) for Variance Analysis do not exist, the Transmission provider shall treat any information collected pursuant to Section IX.D.1 as Project Confidential Information. In the event that the Transmission Provider determines pursuant to IX.D.1 of this Attachment FF that ground(s) for Variance Analysis do exist, the Transmission provider shall be authorized to share Project Confidential Information with such third parties as the Transmission Provider determines are reasonably necessary in order to enable the Transmission Provider to obtain needed input and information to identify any potential system reliability impacts of Variance Analysis Outcomes, including impacts from any potential NERC reliability standards violations, service obligation issues, and economic or public policy needs that may be jeopardized. The Transmission Provider shall consult with the Selected Developer and or the incumbent Transmission Owner prior to sharing any such confidential information for the purposes of discussing reasonable confidentiality safeguards.

IX.G. Variance Analysis Dispute Resolution

All disputes by the affected Selected Developer or Transmission Owner shall be
addressed in accordance with the provisions of Attachment HH, except that disputes involving the termination of a Selected Developer Agreement shall be addressed in accordance with the Dispute Resolution provisions of the Selected Developer Agreement.

IX.H  Project Financial Security

The Transmission Provider may utilize Project Financial Security to cover the costs of Variance Analysis resulting from Default under the Selected Developer Agreement. In such event, the Transmission Provider may draw upon such funds after confirming that a Default exists pursuant to Section IX.D.1 of this Attachment FF. The Transmission Provider shall utilize such funds to offset any costs reasonably incurred by the Transmission Provider in performing a Variance Analysis, transitioning the Competitive Transmission Project to a new Selected Developer and/or incumbent Transmission Owner(s), and otherwise distribute such funds as determined by the Commission to cover Variance Analysis and transition costs. Costs for which Project Financial Security funds may be used include reasonable consultant fees, attorneys’ fees, costs of litigation and or regulatory proceedings, and staffing costs directly attributable to taking actions under the Variance Analysis provisions of the Tariff. The Transmission Provider shall track its use of Project Financial Security and provide an informational filing to the Commission within six (6) months after the Transmission Provider concludes implementation of the selected outcome.
X. Interregional Coordination and Cost Allocation with the Southeastern Regional Transmission Planning Region

The public utility transmission providers in the Southeastern Regional Transmission Planning region (“SERTP”) and the Midcontinent Independent System Operator region (“MISO”) shall undertake the interregional transmission coordination and cost allocation procedures under Section X of this Attachment FF.

Where the regional transmission planning process is referenced as part of this interregional transmission coordination process the applicable regional transmission planning process for the Transmission Provider is described in Attachment FF; and is described for the SERTP in attachment K of the applicable SERTP transmission provider.

A. Interregional Transmission Coordination

1. Annual Meeting: Representatives of the SERTP and staff of the Transmission Provider will meet no less than once per year to facilitate the interregional coordination procedures described below (as applicable). Representatives of the SERTP and staff of the Transmission Provider may meet more frequently during the evaluation of interregional transmission project(s) proposed for purposes of interregional cost allocation between the SERTP and the Transmission Provider transmission planning regions.

2. Website Posting of Information on Interregional Coordination: The Transmission Provider shall utilize the regional planning website for communication of information related to these coordinated interregional transmission planning procedures. The Transmission Provider shall coordinate...
with the SERTP with respect to the posting of materials to the regional planning website related to the interregional coordination procedures between the SERTP and the Transmission Provider transmission planning regions. The Transmission Provider shall, at a minimum, provide the following on the regional planning website:

a. Interregional coordination and cost allocation procedures between the SERTP and Transmission Provider;

b. Links to where stakeholders can register (if applicable/available) for the stakeholder committees or distribution lists of the SERTP;

c. Documents related to joint evaluation of interregional transmission projects; and

d. Status report on interregional transmission projects selected for purposes of interregional cost allocation between the SERTP and the Transmission Provider.

B. Model and Data Exchange

At least annually, the Transmission Provider and the SERTP shall exchange their then-current regional transmission plans including power-flow models and associated data used in the regional transmission planning processes to develop such transmission plan(s). This exchange will occur when such data is available in each of the regional transmission planning processes, typically during the first calendar quarter of each year. Additional transmission-based models and data may be exchanged between the SERTP and the Transmission Provider as necessary and if requested. For purposes of their
interregional coordination activities, the Transmission Provider and SERTP will exchange only data and models used in the development of their then-current regional transmission process and plans. This data will be posted on the pertinent regional transmission planning process’ websites, consistent with the posting requirements of the respective regional transmission planning processes, and subject to the applicable treatment of confidential data and Critical Energy Infrastructure Information (CEII). The Transmission Provider shall notify SERTP of such posting.

C. Identification and Joint Evaluation of Proposed Interregional Transmission Projects

1. Identification of Interregional Transmission Projects: At least biennially, the Transmission Provider and the SERTP shall meet to review the respective regional transmission plans. Such plans include each region’s transmission needs as prescribed by each region’s planning process. This review shall occur on a mutually agreeable timetable, taking into account each region’s regional transmission planning process timeline. If through this review, the Transmission Provider and the SERTP identify a potential interregional transmission project that may be more efficient or cost-effective than regional transmission projects, the Transmission Provider and the SERTP shall jointly evaluate the potential interregional transmission project pursuant to Section X.C.4.

2. Identification of Interregional Transmission Projects by Stakeholders: Stakeholders and transmission developers (pursuant to Section X.D.1) may also propose
interregional transmission projects that may be more efficient or cost-effective than regional transmission projects pursuant to the procedures in each region’s regional transmission planning processes.

3. Identification of Interregional Transmission Projects by Developers:

Interregional transmission projects proposed for interregional cost allocation purposes (“Interregional CAP”) must be submitted in both the Transmission Provider and the SERTP regional transmission planning processes. The project submittal must satisfy the requirements of Section X.D.1 except for the benefit-to-cost ratio requirements of Section X.D.1.a.ii. The submittal must identify the potential transmission project as interregional in scope and identify the Transmission Provider and the SERTP as regions in which the project is proposed to interconnect. The Transmission Provider will verify whether the submittal for the potential interregional transmission project satisfies all applicable requirements. Upon finding that the proposed interregional transmission project satisfies all such applicable requirements, the Transmission Provider will notify the SERTP. Once the potential project has been proposed through the regional transmission planning processes in both regions, and upon both regions so notifying one another that the project is eligible for consideration pursuant to their respective regional transmission planning processes, the Transmission Provider

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3 A transmission developer is not responsible for determining the benefit-to-cost ratio referenced in Section X.D.1.a.ii in a project submittal. However, an interregional transmission project proposed for Interregional CAP must ultimately satisfy the benefit-to-cost ratio requirements in accordance with the provisions of Section X.D.1.a.ii and X.D.3.
and the SERTP will jointly evaluate the proposed interregional projects pursuant to Sections X.C and X.D.

4. **Evaluation of Interregional Transmission Projects:** The Transmission Provider and the SERTP shall act through their respective regional transmission planning processes in the joint evaluation of potential interregional transmission projects identified pursuant to Sections X.C.1 and X.C.2 to determine whether the inclusion of any potential interregional transmission projects in each region’s regional transmission plan would be more efficient or cost-effective than regional projects. Such analysis shall be consistent with accepted transmission planning practices of the respective regions and the methods utilized to produce each region’s respective regional transmission plan(s). The Transmission Provider will evaluate potential interregional transmission projects consistent with Section I.C.6 and Section II of Attachment FF.

5. **Review of Proposed Interregional Transmission Projects:** Initial coordination activities regarding potential interregional transmission projects will typically begin during the third quarter of each calendar year. The Transmission Provider and the SERTP will exchange status updates regarding interregional transmission projects that are newly proposed or that are currently under consideration as needed. These status updates will generally include, if applicable: (i) an update of the region’s evaluation of the proposal(s); (ii) the latest calculation of benefits (as identified pursuant to Section X.D.2); and (iii) the anticipated timeline for future assessments.
6. **Coordination of Assumptions Used in Joint Evaluation:** The Transmission Provider and the SERTP will coordinate assumptions and data used in joint evaluations, as necessary, including items such as:
   
   a. Expected timelines and milestones associated with the joint evaluation;
   
   b. Study assumptions;
   
   c. Models; and
   
   d. Benefit calculations (as identified pursuant to Section X.D.2).

D. **Interregional Cost Allocation:** If an interregional transmission project is proposed for Interregional CAP in the SERTP and the Transmission Provider transmission planning regions, then the following cost allocation and benefits calculations, as identified pursuant to Section X.D.2, shall apply to the project:

   1. **Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes:**
      
      a. For a transmission project to be eligible for Interregional CAP within the SERTP and the Transmission Provider, the project must:
         
         i. Interconnect to transmission facilities in both the SERTP and Transmission Provider regions. The facilities to which the project is proposed to interconnect may be either existing facilities or
transmission projects included in the regional transmission plan that are currently under development\(^4\)

ii. Have a combined benefit-to-cost ratio of 1.25 or higher to the SERTP and Transmission Provider regions, as calculated in Section X.D.3; and

iii. Meet the threshold and qualification criteria for transmission projects potentially eligible to be included in the respective regional transmission plans for purposes of cost allocation in the Transmission Provider and the SERTP, pursuant to their respective regional transmission planning processes.

b. On a case-by-case basis, the Transmission Provider and the SERTP may consider an interregional transmission project that does not satisfy all of the criteria specified in this Section X.D.1, but that: (i) meets the threshold criteria for a project proposed to be included in the regional transmission plan for purposes of cost allocation in only one of the two regions; and (ii) would be interconnected to transmission facilities in both the SERTP and Transmission Provider regions. The facilities to which the project is proposed to interconnect may be either existing facilities or transmission projects included in the regional transmission plan that are currently under development.

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\(^4\) For the MISO region, “under development” refers to Appendix A projects under development approved by the MISO Board of Directors.
The transmission project must be proposed for purposes of cost allocation in both the SERTP and the Transmission Provider. The project submittal must satisfy all criteria specified in the respective regional transmission processes, including the respective timeframes for submittals proposed for cost allocation purposes. If a project is proposed by a transmission developer, the transmission developer must also satisfy the qualification criteria specified by each region.

2. Calculation of Benefits for Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes:  
   The benefits used to establish the allocation of costs of a transmission project proposed for Interregional CAP between the SERTP and the Transmission Provider shall be determined as follows:
   
a. Each transmission planning region, acting through its regional transmission planning process, will evaluate proposals to determine whether the proposed project(s) addresses transmission needs that are currently being addressed with projects in its regional transmission plan and, if so, which projects in the regional transmission plan could be displaced by the proposed project(s).

b. Based upon its evaluation, each region will quantify its benefits based upon the transmission costs that each region is projected to avoid due to its transmission projects being displaced by the proposed interregional transmission project as follows:
i. for the SERTP, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included; and

ii. for the Transmission Provider, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included.

The benefits calculated pursuant to this Section X.D.2 are not necessarily the same as the benefits used for purposes of regional cost allocation.

3. **Calculation of Benefit-to-Cost Ratio for an Interregional Transmission Project Proposed for Interregional CAP:**

Prior to any regional benefit-to-cost ratio calculation pursuant to either regional transmission planning process, the combined interregional benefit-to-cost ratio, referenced in Section X.D.1.a, shall be calculated for an interregional transmission project proposed for Interregional CAP. Such calculation shall be performed by dividing the sum of the present value of the avoided project cost determined in accordance with Section X.D.2.b.i for the SERTP region and the present value of avoided project cost determined in accordance with Section X.D.2.b.ii for the Transmission Provider region by the present value of the proposed interregional transmission project’s total
project cost. The present values used in the cost calculation shall be based on a common date, comparable cost components, and the latest cost estimates used in the evaluation of the interregional transmission project. The combined interregional benefit-to-cost ratio will be assessed in addition to, not in the place of, the SERTP’s and the Transmission Provider’s respective regional benefit-to-cost ratio assessment(s) (if applicable) as specified in the respective regional processes.

4. **Inclusion in Regional Transmission Plans:** An interregional transmission project proposed for Interregional CAP in the transmission planning regions of the SERTP and the Transmission Provider will be included in the respective regional transmission plans for purposes of cost allocation after:

a. Each region has performed all evaluations, as prescribed in its regional transmission planning process, necessary for a project to be included in its regional transmission plan for purposes of cost allocation including any regional benefit-to-cost ratio calculations. Each region shall utilize the benefit calculation(s) as defined in such region’s regional transmission planning process (for purposes of clarity, these benefits are not necessarily the same as the benefits determined pursuant to Section X.D.2). Each region shall utilize the cost calculation(s) as defined in such region’s regional transmission planning process. The anticipated percentage allocation of costs of the interregional transmission project to each region
shall be based upon the ratio of the region’s benefits to the sum of the benefits, both as determined pursuant to Section X.D.2, identified for both the SERTP and the Transmission Provider.

b. Each region has obtained all approvals, as prescribed in its regional process, necessary for a project to be included in the regional transmission plan for purposes of regional cost allocation.

5. Allocation of Costs Between the SERTP and the Transmission Provider

Regions: The cost of an interregional transmission project, selected for purposes of cost allocation in the regional transmission plans of both the SERTP and the Transmission Provider, will be allocated as follows:

a. Each region will be allocated a portion of the interregional transmission project’s costs in proportion to such region’s benefit as calculated pursuant to Section X.D.2 to the sum of the benefits identified for both the SERTP and the Transmission Provider calculated pursuant to Section X.D.2.

i. The benefits used for this determination shall be based upon the benefit calculation most recently performed – pursuant to the method described in Section X.D.2 – before each region included the project in its regional transmission plan for purposes of cost allocation and as approved by each region.

b. Costs allocated to each region shall be further allocated within each region pursuant to the cost allocation methodology contained in its regional transmission planning process.
6. **Milestones of Required Steps Necessary to Maintain Status as Being Selected for Interregional Cost Allocation Purposes:** Once selected in the respective regional transmission plans for purposes of cost allocation, the transmission owners in the SERTP planning region that will be allocated costs of the transmission project, the Transmission Provider, and the transmission developer(s) must mutually agree upon an acceptable development schedule including milestones by which the necessary steps to develop and construct the interregional transmission project must occur. These milestones may include (to the extent not already accomplished) obtaining all necessary rights-of-way and requisite environmental, state, and other governmental approvals and executing a mutually-agreed upon contract(s) between the applicable transmission owners in the SERTP planning region, the Transmission Provider and the transmission developer. If such critical steps are not met by the specified milestones and then afterwards maintained, then the Transmission Provider and the SERTP may remove the transmission project from the selected category in the regional transmission plans for purposes of cost allocation.

7. **Interregional Transmission Project Contractual Arrangements:** The contracts referenced in Section X.D.6 will address terms and conditions associated with the development of the proposed interregional transmission project included in the regional transmission plans for purposes of cost allocation, including but not limited to:
a. Engineering, procurement, construction, maintenance, and operation of the proposed transmission project, including coordination responsibilities of the parties;

b. Emergency restoration and repair;

c. The specific financial terms and specific total amounts to be charged by the transmission developer of the transmission project to each beneficiary, as agreed to by the parties;

d. Creditworthiness and project security requirements;

e. Milestone reporting, including schedule of projected expenditures;

f. Reevaluation of the transmission project; and

g. Non-performance or abandonment.

8. **Removal from Regional Transmission Plans:** An interregional transmission project may be removed from the SERTP’s or the Transmission Provider’s regional transmission plan(s) for Interregional CAP: (i) if the transmission developer fails to meet developmental milestones; (ii) pursuant to the reevaluation procedures specified in the respective regional transmission planning processes; or (iii) if the project is removed from one of the region’s regional transmission plans pursuant to the requirements of its regional transmission planning process.

a. The Transmission Provider shall notify the SERTP if an interregional transmission project or a portion thereof is likely to be, and/or is actually removed from its regional transmission plan.
E. Transparency

1. Stakeholders will have an opportunity to provide input and feedback within the respective regional transmission planning processes of the SERTP and the Transmission Provider related to interregional transmission projects identified, analysis performed, and any determination/results. Stakeholders may participate in either or both regions’ regional transmission planning processes to provide their input and feedback regarding the interregional coordination between the SERTP and the Transmission Provider.

2. The Transmission Provider shall use the existing planning stakeholder forums, such as the Planning Advisory Committee and Sub-regional Planning Meetings, to review with stakeholders the interregional activities associated with the SERTP.

3. The Transmission Provider will post a list, on the Regional Planning Website, of interregional transmission projects proposed for purposes of cost allocation in both the Transmission Provider and the SERTP regions that are not eligible for consideration because they do not satisfy the regional project threshold criteria of one or both of the regions as well as post an explanation of the thresholds the proposed interregional projects failed to satisfy.
Tab B
**Sample Membership Agreement:** The document that establishes the rights and obligations between the Electric Generation and Transmission Cooperative (Coop) and its members.

**Scarcity Price:** The LMP and MCP price levels determined by Demand Curves when insufficient Operating Reserve cleared to meet the Operating Reserve requirement.

**Schedule 16 Costs:** The monthly charge of costs to be recovered under Schedule 16 of this Tariff shall include any deferred pre-operating costs, direct and indirect capital costs, direct and indirect operating expenses and all other costs associated with administrating the Financial Transmission Rights Administrative Service under this Tariff.

**Schedule 17 Costs:** The costs to be recovered under Schedule 17 of this Tariff shall include any deferred pre-operating costs, direct and indirect capital costs, direct and indirect operating expenses and all other costs associated with administering the Energy and Operating Reserve Market Support Administrative Service under this Tariff.

**Scheduled Injections:** Energy scheduled in the Day Ahead Energy and Operating Reserve Market to be injected over an Hour of the Operating Day.

**Scheduled Withdrawals:** Energy withdrawals scheduled in the Day Ahead Energy and Operating Reserve Market over a given Hour of the Operating Day.

**Scheduling Agent:** An entity designated by a Market Participant that has the authority to conduct business in the Transmission Provider Region on behalf of the Market Participant.

**Scheduling Instructions:** Directives issued by the Transmission Provider or Local Balancing Authority to Market Participants with Load Modifying Resources indicating MW quantities to be reduced during Emergencies.
SCUC Instructed Hours of Operation: The period beginning when a Resource is synchronized to the Facilities within the MISO Balancing Authority Area in response to the Transmission Provider selecting the Resource in the unit commitment portion of the SCUC process and ends at the later of: (i) the time incorporating the sum of the time when the Resource is synchronized and the Resource’s Minimum Run Time and (ii) the earlier of the time the Resource is forced out of service or the time when the Transmission Provider notifies the Market Participant that the Resource is no longer needed. The SCUC Instructed Hours of Operation cannot extend beyond the Operating Day.

Seams Operating Agreement: An agreement between adjacent balancing authorities or transmission providers for the coordination of operations, including joint operating agreements.

Season: The four (4) seasons are (i) Winter – December, January, February; (ii) Spring – March, April, May; (iii) Summer – June, July, August; and (iv) Fall – September, October, November.


Second Planning Area: The area of the Transmission Provider Region where Entergy Corporation and its Operating Companies that own and/or operate transmission facilities (i.e., located in Arkansas, Louisiana, Mississippi, or Texas) that are conveyed to the functional control of the Transmission Provider to provide Transmission Service pursuant to Module B of the Tariff. The Second Planning Area shall be formed when the first Entergy Operating Company conveys functional control of its transmission facilities to
the Transmission Provider, and may be expanded if other Entergy Operating Companies or adjacent utilities in Arkansas, Louisiana, Mississippi or Texas, join MISO later in the Second Planning Area’s Transition Period.

**Second Planning Area’s Transition Period:** The period: (i) commencing when the first Entergy Operating Company conveys functional control of its transmission facilities to the Transmission Provider to provide Transmission Service under Module B of this Tariff; (ii) consisting of at least five consecutive (5) years, plus the time needed to complete the MTEP approval cycle pending at the end of the fifth year; (iii) ending on the day after the conclusion of such MTEP approval cycle, which in no case shall be more than six years after the start of that period; and (iv) during which the Transmission Provider shall review and compare the current states of the transmission systems in the First Planning Area and the Second Planning Area and, if a lack of comparability is found, shall identify transmission projects necessary to achieve comparability. The processes for identifying transmission projects necessary to achieve comparability and allocating costs associated with the projects that are so identified during the Second Planning Area’s Transition Period are set forth in Attachment FF-6.

**Security Constrained Economic Dispatch (SCED):** An algorithm capable of clearing, dispatching, and pricing Energy, Operating Reserve, Up Ramp Capability, and Down Ramp Capability in a simultaneously co-optimized basis that minimizes Production Costs and Operating Reserve Costs while enforcing multiple security constraints. The algorithm keeps the commitment of Resources fixed in the dispatch. The model is described in Schedule 29.
**Security Constrained Economic Dispatch Pricing (SCED-Pricing):** An algorithm capable of clearing, dispatching, and pricing Energy, Operating Reserve, Up Ramp Capability, and Down Ramp Capability in a simultaneously co-optimized basis that minimizes Production Costs and Operating Reserve Costs while enforcing multiple security constraints. The model is described in Schedule 29A.

**Security Constrained Unit Commitment (SCUC):** An algorithm capable of committing Resources to supply Energy, Operating Reserve, Up Ramp Capability, and Down Ramp Capability on simultaneously co-optimized basis that minimizes Capacity costs while enforcing multiple security constraints.

**Selected Developer(s):** The RFP Respondent(s) identified in the Selected Proposal. Selected Developers shall not include Proposal Participants.

**Selected Developer Agreement (SDA):** An agreement, in the form provided in Appendix 1 of Attachment FF of the Tariff, between a Selected Developer, including existing Transmission Owners, ITCs, and Non-owner Members, and the Transmission Provider establishing the terms and conditions under which the Selected Developer will construct and implement the Competitive Transmission Facilities specified in its Selected Proposal. Among other terms, the Selected Developer Agreement shall include any binding cost control measures, including cost caps, which the Selected Developer specified in its Selected Proposal.

**Selected Proposal:** The Proposal selected for implementation by the Competitive Transmission Executive Committee, pursuant to Attachment FF of the Tariff.

**Self Schedule:** The designation by a Market Participant of a specific amount of Energy and/or
Operating Reserve and/or capacity to be supplied from a specific Resource or Planning Resource as a Price Taker.

**Self-Scheduled Resource:** A Resource that is scheduled by a Market Participant and controlled by the same Market Participant under the overall coordination of the Transmission Provider. A Self-Scheduled Resource is a Price Taker for the portion of the Resource that is Self Scheduled.

**Service Agreement:** The initial agreement and any amendments or supplements thereto entered into by the Tariff Customer and the Transmission Provider for service under this Tariff, including, without limitation, any service agreement executed pursuant to Section 27A (an HVDC Service Agreement), Module F, and Attachment KK of the Tariff.

**Service Commencement Date:** The date the Transmission Provider or ITC begins to provide service pursuant to the terms of an executed Service Agreement, or the date the Transmission Provider or ITC begins to provide service in accordance with Section 15.3 or Section 29.1 under this Tariff.

**Setpoint Instruction:** The real-time desired MW output signal calculated for a specific Resource by the Transmission Provider’s control system on a specified periodicity that is equal to the current Energy Dispatch Target plus the Regulating Reserve Deployment instruction (which may be positive or negative) plus an adjustment to the Energy Dispatch Target to account for Contingency Reserve Deployment Instructions. The Setpoint Instruction represents the desired output level of the Resource.

**Settlement:** The process of determining charges to be paid to or by a Market Participant in the Energy and Operating Reserve Markets operated by the Transmission Provider under this
Tariff.

**Settlement Statements:** Reports provided by the Transmission Provider to Market Participants containing some aggregate and some detailed charge type information and determinant data regarding financial obligations for Energy and Operating Reserve Market activities and services, allowing for the verification by the Market Participant of Settlements invoiced amounts.

**Shadow Price:** The marginal value of relieving a particular constraint.

**Shortfall Amount:** The difference between a Resource’s Contingency Resource Deployment Instruction and the actual amount of Contingency Reserve deployed by that Resource at the end of the Contingency Reserve Deployment Period.

**Short-Term Firm Point-To-Point Transmission Service:** Firm Point To Point Transmission Service under Module B of this Tariff with a term of less than one (1) Year.

**Short-Term High-Voltage Direct Current Service:** HVDC Service under Section 27A of this Tariff with a term of less than one (1) year.

**Shut-Down Offer:** The compensation required by a Market Participant for reducing the consumption of a Demand Response Resource Type-I.

**Shut-Down Notification Time:** The amount of notification time required by a Demand Response Resource-Type I prior to the initiation of demand reduction procedures.

**Shut-Down Time:** The time required for a Demand Response Resource Type I to reduce consumption equal to its Targeted Demand Reduction Level or the time required for a Demand Resource to reduce consumption equal to its targeted Load reduction level or firm service level.
**Significant Trade Reference:** Trade reference provided to Transmission Provider in the registration process which are of a significant nature, as determined by Transmission Provider in its sole discretion.

**Simultaneous Feasibility Test:** A test for a state in which each set of injections and withdrawals associated with receipt point-to-delivery point FTRs and ARRs, and power transfers associated with FTRs and ARRs, would not exceed any thermal, voltage, or stability limits within the Transmission Provider Region under normal operating conditions or for monitored contingencies.

**Single-Developer Proposal:** A Proposal submitted by a single RFP Respondent that would become the sole Selected Developer for the Competitive Transmission Project, should its Single-Developer Proposal be designated as the Selected Proposal by the Transmission Provider.

**Single-Directional-Down Ramp Rate Curve:** The MW/minute ramp rate curve, that may include up to ten (10) linear segments at which a Generation Resource or Demand Response Resource-Type II can respond to the Setpoint Instructions in the downward direction only.

**Single-Directional-Up Ramp Rate Curve:** The MW/minute ramp rate curve, that may include up to ten (10) linear segments, at which a Generation Resource or Demand Response Resource-Type II can respond to the Setpoint Instructions in the upward direction only.

**Sink Point:** The Commercial Pricing Node at which a Financial Schedule terminates.

**Source Point:** The Commercial Pricing Node at which a Financial Schedule originates.

**Spin Qualified Resource:** A Generation Resource, an External Asynchronous Resource, a
Demand Response Resource-Type I, a Demand Response Resource-Type II, or a Stored Energy Resource – Type II that has met the requirements to be eligible to submit Spinning Reserve Offers into the Energy and Operating Reserve Markets.

**Spinning Reserve:** A specified percentage, based on Applicable Reliability Standards, of Contingency Reserve that must be synchronized to the Transmission System and that meets all Applicable Reliability Standards, and that can be converted to Energy within the Contingency Reserve Deployment Period following a deployment instruction.

**Spinning Reserve Offer:** The price, in dollars per MW per Hour, at which a Spinning Reserve Qualified Resource has agreed to sell Spinning Reserve.

**Start-Up Notification Time:** The amount of notification time required by a Generation Resource prior to the initiation of start-up procedures or the amount of notification time required for a Demand Response Resource Type II or Stored Energy Resource – Type II prior to the initiation of demand reduction procedures, from a hot state, intermediate state and cold state.

**Start Up Offer:** The compensation required by a Market Participant for bringing an off line Generation Resource on line or for reducing consumption of a Demand Response Resource-Type II or Stored Energy Resource – Type II.

**Start-Up Time:** The number of Hours required to start a Generation Resource, Demand Response Resource-Type II, LMR, or Stored Energy Resource – Type II and synchronize with the Transmission Provider Region to Hourly Economic Minimum Limit consistent with the Applicable Reliability Standards from a hot state, intermediate state or cold state.
**State Estimator:** A software program used by the Transmission Provider to create a real time assessment of the condition of the Transmission Provider Region.

**State Estimator MWs:** The megawatts that are determined by the State Estimator to be generated at a given location for each Dispatch Interval.

**State of Charge:** The Regulating Reserve available to the Transmission Provider’s markets from a Stored Energy Resource; or the Energy, Capacity, Spinning Reserve, Supplemental Reserve and/or Regulating Reserve available to the Transmission Provider’s markets from a Stored Energy Resource – Type II.

**Statement of Support:** A document that the Transmission Provider provides to Transmission Developer Applicants for submission with a Transmission Developer Application, which:

1. is executed by an Affiliate of a Transmission Developer Applicant;
2. lists specific qualifications, capabilities, and/or competencies that the Affiliate possesses and intends to make available to the Transmission Developer Applicant in order to assist the Transmission Developer Applicant with meeting one or more of the prequalification requirements set forth in Sections VIII.B.4, VIII.B.4.1, VIII.B.4.2, VIII.B.4.3, and/or VIII.B.4.4 of Attachment FF to the Tariff; and
3. authorizes the Transmission Developer Applicant to represent during the annual prequalification and recertification processes set forth in Sections VIII.B.2 and VIII.B.3 of Attachment FF to the Tariff that such Transmission Developer Applicant will have access to the specified qualifications, capabilities, and/or competencies.

**Station Power:** The Energy used for operating the electrical equipment on the site of a Generation Resource and/or for the lighting, heating, air-conditioning and office
equipment needs of buildings located on the site of such a Generation Resource that are used in the operation, maintenance, or repair of the facility. Station Power does not include Energy (i) used for pumping at a pumped storage facility; (ii) to power synchronous condensers; (iii) in association with power system restoration or blackstart service, or (iv) used for charging a Stored Energy Resource or a Stored Energy Resource – Type II. Station Power may only be provided pursuant to Schedule 20 of this Tariff.

Storage As Transmission Only Asset (SATOA): An Electric Facility connected to or to be connected to the Transmission System and approved for inclusion in Appendix A of the MTEP, as a transmission facility that is part of the Transmission System, that is capable of receiving Energy from the Transmission System and storing Energy for injection to the Transmission System, and is operated only to support the Transmission System. The SATOA shall not participate in the Transmission Provider’s markets except to the extent necessary to receive Energy from the Transmission System and to inject Energy into the Transmission System to provide the services for which the SATOA was included in the MTEP.


Stored Energy Resource Offer: A Regulating Capacity Offer and a Regulating Mileage Offer submitted by a Market Participant within the MISO Balancing Authority Area for the output of a specified Stored Energy Resource to supply Regulating Reserve to the Energy and Operating Reserve Markets.
**Stored Energy Resource – Type II:** A Resource either behind or in front of the meter capable of supplying Energy, Capacity, Spinning Reserve, Supplemental Reserve, Regulating Reserve, Up Ramp Capability, and/or Down Ramp Capability, through the storage and discharge of electrical Energy in response to Setpoint Instructions, including but not limited to negative dispatch levels, and whose State of Charge is managed by the Market Participant operating the Resource. A Stored Energy Resource – Type II shall be registered, modeled, offered and dispatched, as well as monitored and mitigated, as a Demand Response Resource – Type II, and shall use the Offer template for a Demand Response Resource – Type II, provided, that:

1. An SER – Type II will not be settled and compensated as a Demand Response Resource – Type II for any negative dispatch, and instead shall be treated as a regular Generation Resource for settlement purposes, except that an SER – Type II shall not be eligible for Day-Ahead Revenue Sufficiency Guarantee Payments, Real-Time Revenue Sufficiency Guarantee Credit, Real-Time Offer Revenue Sufficiency Guarantee Payment and Day-Ahead Margin Assurance Payment.

2. Reference Levels of SER – Type II shall be determined in accordance with section 64.1.4.a.i, 64.1.4.a.ii, and 64.1.4.b.i of this Tariff.

**Stored Energy Resource – Type II Offer:** An Offer submitted by a Market Participant within the MISO Balancing Authority Area for the output of a specified Stored Energy Resource – Type II to supply Energy, Capacity, Spinning Reserve, Supplemental Reserve and/or Regulating Reserve to the Energy and Operating Reserve Markets.

**Sub-Area:** A Reserve Zone, or any other portion of the MISO Balancing Authority Area.
identified by MISO as described in MISO’s emergency operating procedures, that may require the implementation of emergency actions to address a local reliability problem.

**Sub-Regional Export Constraint (SREC):** The amount of Planning Resources in megawatts modeled in the PRA within an applicable Sub-Regional Resource Zone (SRRZ) that can be cleared in excess of the total individual LRZ’s PRMR comprising the SRRZ in accordance with applicable seams agreements, coordination agreements, or transmission service agreements.

**Sub-Regional Import Constraint (SRIC):** The amount of Planning Resources in megawatts modeled in the PRA, not within an applicable Sub-Regional Resource Zone (SRRZ), that can be cleared to meet the total PRMR of the individual LRZs comprising the SRRZ in accordance with applicable seams agreements, coordination agreements, or transmission service agreements.

**Sub-Regional Power Balance Constraint:** A net Energy injection and withdrawal constraint established to manage intra-regional flows in accordance with applicable seams agreements, coordination agreements, transmission service agreements, or operating procedures.

**Sub-Regional Power Balance Constraint Demand Curve:** A demand curve used to price Sub-Regional Power Balance Constraints.

**Sub-Regional Resource Zone (SRRZ):** A zone, comprised of a LRZ or combination of two or more LRZs, established by the Transmission Provider for Resource Adequacy Requirements under Module E-1 or E-2 to administer constraints in accordance with
applicable seams agreements, coordination agreements, or transmission service agreements.

**Supervisory Control and Data Acquisition (SCADA) Data:** The electric system security data that is used to monitor the electrical state of facilities, as specified in NERC Policy 4.

**Supplemental Qualified Resource:** A Spin Qualified Resource, or a Demand Response Resource-Type I or, a Generation Resource, Demand Response Resource Type-II, Stored Energy Resource – Type II, or an External Asynchronous Resource that is not a Spin Qualified Resource that has met the requirements to be eligible to submit Supplemental Reserve Offers into the Energy and Operating Reserve Markets.

**Supplemental Reserve:** Contingency Reserve that is not considered Spinning Reserve that can be converted to Energy within the Contingency Reserve Deployment Period and that meets all Applicable Reliability Standards.

**Supplemental Reserve Offer:** The price, in dollars per MW per Hour, at which a Demand Response Resource Type I or an External Asynchronous Resource that is a Supplemental Reserve Qualified Resource has agreed to sell Supplemental Reserve.

**Suspend:** The cessation of operation of a Generation Resource or an SCU for more than two (2) months commencing on a specified date that is provided to the Transmission Provider, that includes the right to rescind or modify the Attachment Y Notice for a period ending no later than thirty-six (36) months after the start date specified in an original (i.e. initial, first) Attachment Y Notice, consistent with the requirements in Section 38.2.7 and Attachment X.

**Synchronous Condenser Unit (SCU):** A facility that can be synchronized to the Transmission
Provider’s Transmission System without producing Energy.

**System Auction Clearing Price (System ACP):** The marginal value (“shadow price”) associated with the system-wide Demand constraint. This Demand constraint ensures that the amount cleared, in all LRZs, is at least equal to the total PRMR in all LRZs. The marginal value of this constraint provides a quantitative result of the value of obtaining the marginal MW from the non-export-constrained LRZ(s).

**System Condition:** A specified condition on the Transmission System or on a neighboring transmission system, such as a constrained transmission element or flowgate, that may trigger Curtailment of Long-Term Firm Point-To-Point Transmission Service or Long-Term Firm HVDC Service using the curtailment priority pursuant to Section 13.6 or 27A.1.5 of this Tariff, respectively. Such conditions must be identified in the Transmission Customer’s Service Agreement or HVDC Service Agreement.

**System Impact Study:** An assessment by the Transmission Provider and ITC, as applicable, of (i) the adequacy of the Transmission System to accommodate a request for either Firm Point-To-Point Transmission Service or Network Integration Transmission Service and (ii) whether any additional costs may be incurred in order to provide Transmission Service. System Impact Studies for any transmission facilities not under the operational control of the Transmission Provider or ITC shall be performed by the Transmission Owner or applicable ITC Participant or any entity the Transmission Provider designates to perform the studies.

**System Losses:** The transmission losses experienced on the Transmission System as determined by the Network Model.
**System Operating Limit (SOL):** The value (such as MW) that satisfies the most limiting of the prescribed operating criteria for a specified system configuration to ensure operation within acceptable reliability criteria. Also referred to as Operating Security Limit.

**System Purchase Contracts:** Agreements for the purchase of Energy that do not specify the Resource(s) that the seller shall select to supply such Energy at any particular time; provided, however, that such agreements may identify the group of Resources from which the seller may make its selection; provided, further that this term does not include agreements with Manitoba Hydro involving the supply of Energy from resources in Canada up to or at the U.S. border.

**System Restoration Plans:** The plans developed by the individual Transmission Operators, and coordinated by the Transmission Provider acting in its capacity as the Reliability Coordinator, to enable a system restoration zone to re-energize the Transmission System following a system-wide blackout.

**System Support Resource (SSR):** Generation Resources or Synchronous Condenser Units that have been identified in Attachment Y – Notification to this Tariff and are required by the Transmission Provider for reliability purposes, to be operated in accordance with the procedures described in Section 38.2.7 of this Tariff.

**SSR Agreement:** An agreement identified as Attachment Y 1 to this Tariff that the Transmission Provider, the owner or operator of an SSR Unit executes to provide the terms and conditions under which the SSR Unit will be operated and compensated.

**SSR Notification:** The form in Attachment Y of this Tariff that the owner or operator of a Generation Resource or a Synchronous Condenser Unit must complete and send to the
Transmission Provider at least twenty-six (26) weeks prior to Retiring or Suspending any Generation Resource or Synchronous Condenser Unit located within the Transmission Provider Region, consistent with the requirements in Section 38.2.7.

**SSR Unit:** A Generation Resource or a Synchronous Condenser Unit that is operated and compensated in accordance with an SSR Agreement.
Credits for Real-Time Energy and Operating Reserve Market Sales

a. Real-Time Energy Credits

i. Non-Excessive Energy Credits. Market Participants are credited the applicable Real-Time Ex Post LMP for Non-Excessive Energy for Generation Resources, Stored Energy Resources, Stored Energy Resources – Type II, and External Asynchronous Resources for Import Schedules pursuant to Section 40.3.4, net of Real-Time Financial Schedules, that exceeds their Day-Ahead Scheduled Injections (and will be charged for Non-Excessive Energy, net of Real-Time Financial Schedules, deviations below their Day-Ahead Scheduled Injections). The applicable Real-Time Ex Post LMP is the LMP at the Commercial Pricing Node at which the injection occurs.

A. Non-Excessive Energy Credits for Storage as Transmission Only Asset. Market Participants are credited the applicable Real-Time Ex Post LMP for Non-Excessive Energy for Storage as Transmission Only Assets (and will be charged for Non-Excessive Energy withdrawals). The applicable Real-Time Ex Post LMP is the LMP at the Commercial Pricing Node at which the injection (or withdrawal) occurs.

ii. Excessive Energy Credits. Market Participants are credited the Dispatch Interval Excessive Energy Price for Excessive Energy, as calculated pursuant to Section 40.3.4, where there is Excessive Energy, Deficient Energy or any combination thereof in four (4) or more consecutive Dispatch Intervals in a specific Hour. The Dispatch Interval Excessive Energy Price for Generation Resources (except...
Dispatchable Intermittent Resources), Demand Response Resource – Type I, Demand Response Resource – Type II, External Asynchronous Resource and Stored Energy Resource – Type II is the lesser of (1) the Real-Time Ex Post LMP and (2) the greater of (a) the Energy Offer at the Dispatch Target and (b) zero. The Dispatch Interval Excessive Energy Price for Dispatchable Intermittent Resources is the lesser of: First, the Real-Time Ex Post LMP; or Second, the product of: (1) the Real-Time Ex Post LMP and (2) maximum of (a) 1 minus the quotient of Excessive Energy divided by the Excessive Energy Tolerance and (b) zero.

Excessive Energy associated with Stored Energy Resources is settled at the Real-Time Ex Post LMP.

b. Real-Time Operating Reserve and Regulating Mileage Credits

i. Real-Time Energy and Operating Reserve Market Regulating Mileage Sales Definitions. For the purposes of calculating credits for Real-Time Energy and Operating Reserve Market Regulating Mileage Sales, the following terms are calculated as follows:

Instructed Total Mileage is calculated as the sum of the absolute values of up and down movement during a Dispatch Interval, in MW, that a resource is asked to provide in response to Setpoint Instructions using the resource’s applicable ramp rate.

Instructed Energy Mileage is calculated as the sum of the absolute values of the up and down movement during a Dispatch Interval, in MW, that a resource is
asked to provide in response to Energy Dispatch Targets and Contingency Reserve Deployment Instructions using a resource’s applicable ramp rate.

Instructed Regulating Mileage is calculated as the difference between Instructed Total Mileage and Instructed Energy Mileage for each Dispatch Interval.

Regulating Mileage Target is calculated as the minimum of the Instructed Regulating Mileage and the Desired Resource Response for a Dispatch Interval.

Additional Regulating Mileage is calculated as the positive difference between the Regulating Mileage Target for a Resource and the Regulating Mileage considered in the Regulating Total Cost for the Resource during a Dispatch Interval.

Undeployed Regulating Mileage is calculated as the positive difference between the Regulating Mileage considered in the Regulating Total Cost for a Resource and the Regulating Mileage Target for the Resource during a Dispatch Interval.

The Regulating Mileage considered in the Regulating Total Cost for a Resource during a Dispatch Interval is equal to the Regulating Reserve Dispatch Target multiplied by the Market-wide Regulating Mileage Deployment Ratio.

The Transmission Provider shall update the Market-wide Regulating Deployment Ratio each month for the upcoming month to reflect changes in actual regulation deployment. The study will use data from the 15th of the previous month to the 15th of the current month to calculate the Market-wide Regulating Mileage Deployment Ratio that is effective starting the first of the upcoming month. The Market-wide Regulating Mileage Deployment Ratio is equal to the average of the ratio between the Regulating Mileage Target in a Dispatch Interval and the
Regulating Reserve Dispatch Target in that Dispatch Interval for all Resources for all Dispatch Intervals with non-zero Regulating Reserve Dispatch Targets.

ii. Regulating Reserve Credit. Market Participants are credited the Real-Time Ex Post MCP for any positive difference between the Real-Time cleared amounts for Regulating Reserve within a Dispatch Interval in an Hour and their Day-Ahead Schedule for Regulating Reserve in that Hour (and will be charged the Ex Post MCP for any negative difference between the Real-Time cleared amounts for Regulating Reserve within a Dispatch Interval in an Hour and their Day-Ahead Schedule for Regulating Reserve in that Hour). The applicable Ex Post MCP for Regulating Reserve is for the Commercial Pricing Node at which the procurement occurs. The Regulating Reserve Credit will be reduced by the product of the Ex Post MCP for Regulating Mileage and Undeployed Regulating Mileage for each Dispatch Interval in the Hour. The sum of Regulating Reserve Credits in the Hour will also be augmented by the Undeployed Regulating Mileage Revenue Sufficiency Guarantee Credit as set forth in Schedule 3.

iii. Spinning Reserve Credits. Market Participants are credited the Real-Time Ex Post MCP for any positive difference between the Real-Time cleared amounts for Spinning Reserve within the Dispatch Interval in an Hour and their Day-Ahead Schedule for Spinning Reserve in that Hour (and will be charged the Real-Time Ex Post MCP for any negative difference between the Real-Time cleared amounts for Spinning Reserve within a Dispatch Interval in an Hour and their Day-Ahead Schedule for Spinning Reserve in that Hour). The applicable Ex Post MCP for
Spinning Reserve is for the Commercial Pricing Node at which the procurement occurs.

iv. Supplemental Reserve Credits. Market Participants are credited the Real-Time Ex Post MCP for any positive difference between the Real-Time cleared amounts for Supplemental Reserve within a Dispatch Interval in an Hour and their Day-Ahead Schedule for Supplemental Reserve in that Hour (and will be charged for any negative difference between the Real-Time cleared amounts for Supplemental Reserve within a Dispatch Interval in an Hour less their Day-Ahead Schedule for Supplemental Reserve in that Hour). The applicable Real-Time Ex Post MCP for Supplemental Reserve is for the Commercial Pricing Node at which the procurement occurs.

v. Regulating Mileage Credit. Market Participants are credited the Hourly Real-Time Ex Post Regulating Mileage MCP for the sum of Additional Regulating Mileage for each Dispatch Interval in an Hour.

c. **Real-Time Revenue Sufficiency Guarantee Credit.** The Transmission Provider shall determine, on a daily basis, whether any Generation Resource or Demand Response Resource committed by the Transmission Provider in the Real-Time Energy and Operating Reserve Market did not recover the sum of the Resource’s eligible Production Cost and Operating Reserve Cost through the revenue received through the Real-Time Energy and Operating Reserve Market during the SCUC-Instructed Hours of Operation. In addition, the Transmission Provider shall determine on an hourly basis whether External Asynchronous Resources Export Schedule charges are greater than the energy...
value for export, calculated as the area under the Energy Offer curve for export Energy. If there is a shortfall, the Transmission Provider shall augment the Market Participant’s revenue with a Real-Time Revenue Sufficiency Guarantee Credit, pursuant to Section 40.3.3.3.c.iii.

i. Real-Time Revenue Sufficiency Guarantee Full Payment Criteria. In order to be eligible for full payment of Real-Time Revenue Sufficiency Guarantee Credit, all Hours in the SCUC Instructed Hours of Operation for a Resource must comply with the following requirements, provided that the specified Offer data shall include any overrides entered by the Transmission Provider at the request of the Market Participant that owns or represents the Resource:

(a) The Resource must not receive an Excessive/Deficient Energy Deployment Charge, pursuant to Section 40.3.4, during an Hour. Any Resource receiving an Excessive/Deficient Energy Deployment Charge in an Hour will be subject to a Real-Time Revenue Sufficiency Guarantee Credit reduction, pursuant to Section 40.3.3.3.c.ii.b, for that Hour and all remaining contiguous Hours in the Real-Time SCUC Instructed Hours of Operation.

(b) For all Resources other than Demand Response Resource Type-I, the real-time Economic Minimum Dispatch must be less than or equal to the maximum of:

(i) the as-committed Hourly Economic Minimum Limit; (ii) the as-committed self-schedule MW for instances where the Energy Dispatch Status is self-schedule; or (iii) the as-committed Hourly Regulation Minimum for instances where the Resource is scheduled to potentially provide Regulating Reserve. For
Demand Response Resource - Type I, the real-time Dispatch Target for Energy must be less than or equal to the as committed Targeted Demand Reduction Level. This criterion will be checked for each Dispatch Interval within the Hour and for each Hour of the contiguous Real-Time SCUC Instructed Hours of Operation, sequentially. If four or more consecutive Dispatch Intervals in an Hour fail to meet this criterion, the Resource will be subject to a Real-Time Revenue Sufficiency Guarantee Credit reduction, pursuant to Section 40.3.3.3.c.ii.b, for that Hour and all remaining contiguous Hours in the Real-Time SCUC Instructed Hours of Operation.

(c) In addition, for Resources where all limits used in the Real-Time Energy and Operating Reserve Market within the Dispatch Interval have a dispatch range of greater than 1MW, the following criteria must also be satisfied:

(i) The Real-Time ramp rate utilized by the Unit Dispatch System (UDS) must be greater than 0.5 MW/minute.

(ii) The Real-Time ramp rate utilized by the Unit Dispatch System must be greater than one-half of one percent (0.5%) of the real-time Hourly Economic Maximum Limit of the Generation Resource or Demand Response Resource-Type II per minute and non-decreasing except where:

(1) Resource output is greater than or equal to ninety percent (90%) of the real-time Hourly Economic Maximum Limit as determined by the Unit Dispatch System, then real-time ramp rate utilized by the Unit Dispatch System must be greater than one-half (0.5) MW/minute.
(2) Resource output is less than or equal to the real-time Hourly Economic Minimum Limit plus ten percent (10%) of the real-time Hourly Economic Maximum Limit as determined by the Unit Dispatch System, in which case the real-time ramp rate utilized by the Unit Dispatch System must be greater than one-half (0.5) MW/minute.

(iii) These criteria will be checked for each Dispatch Interval within the Hour and for each contiguous Hour of the SCUC Instructed Hours of Operation, sequentially. If four or more consecutive Dispatch Intervals in an Hour fail to meet these criteria, the Resource will be subject to a Real-Time Revenue Sufficiency Guarantee Credit reduction, pursuant to Section 40.3.3.3.c.ii.b, for that Hour and the subsequent Hours of the Real-Time SCUC Instructed Hours of Operation.

(d) For all Resources other than Demand Response Resource Type-I, the Resource Offer Up and Down Ramp Capability Dispatch Status must be Economic. This criterion will be checked for each Dispatch Interval within the Hour and for each Hour of the contiguous Real-Time SCUC Instructed Hours of Operation, sequentially. If four or more consecutive Dispatch Intervals in an Hour fail to meet this criterion, the Resource will be subject to a Real-Time Revenue Sufficiency Guarantee Credit reduction, pursuant to Section 40.3.3.3.c.ii.b, for that Hour and all remaining contiguous Hours in the Real-Time SCUC Instructed Hours of Operation.
ii. Calculation of Real-Time Revenue Sufficiency Guarantee Credit for Real-Time SCUC Instructed Hours of Operation

(a) Revenue Sufficiency Guarantee Full Payment: Resources that satisfy the Real-Time Revenue Sufficiency Guarantee Full Payment Criteria described in Section 40.3.3.3.c.i shall receive a Real-Time Revenue Sufficiency Guarantee Credit for the Real-Time SCUC Instructed Hours of Operation in the current Operating Day, as described below.

If the sum of the Generation Resource’s or Demand Response Resource’s Production Cost (based on Non-Excessive Energy injection) and Operating Reserve Cost is greater than the revenue over each contiguous commitment period for that Resource, then the Market Participant’s Real-Time Energy and Operating Reserve Market credits shall be augmented by an additional credit called the Real-Time Revenue Sufficiency Guarantee Credit in the amount of the revenue shortfall, spread over all the Hours in that contiguous commitment period. The determination of such credit shall consider only Operating Reserve Costs associated with real-time Operating Reserves volumes that are greater than the day-ahead Operating Reserve volumes. The revenue shall be calculated as the sum of the following values:

(i) Energy Revenue. For Generation Resources and Demand Response Resources, as determined, for all Dispatch Intervals in an Hour, by the sum of the products of: (1) the Non-Excessive Energy injections; (2) the Real-Time Ex Post LMP; and (3) the duration of the Dispatch Interval expressed in Hours;
(ii) Operating Reserve Revenue. The sum of: real-time Regulating Reserve revenue as determined by the sum, for all Dispatch Intervals in an Hour, of the products of: (1) the real-time Regulating Reserve volume; (2) the real-time Regulating Reserve Ex Post MCP; and (3) the duration of the Dispatch Interval expressed in Hours; and the sum, as determined as follows, of the real-time Contingency Reserve revenue for all Dispatch Intervals in the real-time SCUC Instructed Hours of Operation, plus any applicable Minimum Down Time requirements in the current Operating Day: (a) If the day-ahead Contingency Reserve volume is greater than zero and greater than the real-time Contingency Reserve volume, the real-time Contingency Reserve revenue is determined by the product of: (1) the real-time Contingency Reserve volume minus the day-ahead Contingency Reserve volume; (2) the real-time Contingency Reserve Ex Post MCP minus the day-ahead Contingency Reserve offer cost; and (3) the duration of such Dispatch Intervals expressed in Hours; (b) If the day-ahead Contingency Reserve volume is greater than zero and less than or equal to the real-time Contingency Reserve volume, the real-time Contingency Reserve revenue is determined by the product of: (1) the real-time Contingency Reserve volume minus the day-ahead Contingency Reserve volume; (2) the real-time Contingency Reserve Ex Post MCP; and (3) the duration of such Dispatch Intervals expressed in Hours; (c) If the day-ahead Contingency Reserve volume is equal to zero, the real-time Contingency Reserve revenue is determined by the product of: (1) the
real-time Contingency Reserve volume; (2) the real-time Contingency Reserve Ex Post MCP; and (3) the duration of such Dispatch Intervals expressed in Hours.

(iii) Regulating Reserve Deployment Revenue. Real-time Regulating Reserve Deployment revenue as determined, for all Dispatch Intervals in an Hour, by the sum of the product of: (1) the Regulating Reserve Deployment charge/credit determined pursuant to Section 40.3.3.1.a.vi; and (2) the duration of the Dispatch Intervals expressed in Hours.

(iv) Ramp Capability Revenue. Ramp Capability Revenue as determined for the Hour by the sum of (a) the Up Ramp Capability Credit pursuant to Section 40.3.3.1.b.i; and (b) the Down Ramp Capability Credit pursuant to Section 40.3.3.1.b.ii.

(b) Revenue Sufficiency Guarantee Credit Reduction

(i) Energy Revenue Reduction: For any Resource that fails to meet the Real-Time Revenue Sufficiency Guarantee Full Payment Criteria for an Hour during the Real-Time SCUC Instructed Hours of Operation, the Revenue Sufficiency Guarantee Full Payment calculation shall be modified such that the Production Costs and Energy Revenue will be based on the eligible MW value. For all Resources other than Demand Response Resource Type-I, the eligible MW value for a given Dispatch Interval is equal to the lesser of: (1) the Actual Energy Injection; (2) the Excessive Energy Threshold; (3) the Hourly Economic Minimum Limit used by the UDS for the Dispatch Interval; (4) the as-committed self-schedule MW for instances where the Energy Dispatch Status is self-
schedule; or (5) the Hourly Regulation Minimum Limit used by the UDS for the Dispatch Interval for instances where the Resource is scheduled to potentially provide Regulating Reserve. For Demand Response Resource Type-I, the eligible MW value is equal to the lesser of: (1) the Actual Energy Injection; or (2) the as-committed Targeted Demand Reduction Level.

(ii) Ineligible Energy Margin: In order to avoid increasing the total Real-Time Revenue Sufficiency Guarantee Credit for a Resource that fails to meet the Real-Time Revenue Sufficiency Guarantee Full Payment Criteria, the Transmission Provider shall also include any additional energy margin that results from Revenue Sufficiency Guarantee Credit Reduction. The additional energy margin is calculated as the greater of: (1) the difference between (a) the Energy Revenue associated with Actual Energy Injections between the eligible MW value and the Non-Excessive Energy injections; and (b) the Production Costs for the Energy associated with Actual Energy Injections between the eligible MW value and the Non-Excessive Energy injections; and (2) zero.

iii. External Asynchronous Resources Export Schedule Real-Time Revenue Sufficiency Guarantee Credit. The hourly basis External Asynchronous Resources Export Schedule credit is the product of 1) the net positive difference between (a) the Real-Time Hourly Export Energy value, and (b) the Day-Ahead Hourly Export Energy value, and 2) the Real-Time Hourly LMP at the External Asynchronous Resources Commercial Pricing Node. The hourly basis for the External Asynchronous Resources Export energy value is the area under the
MISO  
FERC Electric Tariff  
MODULES  

Credits for Real-Time Energy and Operating Reserve Market

40.3.3.3

Energy Offer curve between the Day-Ahead hourly Export energy and Real-Time hourly Export energy.

iv. Cost Allocation. This credit shall be supported through revenue collected from the Real-Time Revenue Sufficiency Guarantee Charge.

d. Applicability of Excessive/Deficient Energy Deployment Charges and Contingency Reserve Deployment Failure Charges

The provisions of Section 40.3.4 related to Excessive/Deficient Energy Deployment Charges and Contingency Reserve Deployment Failure Charges shall apply to Resources irrespective of the provisions of this Section.
ATTACHMENT X

GENERATOR INTERCONNECTION PROCEDURES (GIP)

SECTION 1. DEFINITIONS.

10 kW Inverter Process shall mean the procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the screen set forth in Section 14.

Adverse System Impact shall mean the negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.

Affected System shall mean an electric transmission or distribution system or the electric system associated with an Existing Generating Facility or of a higher queued Generating Facility, which is an electric system other than the Transmission Owner’s Transmission System that is affected by the Interconnection Request. An Affected System may or may not be subject to FERC jurisdiction.

Affected System Operator shall mean the entity that operates an Affected System.

Affiliate shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

Ancillary Services shall mean those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the Transmission System in accordance with Good Utility Practice.
**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority having jurisdiction over the Parties, their respective facilities and/or the respective services they provide.

**Applicable Reliability Council** shall mean the Regional Entity of NERC applicable to the Local Balancing Authority of the Transmission System to which the Generating Facility is directly interconnected.

**Applicable Reliability Standards** shall mean Reliability Standards approved by the Federal Energy Regulatory Commission (FERC) under section 215 of the Federal Power Act, as applicable.

**Base Case** shall mean the base case power flow, short circuit, and stability databases used for the Interconnection Studies by Transmission Provider or Interconnection Customer.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Generator Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Generator Interconnection Agreement.

**Business Day** shall mean Monday through Friday, excluding Federal Holidays.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.
**Commercial Operation Date (COD)** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed by the Parties pursuant to Appendix E to the Generator Interconnection Agreement.

**Common Use Upgrade** shall mean an Interconnection Facility, Network Upgrade, System Protection Facility, or any other classified addition, alteration, or improvement on the Transmission System or the transmission system of an Affected System, not classified under Attachment FF as a Baseline Reliability Project, Market Efficiency Project, or Multi-Value Project, that is needed for the interconnection of multiple Interconnection Customers’ Generating Facilities and which is the shared responsibility of such Interconnection Customers.

**Confidential Information** shall mean any proprietary or commercially or competitively sensitive information, trade secret or information regarding a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, or any other information as specified in Article 22 of the GIA, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, that is received by another Party.

**Connection Facilities** shall mean the Transmission Owner’s Connection Facilities and the MHVDC Connection Customer’s Connection Facilities, as defined in the MHCP.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Generator Interconnection Agreement.

**Definitive Planning Phase** shall mean the Generator Interconnection Procedures process which leads to a Generator Interconnection Agreement. The Definitive Planning Phase consists of three distinct phases (Definitive Planning Phases I, II, and III) pursuant to Section 7 of the Generator Interconnection Procedures.
Definitive Planning Phase Queue Position shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, in the Definitive Planning Phase. The Definitive Planning Phase Queue Position is established based upon the date Interconnection Customer satisfies all of the requirements of Section 7.2 of the Generator Interconnection Procedures to enter the Definitive Planning Phase.

Demonstrated Capability shall mean the continuous net real power output that the Generating Facility is required to demonstrate in compliance with Applicable Reliability Standards.

Dispute Resolution shall mean the procedure for resolution of a dispute between or among the Parties in which they will first attempt to resolve the dispute on an informal basis.

Distribution System shall mean the Transmission Owner’s facilities and equipment, or the Distribution System of another party that is interconnected with Transmission Owner’s Transmission System, if any, connected to the Transmission System, over which facilities Transmission Service or Wholesale Distribution Service under the Tariff is available at the time Interconnection Customer has requested interconnection of a Generating Facility for the purpose of either transmitting electric energy in interstate commerce or selling electric energy at wholesale in interstate commerce and which are used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among Local Balancing Authorities and other entities owning distribution facilities interconnected to the Transmission System.

Distribution Upgrades shall mean the additions, modifications, and upgrades to the Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the delivery service necessary to affect Interconnection Customer’s wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.
**Effective Date** shall mean the date on which the Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission, or if filed unexecuted, upon the date specified by the Commission.

**Emergency Condition** shall mean a condition or situation: (1) that in the reasonable judgment of the Party making the claim is imminently likely to endanger, or is contributing to the endangerment of, life, property, or public health and safety; or (2) that, in the case of either Transmission Provider or Transmission Owner, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the Transmission System, Transmission Owner’s Interconnection Facilities or the electric systems of others to which the Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer’s Interconnection Facilities. System restoration and blackstart shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the Generator Interconnection Agreement to possess blackstart capability. Any condition or situation that results from lack of sufficient generating capacity to meet load requirements or that results solely from economic conditions shall not constitute an Emergency Condition, unless one of the enumerated conditions or situations identified in this definition also exists.

**Energy Displacement Agreement** shall mean an agreement between an Interconnection Customer with an Existing Generating Facility on the Transmission Provider’s Transmission System and an Interconnection Customer with a proposed Generating Facility seeking to interconnect with Net Zero Interconnection Service. The Energy Displacement Agreement specifies the term of operation, the Generating Facility Interconnection Service limit, and the mode of operation for energy production (common or singular operation).

**Energy Resource Interconnection Service (ER Interconnection Service)** shall mean an Interconnection Service that allows Interconnection Customer to connect its Generating
Facility to the Transmission System or Distribution System, as applicable, to be eligible to deliver the Generating Facility’s electric output using the existing firm or non-firm capacity of the Transmission System on an as available basis. Energy Resource Interconnection Service does not convey transmission service.

**Engineering & Procurement (E&P) Agreement** shall mean an agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Existing Generating Facility** shall mean a Generating Facility that is either under construction or is in service, and has an unsuspended interconnection agreement with its host transmission provider.

**Facilities Construction Agreement (FCA)** shall mean the form of facilities construction agreement, set forth in Appendix 8 to these Generator Interconnection Procedures. The FCA shall be used when an Interconnection Customer causes the need for the construction of Network Upgrades or System Protection Facilities on the transmission system of an Affected System.

**Fast Track Process** shall mean the procedure for evaluating an Interconnection Request for a certified Small Generating Facility no larger than five MW that includes the screen set forth in Section 14, customer options meeting, and optional supplemental review.

**Federal Holiday** shall mean a Federal Reserve Bank holiday for a Party that has its principal place of business in the United States and a Canadian Federal or Provincial banking holiday for a Party that has its principal place of business located in Canada.

Effective On: March 11, 2020

FERC shall mean the Federal Energy Regulatory Commission, also known as Commission, or its successor.

Final System Impact Study shall mean the System Impact Study performed during Definitive Planning Phase III.

Force Majeure shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure event does not include an act of negligence or intentional wrongdoing by the Party claiming Force Majeure.

Generating Facility shall mean Interconnection Customer’s device(s) for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer’s Interconnection Facilities and shall not include a SATOA as defined in Module A. A Generating Facility consists of one or more generating unit(s) and/or storage device(s) which usually can operate independently and be brought online or taken offline individually.

Generating Facility Capacity shall mean the net capacity of the Generating Facility and the aggregate net capacity of the Generating Facility where it includes multiple energy production devices.

Generating Facility Modification shall mean modification to an Existing Generating Facility, including comparable replacement of only a portion of the equipment at the Existing Generating Facility.
**Generating Facility Replacement** shall mean replacement of one or more generating units and/or storage devices at an Existing Generating Facility with one or more new generating units or storage devices at the same electrical Point of Interconnection as those being decommissioned and electrically disconnected.

**Generator Interconnection Agreement (GIA)** shall mean the form of interconnection agreement, set forth in Appendix 6 to these Generator Interconnection Procedures.

**Generator Interconnection Procedures (GIP)** shall mean the interconnection procedures set forth herein.

**Generator Upgrades** shall mean the additions, modifications, and upgrades to the electric system of an Existing Generating Facility or of a higher queued Generating Facility at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the Transmission Service necessary to affect Interconnection Customer’s wholesale sale of electricity in interstate commerce.

**Good Utility Practice** shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental
authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include Interconnection Customer, Transmission Provider, Transmission Owner, or any Affiliate thereof.

**Group Study(ies)** shall mean the process whereby more than one Interconnection Request is studied together, instead of serially, for the purpose of conducting one or more of the required Interconnection Studies.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**HVDC Facilities** shall mean the high voltage direct current transmission facilities, including associated alternating current facilities, if any, that are subject to Section 27A of the Tariff and that are specifically identified in (i) any Agency Agreement pertaining to such facilities between Transmission Provider and Transmission Owner that owns or operates such facilities, or (ii) in any other arrangement that permits or will permit Transmission Provider to provide HVDC Service over such facilities as set forth in Section 27A of the Tariff.

**HVDC Service** shall mean Firm and Non-Firm Point-To-Point Transmission Service provided by Transmission Provider on HVDC Facilities pursuant to Section 27A of the Tariff.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.
**Injection Rights** shall mean the Transmission Provider’s pre-certification of the Transmission System’s capability to receive capacity and energy from the MHVDC Transmission Line at the requested Point of Connection, and in the specified MW quantity, without degrading the reliability of the Transmission System, as described in Section 16 of the GIP and Section 3.2.3 of the MHCP.

**In-Service Date (ISD)** shall mean the date upon which Interconnection Customer reasonably expects it will be ready to begin use of the Transmission Owner’s Interconnection Facilities to obtain back feed power.

**Interconnection Customer** shall mean any entity, including Transmission Provider, Transmission Owner or any of the Affiliates or subsidiaries of either, that proposes to interconnect its Generating Facility with the Transmission System.

**Interconnection Customer Decision Point I** shall mean the time period beginning when the Interconnection Customer is provided the Preliminary System Impact Study results including cost estimates for upgrades and concludes after fifteen (15) Business Days.

**Interconnection Customer Decision Point II** shall mean the time period beginning when the Interconnection Customer is provided the Revised System Impact Study results including cost estimates for upgrades and the Affected Systems analysis results including cost estimates for upgrades on the Affected System and concludes after fifteen (15) Business Days.

**Interconnection Customer’s Interconnection Facilities (ICIF)** shall mean all facilities and equipment, as identified in Appendix A of the Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Transmission System or Distribution System, as applicable. Interconnection Customer’s Interconnection Facilities are sole use facilities.
**Interconnection Facilities** shall mean the Transmission Owner’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Transmission System. Interconnection Facilities shall not include Distribution Upgrades, Generator Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by Transmission Provider, or its agent, for Interconnection Customer(s) to determine a list of facilities (including Interconnection Customer’s Interconnection Facilities, Transmission Owner’s Interconnection Facilities, System Protection Facilities, and if such upgrades have been determined, Network Upgrades, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and upgrades on Affected Systems, as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility(ies) with the Transmission System.

**Interconnection Request** shall mean (1) an Interconnection Customer’s request, in the form of Appendix 1 to the Generator Interconnection Procedures, to interconnect a new Generating Facility, or to increase the capacity of, or make a Material Modification to the operating characteristics of, an Existing Generating Facility that is interconnected with the Transmission System, or to interconnect an Existing Generating Facility that is external to the Transmission System, or to change Energy Resource Interconnection Service to Network Resource Interconnection Service for an Existing Generating Facility; or (2) an MHVDC Connection Customer’s request, in the form of Appendix 1 to the Generator Interconnection Procedures, to obtain Injection Rights.

**Interconnection Service** shall mean the service provided by Transmission Provider associated with interconnecting the Generating Facility to the Transmission System, or external...
host transmission provider if applicable, and enabling it to receive electric energy and capacity from the Generating Facility at the Point of Interconnection pursuant to the terms of the Generator Interconnection Agreement or Point of Delivery as set forth in Service Agreement for Network Resource Interconnection Service for an External Generating Facility and, if applicable, the Tariff.

**Interconnection Study (or Study)** shall mean any of the following studies: the Replacement Impact Study, the Reliability Assessment Study, the Optional Study, the Interconnection System Impact Study, and the Interconnection Facilities Study, or the Restudy of any of the above, described in the Generator Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Generator Interconnection Procedures.

**Interconnection Study Agreement** shall mean the forms of agreement contained in Attachment B to Appendix 1 of the Generator Interconnection Procedures for conducting all studies required by the Generator Interconnection Procedures.

**IRS** shall mean the Internal Revenue Service.

**Local Balancing Authority** shall mean an operational entity or a Joint Registration Organization which is (i) responsible for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for their local area within the MISO Balancing Authority Area, (ii) a Party to Balancing Authority Agreement, excluding MISO, and (iii) provided in the Balancing Authority Agreement.
Loss shall mean any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party’s performance, or non-performance of its obligations under the Generator Interconnection Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing, by the indemnified party.

Material Modification shall mean: (1) modification to an Interconnection Request in the queue that has a material adverse impact on the cost or timing of any other Interconnection Request with a later queue priority date; or (2) planned modification to an Existing Generating Facility that is undergoing evaluation for a Generating Facility Modification or Generating Facility Replacement, and has a material adverse impact on the Transmission System with respect to: i) steady-state thermal or voltage limits, ii) dynamic system stability and response, or iii) short-circuit capability limit; compared to the impacts of the Existing Generating Facility prior to the modification or replacement.

Merchant HVDC Connection Customer (MHVDC Connection Customer) shall mean any entity that proposes to interconnect an MHVDC Transmission Line with the Transmission System, as set forth in the MHCP.

Merchant HVDC Connection Procedures (MHCP) shall mean the connection procedures set forth in Attachment GGG to the Tariff.

Merchant HVDC Transmission Connection Request (MHVDC Transmission Connection Request) shall mean an MHVDC Connection Customer’s request, in the form of Appendix 1 to the MHCP to interconnect a new MHVDC Transmission Line, increase the capacity of an existing MHVDC Transmission Line, or make a substantial modification to the operating characteristics of an existing MHVDC Transmission Line.
Merchant HVDC Transmission Connection Agreement (Transmission Connection Agreement or TCA) shall mean the form of the transmission connection agreement for merchant HVDC transmission facilities set forth in Appendix 2 to the MHCP.

Merchant HVDC Transmission Line (MHVDC Transmission Line) shall mean the merchant high voltage direct current transmission line external to the Transmission System that is proposed for connection to the Transmission System, as defined in the MHCP.

Metering Equipment shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

Monitoring and Consent Agreement shall mean an agreement that defines the terms and conditions applicable to a Generating Facility acquiring Net Zero Interconnection Service. The Monitoring and Consent Agreement will list the roles and responsibilities of an Interconnection Customer seeking to interconnect with Net Zero Interconnection Service and Transmission Owner to maintain the total output of the Generating Facility inside the parameters delineated in the GIA.

Multi-Party Facilities Construction Agreement (MPFCA) shall mean the form of facilities construction agreement, set forth in Appendix 9 to these Generator Interconnection Procedures. The MPFCA shall be used when multiple Interconnection Requests cause the need for the construction of Common Use Upgrades on the Transmission System or the transmission system of an Affected System and share cost responsibility for such Common Use Upgrades.

NERC shall mean the North American Electric Reliability Corporation or its successor organization.
Net Zero Interconnection Service shall mean a form of ER Interconnection Service that allows an Interconnection Customer to alter the characteristics of an Existing Generating Facility, with the consent of the Existing Generating Facility, at the same POI such that the Interconnection Service limit remains the same.

Network Customer shall have that meaning as provided in the Tariff.

Network Resource shall mean any designated generating resource owned, purchased, or leased by a Network Customer under the Tariff. Network Resources do not include any resource, or any portion thereof, that is committed for sale to third parties or otherwise cannot be called upon to meet the Network Customer’s Network Load on a non-interruptible basis.

Network Resource Interconnection Service (NR Interconnection Service) shall mean an Interconnection Service that allows Interconnection Customer to integrate its Generating Facility with the Transmission System in the same manner as for any Generating Facility being designated as a Network Resource. Network Resource Interconnection Service does not convey transmission service. Network Resource Interconnection Service shall include any network resource interconnection service established under an agreement with, or the tariff of, a Transmission Owner prior to integration into MISO, that is determined to be deliverable through the integration deliverability study process.

Network Upgrades shall mean the additions, modifications, and upgrades to the Transmission System required at or beyond the point at which the Interconnection Facilities connect to the Transmission System or Distribution System, as applicable, to accommodate the interconnection of the Generating Facility(ies) to the Transmission System. Network Upgrades shall not include any HVDC Facility Upgrades.

Notice of Dispute shall mean a written notice of a dispute or claim that arises out of or in connection with the Generator Interconnection Agreement or its performance.
**Operating Horizon Study** shall mean an Interconnection System Impact Study that includes in service transmission and generation for an identified timeframe to determine either the available injection capacity of an Interconnection Request or Interconnection Facilities and/or Transmission System changes required for the requested Interconnection Service.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Generator Interconnection Procedures for conducting the Optional Interconnection Study.

**Party or Parties** shall mean Transmission Provider, Transmission Owner, Interconnection Customer, or any combination of the above.

**Planning Horizon Study** shall mean an Interconnection System Impact Study that includes a future year study to determine either the available injection capacity of an Interconnection Request or Interconnection Facilities and/or Transmission System changes required for the requested Interconnection Service.

**Point of Change of Ownership (PCO)** shall mean the point, as set forth in Appendix A to the Generator Interconnection Agreement, where the Interconnection Customer’s Interconnection Facilities connect to the Transmission Owner’s Interconnection Facilities.

**Point of Connection** shall mean the point, as set forth in an MHVDC Transmission Connection Request, where the MHVDC Transmission Line connects to the Transmission System.
Point of Interconnection (POI) shall mean the point, as set forth in Appendix A of the GIA, where the Interconnection Facilities connect to the Transmission System.

Preliminary System Impact Study shall mean the System Impact Study performed during Definitive Planning Phase I

Pre-Queue Phase shall mean Interconnection Customer outreach and education effort undertaken prior to the submission of the Interconnection Request.

Provisional Interconnection Study shall mean an engineering study, performed at Interconnection Customer’s request, as a condition to entering into a provisional GIA, that evaluates the impact of the proposed interconnection on the safety and reliability of the Transmission System and, if applicable, any Affected System. The study shall identify and detail the impacts on the Transmission System and, if applicable, an Affected System, from stability, short circuit, and voltage issues that would result if the Generating Facility were interconnected without project modifications or system modifications.

Queue Position shall mean the order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests. The Queue Position is established based upon the date and time of receipt of the valid Interconnection Request by Transmission Provider.

Reasonable Efforts shall mean, with respect to an action required to be attempted or taken by a Party under the Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Reliability Assessment Study shall mean an engineering study that evaluates the impact of a proposed Generating Facility Replacement on the reliability of Transmission System during the time period between the date that the Existing Generating Facility ceases commercial operations and the Commercial Operation Date of the Replacement Generating Facility.
**Replacement Generating Facility** shall mean a Generating Facility that replaces an Existing Generating Facility, or a portion thereof, at the same electrical Point of Interconnection pursuant to Section 3.7 of this Attachment X.

**Replacement Impact Study** shall mean an engineering study that evaluates the impact of a proposed Generating Facility Replacement on the reliability of the Transmission System.

**Revised System Impact Study** shall mean the System Impact Study performed during Definitive Planning Phase II

**Scoping Meeting** shall mean the meeting between representatives of Interconnection Customer or MHVDC Connection Customer, Transmission Owner, Affected System Operator(s) and Transmission Provider conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection or Points of Connection.

**Shared Network Upgrade** shall mean a Network Upgrade or Common Use Upgrade that is funded by an Interconnection Customer(s) and also benefits other Interconnection Customer(s) or MHVDC Connection Customer(s) that are later identified as beneficiaries.

**Site Control** shall mean a documented right for one or more parcels of land for the purpose of constructing a Generating Facility, Interconnection Customer’s Interconnection Facilities, and, if applicable (i.e., when the Interconnection Customer is providing the site for such facilities), the Transmission Owner’s Interconnection Facilities and Network Upgrades at the POI that the Interconnection Customer will develop. Such documented right shall be one of the following: (1) ownership of a site; (2) a leasehold interest in a site; (3) an option to purchase or acquire a leasehold interest in a site; or (4) any other
contractual or legal right to possess or occupy a site.

**Small Generating Facility** shall mean a Generating Facility that has an aggregate net Generating Facility Capacity of no more than five MW and meets the requirements of Section 14 and Appendix 3.

**Special Protection System (SPS)** shall mean an automatic protection system or remedial action scheme designed to detect abnormal or predetermined system conditions, and take corrective actions other than and/or in addition to the isolation of faulted components, to maintain system reliability. Such action may include changes in demand (MW and MVar), energy (MWh and MVArh), or system configuration to maintain system stability, acceptable voltage, or power flows. An SPS does not include: (a) underfrequency or undervoltage load shedding; (b) fault conditions that must be isolated; (c) out-of-step relaying not designed as an integral part of an SPS; or (d) Transmission Control Devices.

**Stand-Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer or MHVDC Connection Customer may construct without affecting day-to-day operations of the Transmission System during their construction. Transmission Provider, Transmission Owner and Interconnection Customer or MHVDC Connection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Generator Interconnection Agreement or Appendix B of the Transmission Connection Agreement.

**System Planning and Analysis Phase** shall mean the phase of the Generator Interconnection Procedure process, prior to January 4, 2017, which consisted of an Interconnection System Impact Study for those Interconnection Requests that were studied in this phase.

**System Protection Facilities** shall mean the equipment, including necessary protection signal communications equipment, required to protect (1) the Transmission System or other
delivery systems or other generating systems from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the Transmission System or on other delivery systems or other generating systems to which the Transmission System is directly connected.

**Tariff** shall mean the Transmission Provider’s Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

**Transmission Control Devices** shall mean a generally accepted transmission device that is planned and designed to provide dynamic control of electric system quantities, and are usually employed as solutions to specific system performance issues. Examples of such devices include fast valving, high response exciters, high voltage DC links, active or real power flow control and reactive compensation devices using power electronics (e.g., unified power flow controllers), static var compensators, thyristor controlled series capacitors, braking resistors, and in some cases mechanically switched capacitors and reactors. In general, such systems are not considered to be Special Protection Systems.

**Transmission Owner** shall mean that Transmission Owner as defined in the Tariff, which includes an entity that owns, leases or otherwise possesses an interest in the portion of the Transmission System at which Interconnection Customer proposes to interconnect or otherwise integrate the operation of the Generating Facility. Transmission Owner should be read to include any Independent Transmission Company that manages the transmission facilities of Transmission Owner and shall include, as applicable, the owner and/or operator of distribution facilities interconnected to the Transmission System, over which facilities transmission service or Wholesale Distribution Service under the Tariff is available at the time Interconnection Customer requests Interconnection Service and to which Interconnection Customer has requested interconnection of a Generating Facility for the purpose of either transmitting electric energy in interstate commerce or selling electric energy at wholesale in interstate commerce.
Transmission Provider shall mean the Midcontinent Independent System Operator, Inc. ("MISO"), the Regional Transmission Organization that controls or operates the transmission facilities of its transmission-owning members used for the transmission of electricity in interstate commerce and provides transmission service under the Tariff.

Transmission Owner’s Interconnection Facilities (TOIF) shall mean all facilities and equipment owned by Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Generator Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Transmission System shall mean the facilities owned by Transmission Owner and controlled or operated by Transmission Provider or Transmission Owner that are used to provide transmission service (including HVDC Service) or Wholesale Distribution Service under the Tariff.

Trial Operation shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

Variable Energy Resource shall mean a device for the production of electricity that is characterized by an energy source that: (1) is renewable; (2) cannot be stored by the facility owner or operator; and (3) has variability that is beyond the control of the facility owner or operator.

Wholesale Distribution Service shall have that meaning as provided in the Tariff. Wherever the term “transmission delivery service” is used, Wholesale Distribution Service shall also be implied.
SECTION 2. SCOPE AND APPLICATION.

2.1 Application of Generator Interconnection Procedures.

a. Sections 2 through 13 of the GIP apply to processing an Interconnection Request pertaining to a Generating Facility. The GIP specifically applies when one of the following is proposed by an Interconnection Customer: (i) a new Generating Facility at a new Point of Interconnection that does not meet the criteria set forth in Sections 2.1 (b) or (c), (ii) additional generation at an existing Point of Interconnection, (iii) an increase in the capacity of an Existing Generating Facility, (iv) a Generating Facility Modification that may constitute a Material Modification to the operating characteristics of an Existing Generating Facility, or (v) a Replacement Generating Facility. The evaluation in subpart (iv) will be performed expeditiously depending on the specific information regarding any proposed Generating Facility Modification and the existence of an Emergency Condition.

b. Section 14 of the GIP applies to a request to interconnect a certified Small Generating Facility meeting the certification criteria set forth in Appendix 3.

c. A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kW shall be evaluated under the Appendix 4 – 10 kW Inverter Process.

d. A request to interconnect to HVDC Facilities subject to Section 27A of the Tariff will be incorporated into the queue as described in Sections 2 through 13 of the GIP. Modifications to the process necessitated by the physics of a connection to HVDC Facilities are found in Section 15 of the GIP, and will apply to those requests to interconnect to HVDC Facilities.

Effective On: March 11, 2020
e. Network Resource Interconnection Service is available to Existing Generating Facilities connected to facilities external to the Transmission System, including any Existing Generating Facilities connected to any MHVDC Transmission Line. Such a request for Network Resource Interconnection Service shall be memorialized with a Service Agreement as found in Appendix 13 of the GIP.

f. Sections 1 through 7, Section 10, Section 13 and Section 16 of the GIP apply to processing an Interconnection Request pertaining to Injection Rights for an MHVDC Transmission Line. Any such request for Injection Rights will be incorporated into the queue as described in Sections 2 through 7 of the GIP. Procedures for obtaining Injection Rights and the conversion of those rights to external Network Resource Interconnection Service are set forth in Section 16 of the GIP. All references to MHVDC Connection Customer(s) in these GIP shall be understood to refer to MHVDC Connection Customer(s) seeking Injection Rights.

g. A request for Replacement Generating Facility shall be evaluated pursuant to Section 3.7 of the GIP.

h. A request for Generating Facility Modification for an Existing Generating Facility must be submitted to and coordinated with the Transmission Provider pursuant to the provisions set forth in the Generator Interconnection Business Practices Manual to allow the Transmission Provider to determine whether the proposed modification would result in a substantive modification to the operating characteristics of such Existing Generating Facility.

2.2 Comparability.

Transmission Provider shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in the GIP. Transmission Provider will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all
Interconnection Customers regardless of Generating Facility ownership and from all MHVDC Connection Customers regardless of MHVDC Transmission Line ownership.

2.3 **Base Case Data.**
Transmission Provider shall provide base power flow, short circuit and stability databases, including all underlying assumptions, and contingency list upon request subject to confidentiality provisions in GIP Section 13.1. In the event that the Base Case data contains commercially sensitive information, transmission related information, or Critical Energy Infrastructure Information, Transmission Provider shall require that Interconnection Customer or MHVDC Connection Customer sign a confidentiality agreement and release from liability in the form attached hereto as Attachment C to Appendix 1 before the release of the Base Case data. Such databases and lists shall include all (i) generation projects and (ii) transmission projects, including merchant transmission projects that are proposed for the Transmission System for which a transmission expansion plan has been submitted and approved by the applicable authority. To the extent that a Company has a Universal Non-Disclosure Agreement in place with MISO, the Company will not be required to execute the Non-Disclosure and Confidentiality Agreement in Attachment C to Appendix 1 of the GIP.

2.4 **No Applicability to Transmission Service.**
Nothing in the GIP shall constitute a request for transmission service or confer upon an Interconnection Customer or MHVDC Connection Customer any right to receive transmission service or Wholesale Distribution Service under the Tariff.

**SECTION 3. INTERCONNECTION REQUESTS.**

3.1 **General.**
An Interconnection Customer or MHVDC Connection Customer shall submit to Transmission Provider an Interconnection Request in the form of Appendix 1 to the GIP and the deposit along with the other items listed in Section 3.3.1 of these GIP.
Transmission Provider shall apply the deposit towards the cost of any Interconnection Study. Interconnection Customer or MHVDC Connection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. Interconnection Customer or MHVDC Connection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Points of Interconnection; provided, however, that an Interconnection Request for Injection Rights shall only evaluate one voltage level at each Point of Connection.

3.2 Identification of Types of Services.
At the time the Interconnection Request is submitted, Interconnection Customer must request NR Interconnection Service, ER Interconnection Service or Net Zero Interconnection Service, as described; provided, however, any Interconnection Customer requesting NR Interconnection Service may also request that it be concurrently studied as an ER Interconnection Service, up to the expiration of Decision Point II. Interconnection Customer may then elect to proceed with NR Interconnection Service or to proceed under a lower level of NR Interconnection Service to the extent that only certain upgrades will be completed. MHVDC Connection Customer may only request Injection Rights pursuant to Section 16 of the GIP and shall not be eligible to receive any Interconnection Services specified in the GIP.

3.2.1 Energy Resource Interconnection Service (ER Interconnection Service).

3.2.1.1 The Product. ER Interconnection Service allows Interconnection Customer to connect the Generating Facility to the Transmission System or Distribution System, as applicable, and be eligible to deliver the Generating Facility’s output using the existing firm or non-firm capacity of the Transmission System on an “as available” basis and may be granted on a conditional basis. ER Interconnection Service does not in and of
itself convey any right to deliver electricity to any specific customer or Point of Delivery.

3.2.1.2 The Study. The study consists of short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The short circuit/fault duty analysis would identify the Interconnection Facilities required and the Network Upgrades necessary to address short circuit issues associated with the Interconnection Facilities. The stability and steady state studies would identify necessary upgrades to allow full output of the proposed Generating Facility and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting Generating Facility without requiring additional Network Upgrades.

3.2.2 Network Resource Interconnection Service (NR Interconnection Service).

3.2.2.1 The Product. Transmission Provider must conduct the necessary studies and Transmission Owner shall cause the construction of the Network Upgrades, System Protection Facilities, Distribution Upgrades or Generator Upgrades, subject to the approval of Governmental Authorities, needed to integrate the Generating Facility in the same manner as for any Generating Facility being designated as a Network Resource. NR Interconnection Service allows the Generating Facility to be designated as a Network Resource, up to the Generating Facility’s full output on the same basis as existing Network Resources that are interconnected to the Transmission or Distribution System as applicable, and to be studied as a Network Resource on the assumption that such a designation will occur. NR Interconnection Service may be granted on a conditional basis pursuant to the terms of Article 4.1.2.3 of the GIA. Interconnection Customer with an in-service Generating Facility or with an executed GIA, having ER Interconnection Service or equivalent interconnection service
can request NR Interconnection Service by making an Interconnection Request for obtaining only NR Interconnection Service.

**3.2.2.2 The Study.** The Interconnection Study for NR Interconnection Service shall assure that the Generating Facility meets the requirements for NR Interconnection Service and will qualify the Generating Facility as a Network Resource under Module B and the RAR of the Transmission Provider’s Tariff. As a general matter, the Generating Facility’s interconnection is studied with the Transmission System at both off-peak and peak loads, under a variety of severely stressed conditions, to determine whether, with the Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load on the Transmission System or Distribution System, as applicable, consistent with Applicable Reliability Standards. This approach assumes that some portion of existing Network Resources is displaced by the output of the Generating Facility. NR Interconnection Service does not convey any right to deliver electricity to any specific customer or Point of Delivery.

**3.2.3 Net Zero Interconnection Service.**

**3.2.3.1 The Product.** Net Zero Interconnection Service is restricted ER Interconnection Service that allows an Interconnection Customer to increase the gross generating capability at the same Point of Interconnection of an Existing Generating Facility without increasing the Existing Generating Facility’s Capacity at that Point of Interconnection. Net Zero Interconnection Service does not convey any right to deliver electricity to any specific customer or Point of Delivery.
3.2.3.2 The Study. The Interconnection Study for Net Zero Interconnection Service consists of reactive power, short circuit/fault duty, and stability analyses. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied. If the Existing Generating Facility was not studied under off-peak condition, off-peak steady state analyses will be performed to the required level necessary to demonstrate reliable operation of the Net Zero Interconnection Service. If no System Impact Study was available for the existing generation, both off-peak and peak analysis may need to be performed for the Generating Facility seeking Net Zero Interconnection Service in accordance with the GIP. The Interconnection Study will identify the Interconnection Facilities required and the Network Upgrades necessary to address reliability issues associated with the Interconnection Facilities.

3.2.4 Injection Rights

3.2.4.1 The Product. Injection Rights serve as a pre-certification of the Transmission System’s capability to receive capacity and energy from the MHVDC Transmission Line at the requested Point of Connection, and in the specified MW quantity, without degrading the reliability of the Transmission System. Injection Rights do not grant Interconnection Service or Transmission Service to the MHVDC Connection Customer. Injection Rights must be converted to external Network Resource Interconnection Service as set forth in Section 16.2 of the GIP before those rights may be used to offer energy or capacity into the MISO markets.

3.2.4.2 The Study. Requests for Injection Rights shall include both ERIS-level and NRIS-level evaluations. For ERIS-level evaluation, the study will include short circuit/fault duty, steady state (thermal and voltage) and stability analyses.
The stability and steady state studies would identify necessary upgrades to allow full output of the proposed MHVDC Transmission Line and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting MHVDC Transmission Line without requiring any additional upgrades.

For NRIS-level evaluation, the study will assure that the output of the MHVDC Transmission Line meets the requirements for NR Interconnection Service and will qualify any existing Generating Facility connected to the MHVDC Transmission Line as a Network Resource under Module B and the RAR of the Transmission Provider Tariff. As a general matter, such Generating Facility’s interconnection with the Transmission System is studied at both off-peak and peak loads, under a variety of severely stressed conditions, to determine whether, with such Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load on the Transmission System or Distribution System, as applicable, consistent with Applicable Reliability Standards. This approach assumes that some portion of an existing Network Resource is displaced by the output of such Generating Facility.

### 3.3 Valid Interconnection Request.

#### 3.3.1 Initiating an Interconnection Request.

An Interconnection Customer or an MHVDC Connection Customer wishing to join the next Definitive Planning Phase shall submit their Interconnection Request to the Transmission Provider no later than the application deadline, which will be at least ninety (90) Calendar Days prior to the scheduled start of the next Definitive Planning Phase cycle, published on the MISO public website. Any Interconnection Request received after the application deadline published on the MISO public website shall be applied towards the following Definitive Planning Phase cycle.
Definitive Planning Phase study deposits are required based on the Megawatt amount of the new Interconnection Service requested per the following schedule:

<table>
<thead>
<tr>
<th>Amount of new Interconnection Service and/or Injection Rights requested (MW)</th>
<th>Non-Refundable Deposit 1 (D1)</th>
<th>Study Deposit 2 (D2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 6 MW</td>
<td>$5,000</td>
<td>$50,000</td>
</tr>
<tr>
<td>20 ≥ MW ≥ 6</td>
<td>$5,000</td>
<td>$120,000</td>
</tr>
<tr>
<td>50 ≥ MW &gt; 20</td>
<td>$5,000</td>
<td>$180,000</td>
</tr>
<tr>
<td>100 ≥ MW &gt; 50</td>
<td>$5,000</td>
<td>$270,000</td>
</tr>
<tr>
<td>200 ≥ MW &gt; 100</td>
<td>$5,000</td>
<td>$320,000</td>
</tr>
<tr>
<td>500 ≥ MW &gt; 200</td>
<td>$5,000</td>
<td>$420,000</td>
</tr>
<tr>
<td>1000 &gt; MW &gt; 500</td>
<td>$5,000</td>
<td>$530,000</td>
</tr>
<tr>
<td>MW ≥ 1000</td>
<td>$5,000</td>
<td>$640,000</td>
</tr>
</tbody>
</table>

An Interconnection Request for a Replacement Generating Facility shall be accompanied by a study deposit in the amount of $60,000.

Thirty (30) Calendar Days after the execution of a non-provisional GIA or a Transmission Connection Agreement in which the Injection Rights option has been selected, Interconnection Customer or MHVDC Connection Customer may replace any non-encumbered balance of the study deposits with an irrevocable letter of credit reasonably acceptable to Transmission Provider.

Interconnection Customer or MHVDC Connection Customer shall be required to provide to Transmission Provider the following data along with its Interconnection Request:

(i) a detailed stability model for the proposed Generating Facility or MHVDC Transmission Line;

(ii) Technical data as outlined in Attachment A of Appendix 1 of this GIP;
(iii) an Interconnection Study Agreement executed by Interconnection Customer or MHVDC Connection Customer in the form of Appendix 1, Attachment B;

(iv) a definitive Point of Interconnection or Point of Connection;

(v) for Interconnection Requests proposing to share Interconnection Facilities with another pending Interconnection Request or existing project, a consent agreement in accordance with Section 3.3.1.3 of these Generator Interconnection Procedures;

(vi) a one line diagram showing the Generating Facility or MHVDC Transmission Line and associated electrical equipment with appropriate rating and impedance information; and

(vii) Megawatt amount of new Interconnection Service or Injection Rights requested.

In addition, Interconnection Customer or MHVDC Connection Customer entering the Definitive Planning Phase shall provide the Definitive Planning Phase entry milestone in the form of either cash or irrevocable letter of credit reasonably acceptable to Transmission Provider.

The Definitive Planning Phase entry milestone (M2) will be calculated as $4,000 per Megawatt amount of new Interconnection Service or Injection Rights requested.

Except as otherwise provided for Site Control in Section 7.2 of this GIP, all applicable deposits, milestone payments, and data required to enter the Definitive Planning Phase must be received no later than the application deadline published on the Transmission Provider website.

Interconnection Customer shall provide proof of Site Control or a cash deposit in lieu of Site Control in accordance with the requirements and timing established in Section 7.2 of this GIP. In the event that an Interconnection Customer or MHVDC Connection
Customer has a state regulatory requirement to process two Points of Interconnection or Points of Connection through the entire process, that Interconnection Customer or MHVDC Connection Customer is not required to comply with the Site Control requirements in Section 7.2 for the second Interconnection Request, provided it is properly identified as the required alternative.

Deposits shall be applied toward any Interconnection Studies pursuant to the Interconnection Request.

The expected In-Service Date of the Generating Facility or MHVDC Transmission Line shall be no later than the process window for the Transmission Provider’s regional expansion planning period not to exceed seven years from the date the Interconnection Request is received by Transmission Provider, unless Interconnection Customer or MHVDC Connection Customer demonstrates that engineering, permitting and construction of the Generating Facility or MHVDC Transmission Line will take longer than the regional expansion planning period, nor shall it be any sooner than the process time described in the Generator Interconnection Procedures and confirmed in the Pre-Queue Phase. The In-Service Date may succeed the date the Interconnection Request is received by Transmission Provider by a period up to ten years, or longer where Interconnection Customer or MHVDC Connection Customer and Transmission Provider agree, such agreement not to be unreasonably withheld.

The expected Commercial Operation Date of a Replacement Generating Facility shall be no more than three (3) years from the date of cessation of operation of the Existing Generating Facility. For Existing Generating Facility that is in suspension pursuant to Section 38.2.7 of the Tariff or in Forced Outage, the start date of suspension or outage shall be considered the date of cessation of operation of the Existing Generating Facility for purposes of calculating the three (3) year limit. If the requested period of time between the cessation of operation of the Existing Generating Facility and expected Commercial Operation Date of the Replacement Generating Facility is more than three
(3) years, the request shall be treated as Interconnection request for a new Generating Facility.

3.3.1.1 Additional Requirements for a Net Zero Interconnection Request application

A request for Net Zero Interconnection Service made by an Interconnection Customer must meet the requirements listed in section 3.3.1 above, plus the following requirements:

1. The Existing Generating Facility must request that MISO post on its website that it is willing to enter into a Net Zero arrangement with a suitable proposal. Such posting will include the name of this Existing Generating Facility, the exact electrical location of the physical termination point of the Net Zero Generating Facility, including proposed breaker position(s) within its substation, the state and county of the Existing Generating Facility, and a valid email address and phone number to contact the representative of the Existing Generating Facility. This requirement does not apply to Interconnection Requests for which a GIA has been executed with an effective date prior to the effective date granted by the Commission for the revisions to the GIP filed in Docket No. ER12-309 (January 1, 2012).

2. The Interconnection Customer must include the System Impact Study performed for the Existing Generating Facility with its application or indicate that such study is not available. Transmission Provider will use that System Impact Study to appropriately scope the Interconnection Customer’s System Impact Study described in Section 7 of this GIP.
3.3.1.2 Evaluation Process for Net Zero Interconnection Request and the Requirements for the Request to Remain Valid

The process posted on the Transmission Provider’s website will provide a description of the selection process that will take place between the time that Transmission Provider posts that an Existing Generating Facility interconnection customer is offering Net Zero Interconnection Service and the time an Interconnection Customer is selected, including a timeline and the selection criteria developed by the Existing Generating Facility. The selection process may vary among Existing Generating Facility interconnection customers, but the following conditions will apply:

1. The Existing Generating Facility interconnection customer will choose the winning request;

2. System Impact Study scope will be determined for each Interconnection Request, and the study will be performed as necessary based/as determined by Transmission Provider;

3. The winning request shall be selected after the latter of System Impact Study or Interconnection Facilities Study, and the posting will include a description of when and how the identity of the winning request will be disclosed;

4. For its Interconnection Request to remain valid, the Net Zero customer has 90 days after the winning request has been chosen to provide Transmission Provider an executed Energy Displacement Agreement (including, in a separate agreement, the agreed upon compensation arrangements – rates, terms, and conditions), and an executed Monitoring and Consent Agreement with the Transmission Owner and/or
Transmission Operator, to be effective upon execution of a GIA.

The executed Monitoring and Consent Agreement shall be in the form of Appendix 11 of the GIP to be effective upon execution of a GIA and must remain in effect during the term of the GIA.

The executed Energy Displacement Agreement shall be in the form of Appendix 12 of the GIP to be effective upon execution of a GIA and must remain in effect during the term of the GIA.

If at any time prior to execution of the GIA the Energy Displacement Agreement or Monitoring and Consent Agreement required above is no longer in effect, the Interconnection Request for Net Zero Interconnection Service shall be deemed to have been withdrawn.

5. The Interconnection Facilities Study will be performed in Definitive Planning Phase II if needed; and

6. Transmission Provider will begin drafting GIA one Business Day after the later of the date of the completion of the Facilities Study or the submission dates of Energy Displacement Agreement and Monitoring and Consent Agreement.

**3.3.1.3 Additional Requirements for Interconnection Requests Proposing to Share Interconnection Facilities**

Interconnection Customer may submit an Interconnection Request that proposes to share Interconnection Facilities with one or more existing projects or pending Interconnection Requests. Interconnection Requests proposing such an arrangement shall so indicate in their Interconnection Request and attach a
consent agreement executed by the applicable Transmission Owner and all Interconnection Customers with projects that propose to connect, or are connected, to the shared Interconnection Facilities. Such consent agreement shall, in accordance with the Business Practices Manuals, describe the proposed configuration of the projects, the proposed ownership of the Interconnection Facilities, the division of rights and responsibilities among the parties with respect to operations, maintenance, and repair of the Interconnection Facilities, and such other information regarding the operation of the Generating Facilities under this arrangement as may be specified in the Generator Interconnection Business Practice Manual. The consent agreement shall indicate the parties’ consent to sharing the Interconnection Facilities in the manner described in the Interconnection Request(s).

3.3.1.4 Evaluation Process for Interconnection Requests Proposing to Share Interconnection Facilities

Interconnection Requests proposing shared Interconnection Facilities shall require the consent of the Transmission Provider to proceed, which consent shall not be unreasonably withheld, conditioned, or delayed. The Transmission Provider shall review Interconnection Requests proposing to share Interconnection Facilities amongst multiple projects to confirm compliance with the requirements of Section 3.3.1.3 of these Generator Interconnection Procedures, that all Interconnection Customer responsibilities have been appropriately accounted for, and that all parties have consented to the described arrangement. The Transmission Provider shall complete this review and notify the parties whether the Transmission Provider consents to the proposed arrangement no later than five (5) days prior to the start of the Scoping Meeting in which their requests are discussed. In the event that the Transmission Provider does not consent, the Transmission Provider shall provide a written statement of the reasons for such decision to each of the parties. Interconnection Requests that do not receive the Transmission Provider’s
consent for the sharing of Interconnection Facilities may be revised and resubmitted for inclusion in the applicable cycle prior to the start of DPP Phase I.

Any Interconnection Customer that has an Interconnection Request pending in the DPP as of August 14, 2019 and that intends to share Interconnection Facilities for that Interconnection Request with one or more existing projects or other Interconnection Requests shall satisfy each of the terms of Sections 3.3.1.3 and 3.3.1.4 of these Generator Interconnection Procedures, prior to the start of GIA negotiations for any Interconnection Request that remains pending in the DPP and that will participate in the sharing arrangement.

3.3.2 Acknowledgment of Interconnection Request.
Transmission Provider shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the Interconnection Request. Transmission Provider shall tender to Interconnection Customer or MHVDC Connection Customer a copy of the countersigned Interconnection Study Agreement within ten (10) Business Days of acceptance of the Interconnection Request as valid. All acknowledgments and other communications may be made via e-mail and/or other electronic means.

3.3.3 Deficiencies in Interconnection Request.
An Interconnection Request will not be considered to be a valid request until all items in Section 3.3.1 have been received by Transmission Provider. If an Interconnection Request fails to meet the requirements set forth in Section 3.3.1, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer within fifteen (15) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. In the event Transmission Provider discovers or verifies a deficiency later in the GIP process, Transmission Provider will notify Interconnection Customer or MHVDC Connection Customer as soon as practicable. Interconnection Customer or MHVDC Connection Customer shall provide Transmission Provider the additional requested
information needed to constitute a valid request no later than ten (10) Business Days after the request is made. Failure by Interconnection Customer or MHVDC Connection Customer to comply with this Section 3.3.3 will result in the Interconnection Request not being processed until such deficiency is cured. In the event that the deficiency is not cured, deposits will be held by Transmission Provider until such time that a withdrawal notice is given per Section 3.6.

3.3.4 Scoping Meeting.
Within ten (10) Business Days after receipt of a valid Interconnection Request, Transmission Provider shall submit a summary of the Interconnection Request to Interconnection Customer or MHVDC Connection Customer and likely affected Transmission Owners. The Transmission Provider shall establish a date agreeable to Interconnection Customer and Transmission Owner for a Scoping Meeting, and such date shall be at least five (5) Business Days prior to and no more than forty-five (45) Calendar days prior to the kick-off of the Definitive Planning Phase, unless otherwise mutually agreed upon by Transmission Provider, Transmission Owner and Interconnection Customer or MHVDC Connection Customer. The Transmission Provider, Interconnection Customer, or MHVDC Connection Customer, and Transmission Owner must attend the Scoping Meeting. Transmission Provider shall use Reasonable Efforts to include any other Affected System Operators in the Scoping Meeting.

The purpose of the Scoping Meeting shall be to discuss alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection. Transmission Provider, Transmission Owner and Interconnection Customer or MHVDC Connection Customer will bring to the meeting such technical data including, but not limited to, known: (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues including voltage and frequency ride-through capabilities for the Generating Facility, (v) general power quality issues including voltage flicker,
harmonics, (vi) general reliability issues; and (vii) diagrams and/or layout of applicable substations as may be reasonably required to accomplish the purpose of the meeting.

Transmission Provider and Interconnection Customer or MHVDC Connection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting.

On the basis of the meeting, Interconnection Customer or MHVDC Connection Customer may modify its Point of Interconnection/Connection and one or more available alternative Point(s) of Interconnection/Connection. Interconnection Customer or MHVDC Connection Customer will have five (5) Business Days from the date of the Scoping Meeting to submit to Transmission Provider its modified Point of Interconnection/Connection or one of its alternative Point(s) of Interconnection/Connection as a result of the Scoping Meeting. The duration of the meeting shall be sufficient to accomplish its purpose.

3.4 OASIS Posting.

Transmission Provider will maintain on its OASIS a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected In-Service Date; (v) the status of the Interconnection Request, including Initial, and when applicable, Definitive Planning Phase Queue Position; (vi) the type of Interconnection Service being requested or whether the Interconnection Request is for Injection Rights; (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Generating Facility to be constructed including technology and fuel type); (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed; (xi) associated System Impact Study phase costs by Definitive Planning Phase; and (xii) for a Generating Facility Replacement, the planned date of cessation of operation for the Existing Generating Facility or actual date if the Existing Generating Facility already has ceased commercial operations, the expected Commercial Operation Date of the
replacement facility and requested Interconnection Service. The list will not disclose the identity of Interconnection Customer or MHVDC Connection Customer until Interconnection Customer or MHVDC Connection Customer executes a GIA or a TCA or requests that Transmission Provider file an unexecuted GIA or TCA with FERC. Transmission Provider shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports shall be posted to the Transmission Provider’s OASIS site prior to the meeting between Interconnection Customer and Transmission Provider to discuss the applicable study results. Transmission Provider shall also post any known deviations in the Generating Facility’s In-Service Date.

3.5 Coordination with Affected Systems.
Interconnection Customer or MHVDC Connection Customer, Transmission Provider, Transmission Owner and Affected System Operator shall each coordinate and cooperate on studies required to determine the impact of the Interconnection Request on Affected Systems. Transmission Provider will include such Affected System Operators, whose representatives either abide by FERC’s Standards of Conduct pursuant to 18 C.F.R Parts 37 and 358 or have executed a non-disclosure agreement with Transmission Provider, in all meetings held with Interconnection Customer as required by the GIP. If the Affected System is not under the functional control of Transmission Provider, the Affected System Operator’s procedures shall be applicable. Interconnection Customer or MHVDC Connection Customer will be separately responsible to adhere to the Affected Systems Operator’s procedures and costs related to studies and modifications to the Affected System.

Interconnection Customer or MHVDC Connection Customer will cooperate with Transmission Provider in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Transmission Provider may limit Interconnection Service or Injection Rights for an Interconnection Request until needed reliability upgrades on an Affected System(s) are complete under separate agreements.
Each Interconnection Customer or MHVDC Connection Customer shall provide notice to Transmission Owner and Transmission Provider that the facilities built under such agreements are in service.

3.6 Withdrawal.

Interconnection Customer or MHVDC Connection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to Transmission Provider. In addition, if Interconnection Customer fails to adhere to all requirements of the GIP, except as provided in Section 13.5 (Disputes), Transmission Provider shall deem the Interconnection Request to be withdrawn and shall provide written notice to Interconnection Customer or MHVDC Connection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Unless otherwise provided in this GIP, upon receipt of such written notice, Interconnection Customer or MHVDC Connection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cure the deficiency or to notify Transmission Provider of its intent to pursue Dispute Resolution.

In the event that an MHVDC Transmission Connection Request is withdrawn or deemed withdrawn in accordance with the terms of Attachment GGG to the Tariff, then all Interconnection Requests associated with that MHVDC Transmission Connection Request will also be deemed withdrawn.

Withdrawal prior to or during Interconnection Customer Decision Point I shall result in the loss of the Interconnection Customer’s or MHVDC Connection Customer’s Definitive Planning Phase Queue Position. Withdrawal after Interconnection Customer Decision Point I, but prior to or during Interconnection Customer Decision Point II shall result in the loss of the Interconnection Customer’s or MHVDC Connection Customer’s Definitive Planning Phase Queue Position and forfeiture of the Definitive Planning Phase entry milestone (M2) payment. Withdrawal after Interconnection Customer Decision Point II shall result in the loss of Interconnection Customer’s or MHVDC Connection...
Customer’s Definitive Planning Phase Queue Position and forfeiture of the M2, M3 and M4 milestone payments, except as otherwise provided in Section 7.6.2.

If an Interconnection Customer or MHVDC Connection Customer disputes the withdrawal and loss of its applicable queue position, then during Dispute Resolution, the Interconnection Customer’s or MHVDC Connection Customer’s Interconnection Request is eliminated from the queue until such time that the outcome of Dispute Resolution would restore its applicable queue position.

An Interconnection Customer or MHVDC Connection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to Transmission Provider all costs that Transmission Provider prudently (i) incurs prior to the Transmission Provider’s receipt of notice described above and (ii) will incur as a result of the withdrawal. Interconnection Customer or MHVDC Connection Customer must pay all monies due to Transmission Provider before it is allowed to obtain any Interconnection Study data or results.

Transmission Provider shall (i) update the OASIS list of Interconnection Requests and (ii) refund to Interconnection Customer or MHVDC Connection Customer any portion of the Interconnection Customer’s or MHVDC Connection Customer’s study deposit that exceeds the costs that Transmission Provider has incurred or will incur as a result of the withdrawal as described in Section 13.3, including interest earned on the Interconnection Customer’s or MHVDC Connection Customer’s study deposit and Definitive Planning Phase entry milestone payment while held in Transmission Provider’s interest-bearing, money market account, or if such account does not exist, then the interest calculated in accordance with 18 C.F.R. Section 35.19a(a)(2)(iii). In the event of such withdrawal, Transmission Provider, subject to the confidentiality provisions of Section 13.1, shall provide, at Interconnection Customer’s or MHVDC Connection Customer’s request, all information that Transmission Provider developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.
3.7 Additional requirements for Generating Facility Replacement Requests.

3.7.1 Requirements for Replacement Generating Facility Requests.

i) Any Replacement Generating Facility must connect to the Transmission System at the same electrical Point of Interconnection (i.e. same voltage level at the interconnecting substation) as the Existing Generating Facility.

ii) The request for Generating Facility Replacement must be submitted to the Transmission Provider by the Interconnection Customer for its Existing Generating Facility at least one (1) year prior to the date that the Existing Generating Facility will cease operation unless the Existing Generating Facility is in suspension pursuant to Section 38.2.7 of the Tariff or in Forced Outage. The request shall include the planned or actual date of cessation of operation for the Existing Generating Facility and the expected Commercial Operation Date for the Replacement Generating Facility.

iii) The Interconnection Customer shall request only ER Interconnection Service for the Replacement Generating Facility if the Existing Generating Facility has only ER Interconnection Service. The request for NR Interconnection Service for the Replacement Generating Facility, when the Existing Generating Facility has only ER Interconnection Service, shall be submitted as a separate Interconnection Request and shall proceed through the Definitive Planning Phase cycle in the same manner as an Interconnection Request for a new Generating Facility. The Interconnection Customer may request either ER Interconnection Service or NR Interconnection Service for the Replacement Generating Facility if the Existing Generating Facility has NR Interconnection Service. Requests for ER or NR Interconnection Service that exceed the amount of Interconnection Service for the Existing Generating Facility shall be processed as a new Interconnection Request for the amount of such excess pursuant to Section 3.7.1.iv of this Attachment X to the Tariff.
iv) If the Replacement Generating Facility requires Interconnection Service (MW) in excess of that of the Existing Generating Facility that is being replaced, Interconnection Customer shall initiate a separate request for Interconnection Service in an amount (MW) equal to the excess. Such Interconnection Request shall be assigned a new Queue Position, and proceed through the Definitive Planning Phase cycle in the same manner as an Interconnection Request for a new Generating Facility.

v) If the request for Generating Facility Replacement requests less Interconnection Service (MW) than that of the Existing Generating Facility that is being replaced, the owner shall be required to submit an Attachment Y Notice for the amount (MW) of such decrease in generating capacity to the Transmission Provider in accordance with timing and requirements of Section 38.2.7 of the Tariff.

vi) No request for Generating Facility Replacement may be made until twelve (12) months have elapsed from: (1) the date of any assignment of the Generator Interconnection Agreement applicable to the Existing Generating Facility, or (2) the date of sale or other transfer of such Existing Generating Facility. Upon submission of a request for Generating Facility Replacement, the Interconnection Customer shall not sell or otherwise transfer the Existing Generating Facility, the Replacement Generating Facility, nor assign the applicable Generator Interconnection Agreement until such time as the Transmission Provider completes evaluation of the request for Generating Facility replacement unless the Interconnection Customer first withdraws such request for Generating Facility Replacement in writing. In the event that the Transmission provider notifies Interconnection Customer that the request for Generating Facility Replacement has been granted, the prohibition on sale, transfer, or assignment shall be extended in accordance with Section 3.7.5 of this Attachment X. For purposes of this Section 3.7.1 (vi), prohibited assignments include assignments to affiliates pursuant to Article 19.1 of the pro forma Generator Interconnection Agreement or any analogous provision in the applicable GIA.
A transfer, sale, or assignment of the Existing Generating Facility, Replacement Generating Facility, or applicable GIA that violates this Section 3.7.1 (vi) of Attachment X shall void the request for Generating Facility Replacement.

3.7.1.1 Requirements for modification of Replacement Generating Facility Requests.
The request for Replacement Generating Facility can be modified any time before the evaluation process is complete.

1) If the revised planned date of cessation of operation for the Existing Generating Facility is prior to the planned date of cessation of operation specified in original request, a new request for Replacement Generating Facility must be submitted at least one (1) year prior to the date that the Existing Generating Facility is planned to cease operation.

2) If the revised expected Commercial Operation Date for the Replacement Generating Facility is after the expected Commercial Operation Date for the Replacement Generating Facility in the original request, a new request for Replacement Generating Facility must be submitted at least one (1) year prior to the date that the Existing Generating Facility is planned to cease operation, unless the Existing Generating Facility is in suspension pursuant to Section 38.2.7 of the Tariff or in Forced Outage.

3.7.2 Evaluation Process for Generating Facility Replacement Requests.
The Transmission Provider will evaluate Generating Facility Replacement requests in the order in which they are submitted. The evaluation will consist of two studies: i) a Replacement Impact Study as set forth in Section 3.7.2.1 of the GIP, and ii) a Reliability Assessment Study as set forth in Section 3.7.2.2 of the GIP.

Transmission Provider shall use Reasonable Efforts to complete the Replacement Impact Study and Reliability Assessment Study and share results with the Interconnection Customer within one hundred eighty (180) Calendar Days of the request.
3.7.2.1 Generating Facility Replacement—Replacement Impact Study.
The Replacement Impact Study will include analyses to determine if the Replacement Generating Facility has a material adverse impact on the Transmission System when compared to Existing Generating Facility. The Replacement Impact Study may include steady-state (thermal/voltage), reactive power, short circuit/fault duty, and stability analyses, as necessary, to ensure that required reliability conditions are studied. If the Replacement Impact Study identifies any materially adverse impact from operating the Replacement Generating Facility when compared to the Existing Generating Facility, such impacts shall be deemed a Material Modification, and in order to move forward, the Interconnection Customer must submit all information and milestone payments necessary for a valid Interconnection Request for a new Generating Facility pursuant to Section 3.3 of this GIP, be assigned queue priority as of the date such information and milestones are provided, and proceed through the Definitive Planning Phase cycle as an Interconnection Request for a new Generating Facility. In such event, the Interconnection Customer shall be subject to the timing and requirements of Section 38.2.7 of the Tariff for any retirement of the Existing Generating Facility.

3.7.2.2 Generating Facility Replacement—Reliability Assessment Study
The Reliability Assessment Study for the time period between the date that the Existing Generating Facility ceases commercial operations and the Commercial Operation Date of the Replacement Generating Facility shall evaluate the performance of the Transmission System to determine if thermal and/or voltage violations of applicable NERC Standards and Transmission Owner planning criteria are caused by removing the Existing Generating Facility from service prior to the Commercial Operation Date of the Replacement Generating Facility. This study shall compare the conditions on the Transmission System that would exist if the Existing Generating Facility is taken offline to the conditions on the Transmission System as they exist when the Existing Generating Facility is online. The scope of Reliability Assessment Study may include stability analysis as necessary. The Existing Generating Facility shall be responsible for mitigating
any reliability violation identified in the Reliability Assessment Study and may not cease operations until all mitigations are implemented or are in service. Mitigation for this interim period may, as applicable, include: (i) redispatch/reconfiguration through operator instruction; and (ii) remedial action scheme or any other operating steps depending upon the type of reliability violation identified.

3.7.3 Generating Facility Replacement - Notice to Proceed

Interconnection Customer requesting Generating Facility Replacement shall inform Transmission Provider within thirty (30) Calendar Days after having received results of the Replacement Impact Study and Reliability Assessment Study of its election to proceed and Transmission Provider will initiate an Interconnection Facility Study or tender a draft GIA. Interconnection Customer that fails to provide an election to proceed within thirty (30) Calendar Days will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

3.7.4 Scope of Interconnection Facilities Study

Interconnection Facilities Study focusing on the Interconnection Facilities for the Replacement Generating Facility will start, if the Transmission Provider determines such a study is necessary, upon Interconnection Customer’s notice to proceed to the Transmission Provider after completion of the Replacement Impact Study and the Reliability Assessment Study. This Interconnection Facilities Study will identify estimates for cost and the time required to construct the Interconnection Facilities. Transmission Provider shall use Reasonable Efforts to complete this portion of the Interconnection Facilities Study within ninety (90) Calendar Days.

3.7.5 GIA for Generating Facility Replacement.

Transmission Provider shall tender a draft pro forma GIA or, if deemed appropriate, an amended GIA that conforms to the pro forma GIA in effect at the time, within thirty (30) Calendar Days after the Interconnection Customer communicates its election to proceed
with Generator Replacement if an Interconnection Facilities Study is not required or within thirty (30) Calendar Days after final Facility Study reports are provided to the Interconnection Customer. The draft pro forma GIA shall include updated appendices describing the timing of Generating Facility Replacement and a condition that the GIA cannot be assigned and the Replacement Generating Facility cannot be transferred to any other Party, including an affiliate of the Interconnection Customer, until such date as the Replacement Generating Facility achieves commercial operation. A transfer, sale, or assignment of the Existing Generating Facility, Replacement Generating Facility, or applicable GIA that violates this Section 3.7.5 shall be void and constitute a material breach of the GIA.

SECTION 4. QUEUE POSITION.

4.1 General.

Transmission Provider shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form, and Interconnection Customer or MHVDC Connection Customer provides such information in accordance with Section 3.3.1, then Transmission Provider shall assign Interconnection Customer or MHVDC Connection Customer a Queue Position based on the date the application was deemed complete by Transmission Provider. Moving a Point of Interconnection or Point of Connection shall result in a reassignment of the Queue Position except as otherwise noted in Section 4.4.

The Definitive Planning Phase Queue Position will be established based upon the date Interconnection Customer or MHVDC Connection Customer satisfies all of the requirements of Section 7.2 to enter the Definitive Planning Phase. The Definitive Planning Phase Queue Position will also be used for the determination of cost responsibility for the facilities necessary to accommodate the Interconnection Request,
except for Group Studies. The determination of cost responsibility for common facilities necessary to accommodate two or more Interconnection Requests participating in a Group Study may depend on factors other than the Definitive Planning Phase Queue Position. A higher queued Interconnection Request is one that has been placed “earlier” in the queue in relation to another Interconnection Request that is lower queued.

Transmission Provider may perform an Interconnection Study out of queue order at any time to the extent warranted by Good Utility Practice based upon: 1) the electrical remoteness of the Generating Facility or MHVDC Transmission Line or 2) the request of Interconnection Customer or MHVDC Connection Customer, if Transmission Provider concurs with the request and has the resources to do the study provided Interconnection Customer or MHVDC Connection Customer accepts the financial risk that study resources may be reassigned, that its Interconnection Request is subject to review and restudy in queue order, and that its GIA or TCA may be amended to reflect a reassignment of upgrades as Interconnection Studies of higher queued Interconnection Requests are completed. Interconnection Customer or MHVDC Connection Customer may request the Transmission Provider’s concurrence 1) in connection with a resource solicitation process, 2) when Interconnection Customer or MHVDC Connection Customer proposes to replace equipment due to catastrophic failure and such replacement is determined to be Material Modifications under Section 4.4, and 3) for other reasons specific to Interconnection Customer or MHVDC Connection Customer.

4.2 Group Study Organization of Interconnection Studies.

Interconnection System Impact Studies and Interconnection Facilities Studies may be performed in a Group Study format, whenever applicable, in the Definitive Planning Phase, except when a particular Interconnection Request is sufficiently electrically remote from others that it cannot reasonably be grouped with other Interconnection Requests. Interconnection Requests for both ER Interconnection Service and NR Interconnection Service may be part of a Group Study at the option of Transmission
Provider. An Interconnection Request’s inclusion in a Group Study will not relieve Transmission Provider from meeting the timelines provided in the GIP.

Grouping shall be implemented on the basis of electrical proximity. Transmission Provider may elect to perform Group Studies: (i) in connection with a resource solicitation process with the concurrence of Transmission Provider; (ii) when a coordinated study with an Affected System Operator will be performed that involve Interconnection Requests in the generator interconnection queue of Transmission Provider and of the Affected System Operator; (iii) to identify Common Use Upgrades; or (iv) at the request of a group of affected Interconnection Customers or MHVDC Connection Customers.

If item (i) above applies and Transmission Owner concurs, the solicitor must (a) be authorized by Interconnection Customers participating in the solicitation to act as the agent for all the Interconnection Requests submitted by Interconnection Customers, (b) maintain valid Interconnection Requests, (c) submit all Interconnection Requests at the same time, (d) submit a reasonable number of study portfolios (i.e., a mixture of projects meeting the requirements of the solicitation that are studied in parallel), and (e) select one portfolio prior to the start of the Interconnection Facilities Study.

Interconnection Requests included in a Group Study related to a resource solicitation process are subject to study according to their Definitive Planning Phase Queue Position in the process. Interconnection Requests for projects that are not included in a Group Study related to a resource solicitation process are subject to study according to their Definitive Planning Phase Queue Position outside the process in accordance with the provision of the GIP, and such studies may not be delayed as a result of the resource solicitation process. An Interconnection Customer may request that its Interconnection Request be included in a Group Study related to a resource solicitation process without having to abandon the existing Definitive Planning Phase Queue Position for such
Interconnection Request. Once the solicitor rejects a project in the resource solicitation process, the Interconnection Request associated with the rejected project loses the Definitive Planning Phase Queue Position it held as part of the resource solicitation process. An Interconnection Customer that participates in a Group Study related to a resource solicitation process may at any time for the same project submit a separate Interconnection Request that is not included in the Group Study, provided, however, that Interconnection Customer shall be responsible for all Interconnection Study costs associated with its non-solicitation-related Interconnection Request in addition to any costs associated with Interconnection Customer’s bid into the resource solicitation. When the solicitor selects a project in the resource solicitation process, Interconnection Customer may no longer maintain more than one Definitive Planning Phase Queue Position for the selected project. Interconnection System Impact Studies performed as Group Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the Transmission System’s capabilities at the time of each study.

In the event that an Interconnection Customer or MHVDC Connection Customer in a Group Study withdraws from the process at any point during the Definitive Planning Phase, then Transmission Provider may substitute the next highest queued similarly situated Interconnection Request into the existing Group Study, provided such substitution occurs on a non-discriminatory basis and does not have a material impact on the effort required for the Group Study.

4.3 Transferability of Queue Position.

An Interconnection Customer or MHVDC Connection Customer may transfer either of its queue positions to another entity only if such entity acquires the specific Generating Facility or MHVDC Transmission Line identified in the Interconnection Request and the Point of Interconnection or Point of Connection does not change.

4.4 Modifications.
Interconnection Customer or MHVDC Connection Customer shall submit to Transmission Provider, in writing, modifications to any information provided in the Interconnection Request. Interconnection Customer or MHVDC Connection Customer shall retain its Queue Position if the modifications proposed by Interconnection Customer or MHVDC Connection Customer are in accordance with Sections 4.4.1 or 4.4.4. Notwithstanding any modifications to information provided in the Interconnection Request, the applicable timing requirements of Section 7.2 to return study agreements and obligation to provide study deposits will not change.

Notwithstanding the above, during the course and prior to the completion of the Interconnection Studies, Interconnection Customer or MHVDC Connection Customer, Transmission Owner or Transmission Provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to Transmission Provider, Transmission Owner and Interconnection Customer or MHVDC Connection Customer, such acceptance not to be unreasonably withheld; Transmission Provider shall modify the Point of Interconnection or Point of Connection and/or configuration in accordance with such changes and proceed with any required Interconnection Studies. Changes to the Point of Interconnection or Point of Connection requested by Interconnection Customer or MHVDC Connection Customer during the Definitive Planning Phase, except as described in this paragraph, will result in the Interconnection Request having to be revalidated according to the procedures in Section 3.3.1, and a new Definitive Planning Phase Queue Position assigned in accordance with the procedures in Section 4.1.

4.4.1 During the Definitive Planning Phase, the only modification permitted is a change in the technical parameters associated with the Generating Facility or MHVDC Connection Customer technology or a change to the Point of Interconnection or Point of Connection permitted under Section 4.4. For such permitted
modification proposed by Interconnection Customer or MHVDC Connection Customer, Interconnection Customer or MHVDC Connection Customer shall submit a detailed analysis demonstrating why they believe the change is not a Material Modification. Transmission Provider must review such analysis and will determine, in its discretion, if the proposed modification is a Material Modification. In the absence of such analysis, the modification shall be deemed a Material Modification.

4.4.2 After entering the Definitive Planning Phase any modifications to the type of Interconnection Service selected by Interconnection Customer in the Interconnection Request, other than a change from NR Interconnection Service to ER Interconnection Service pursuant to Section 3.2 of this GIP, shall be deemed a Material Modification.

4.4.3 After entering the Definitive Planning Phase, any modification to the size of the Interconnection Request, other than as allowed in Section 7.3.1.4 or Section 7.3.2.4 of this GIP, shall be deemed a Material Modification.

4.4.4 After entering the Definitive Planning Phase any extension by Interconnection Customer or MHVDC Connection Customer to the In-Service Date or Commercial Operation Date of the Generating Facility or MHVDC Transmission Line shall be deemed a Material Modification except that the Transmission Provider will not unreasonably withhold approval of an Interconnection Customer’s or MHVDC Connection Customer’s proposed change in the In-Service Date or Commercial Operation Date of the Generating Facility or MHVDC Transmission Line if that change is the result of either (a) a change in milestones by another party to the GIA or TCA, (b) a change in a higher-queued Interconnection Request, (c) delays in the completion of the Definitive Planning Phase Studies, or (d) Interconnection Customer demonstrates that engineering, permitting and construction of the Generating Facility will take longer than the
process window for the Transmission Provider’s Definitive Planning Phase period. Where such exceptions apply, extensions to the Commercial Operation Date or In-Service Date shall not exceed three years beyond the original Commercial Operation Date or In-Service Date. A change to either of these dates that exceeds three years from the date in the original Interconnection Request is a Material Modification. At the completion of the Definitive Planning Phase, the Commercial Operation Date shall be set forth in a GIA. Consistent with Article 2.3.1 of the GIA, once that GIA is executed or filed unexecuted, if the Generating Facility fails to reach Commercial Operation by the Commercial Operation Date set forth in the GIA, such Commercial Operation Date as set forth in the GIA may be extended by Interconnection Customer for a period up to three (3) consecutive years, after which Transmission Provider shall terminate the GIA if the Generating Facility has still failed to reach Commercial Operation. Notwithstanding the foregoing, in the limited circumstance that the Interconnection Request is served by a contingent Network Upgrade with an in-service date that is farther out than the Commercial Operation Date permitted under this Section 4.4.4, Transmission Provider shall only terminate the GIA for failure to achieve Commercial Operation by that later in-service date of the contingent Network Upgrade.

SECTION 5. PROCEDURES FOR INTERCONNECTION REQUESTS SUBMITTED PRIOR TO EFFECTIVE DATE OF GENERATOR INTERCONNECTION PROCEDURES.

5.1 Queue Position for Pending Requests.

5.1.1 All Interconnection Requests that have entered a Definitive Planning Phase and the Definitive Planning Phase System Impact Study has been completed prior to January 4, 2017 will complete the Definitive Planning Phase pursuant to the approved GIP in effect on January 3, 2017. The August 2015 Definitive Planning
Phase cycle shall be completed pursuant to the approved GIP in effect on January 3, 2017.

5.1.2 All Interconnection Requests that have entered a Definitive Planning Phase and the System Impact Study has not been started, or started and not completed, as of January 4, 2017 will be required to conform to Section 7 of this GIP excluding Section 7.2 “Eligibility for the Definitive Planning Phase” and the Site Control provisions found in Section 7.3.2.4 so long as the Interconnection Customer has previously complied with the then existing Section 8.2 “Eligibility for the Definitive Planning Phase.” All study deposits will be applied to studies performed under this transition plan and M2 milestone amounts previously paid will satisfy the M2 milestone requirement of Section 7.2. These projects will then follow all other sections of these Generator Interconnection Procedures in effect as of January 4, 2017.

5.1.3 All Interconnection Requests that have been received but have not had an M2 milestone calculated as of January 4, 2017, and have not met the requirements of Section 5.1.4, will be required to conform to Section 7 of these GIPs and will then follow all other sections of these Generator Interconnection Procedures in effect as of January 4, 2017.

5.1.4 All Interconnection Requests that are in the System Planning and Analysis Phase of the GIPs in effect prior to January 4, 2017 may pay their M2 milestone payment prior to January 4, 2017 and shall be treated pursuant to section 5.1.2. Interconnection Requests that are in the System Planning and Analysis Phase prior to the effective date of these GIPs that have not paid an M2 milestone payment prior to January 4, 2017 shall be treated pursuant to section 5.1.3. Interconnection Requests that are in the System Planning and Analysis Phase may remain in the System Planning and Analysis Phase until 45 Calendar Days prior to the start of the first cycle under these GIPs which begins August 1, 2017.
MISO shall deem withdrawn any Interconnection Requests that are in the System Planning and Analysis Phase that have not made their M2 milestone payment at least 45 Calendar Days prior to the start of the first cycle under these GIPs.

Notwithstanding the foregoing, any request for HVDC facilities listed as being in the System Planning and Analysis Phase as of June 16, 2017 shall be deemed transferred into the Pre-Queue Phase. Furthermore, any MHVDC projects in the Pre-Queue Phase as of the effective date of the MHCP shall be deemed transferred to the MHCP, as set forth in Section 4 of the MHCP.

5.2 **Transition Period.**

An Interconnection Customer of a new transmission owning member of Transmission Provider shall transition to the revised GIP within a reasonable period of time not to exceed ninety (90) Calendar Days from the date when this GIP becomes applicable to that transmission owning member.

5.3 **New Transmission Provider.**

If Transmission Provider transfers control of its Transmission System to a successor Transmission Provider during the period when an Interconnection Request is pending, the original Transmission Provider shall transfer to the successor Transmission Provider any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by the GIP shall be paid by or refunded to Interconnection Customer, as appropriate. The original Transmission Provider shall coordinate with the successor Transmission Provider to complete any Interconnection Study, as appropriate, that the original Transmission Provider has begun but has not completed. If Transmission Provider has tendered a draft GIA to Interconnection Customer but Interconnection Customer has not either executed the GIA or requested the filing of an unexecuted GIA with FERC, unless otherwise provided, Interconnection Customer must complete negotiations with the successor Transmission Provider.
5.4 **Transition to Revised Scope of DPP Phase I Studies.**

With the exception of this provision, the Tariff revisions accepted in Docket Nos. ER18-2049-000 and -001 shall not apply to any queue cycle(s) for which the Definitive Planning Phase preliminary System Impact Study has started prior to September 19, 2018.

5.5 **Transitional Notice Requirements for Generating Facility Replacement.**

All requests for Replacement Generating Facility that are submitted to the Transmission Provider within 365 Calendar Days after May 16, 2019 shall have a date of cessation of operation for the Existing Generating Facility that is not earlier than May 16, 2021.

5.6 **Transition to Revised Milestone Requirements Accepted in Docket No. ER20-___.**

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was prior to April 29, 2019 shall be required to adhere to milestone requirements in GIP in effect prior to December 2, 2019.

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was on April 29, 2019 shall be required to adhere to the revised milestone requirements accepted in Docket No. ER20-___, but shall not be subject to the M2 refund provisions in Section 7.6.2.1 of this GIP. All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was on April 29, 2019 shall be subject to M2 refund provisions in effect prior to December 2, 2019.

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase is after April 29, 2019 shall be required to adhere to the revised milestone requirements accepted in Docket No. ER20-___.

5.7 **Transition to Revised Site Control Requirements Accepted in Docket No. ER20-___.**
All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was prior to April 29, 2019 shall be required to adhere to Site Control requirements in GIP in effect prior to December 2, 2019.

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase was on April 29, 2019 shall be required to provide proof of Site Control for the Generation Facility by the end of Interconnection Customer Decision Point II in accordance with the timing requirements established in Section 7.2.2.1. Such Interconnection Requests shall not be required to provide proof of Site Control for the Generating Facility ninety (90) Calendar Days prior to the start of DPP Phase I in accordance with the timing requirements established in Section 7.2.1. For such requests, the proof of Site Control for all applicable Interconnection Customer’s Interconnection Facilities, and, if applicable (i.e., when the Interconnection Customer is providing the site for such facilities), the Transmission Owner’s Interconnection Facilities and Network Upgrades at the POI shall be due in accordance with the terms of Sections 7.2.2.1 and 7.2.2.2.

All Interconnection Requests for which the application deadline to enter the Definitive Planning Phase is after April 29, 2019 will be subject to the Site Control requirements as set forth in Section 7.2.

SECTION 6. PRE-QUEUE PHASE.

6.1 Pre-Queue Customer Education

Transmission Provider will be available for consultation with Interconnection Customer to discuss potential Interconnection Requests for Generating Facilities or study and processing of HVDC facilities. Such discussions may include, but are not limited to: (i) general facility loadings; (ii) general instability issues; (iii) general short circuit issues; (iv) general voltage issues including voltage and frequency ride-through capabilities for the Generating Facility; (v) general power
quality issues including voltage flicker, harmonics; (vi) general reliability issues as may be reasonably required to accomplish the purpose of the meeting; (vii) estimated timing of Interconnection Request proceeding to the Definitive Planning Phase; (viii) estimated in-service date for the request; and (ix) any process related questions.

6.2 Interim Treatment of HVDC Facilities in Pre-Queue Phase: All requests for HVDC facilities deemed transferred into the Pre-Queue Phase pursuant to Section 5.1.4 of this GIP or which otherwise are permitted to enter the Pre-Queue Phase shall not be eligible to proceed to the Definitive Planning Phase until such time as additional procedures for processing such facilities are implemented.

6.3 Small Generating Facility Pre-Application Report.

6.3.1 In addition to the information described in section 6.1, which may be provided in response to an informal request, an Interconnection Customer proposing to interconnect its Small Generating Facility may submit a formal written request form along with a non-refundable fee of $300 for a pre-application report on a proposed project at a specific site. The Transmission Provider shall provide the pre-application data described in section 6.3.2 to the Interconnection Customer within twenty (20) Business Days of receipt of the completed request form and payment of the $300 fee. Should the Transmission Provider notify the Interconnection Customer that more than twenty (20) Business Days are necessary to provide the pre-application data described in section 6.3.2 below because the information is not readily available to the Transmission Provider, the Interconnection Customer shall notify the Transmission Provider that it desires more complete information and waives the twenty (20) Business Day timeline. The pre-application report produced by the Transmission Provider is non-binding, does not confer any rights, and the
Interconnection Customer must still successfully apply to interconnect to
the Transmission Provider’s system. The written pre-application report
request form shall include the information in sections 6.3.1.1 through
6.3.1.8 below to clearly and sufficiently identify the location of the
proposed Point of Interconnection.

6.3.1.1 Project contact information, including name, address, phone
number, and email address.

6.3.1.2 Project location (street address with nearby cross streets and
town)

6.3.1.3 Meter number, pole number, or other equivalent information
identifying proposed Point of Interconnection, if available.

6.3.1.4 Generator Type (e.g., solar, wind, combined heat and power, etc.)

6.3.1.5 Size (alternating current kW)

6.3.1.6 Single or three phase generator configuration

6.3.1.7 Stand-alone generator (no onsite load, not including station
service – Yes or No?)

6.3.1.8 Is new service requested? Yes or No? If there is existing service,
include the customer account number, site minimum and
maximum current or proposed electric loads in kW (if available)
and specify if the load is expected to change.
6.3.2 Using the information provided in the pre-application report request form in section 6.3.1, the Transmission Provider will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. This selection by the Transmission Provider does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. Subject to section 6.3.3, the pre-application report will include the following information:

6.3.2.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.

6.3.2.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.

6.3.2.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.

6.3.2.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).
6.3.2.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

6.3.2.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.

6.3.2.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.

6.3.2.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 14.4.4.1.1 below and absolute minimum load, when available.

6.3.2.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.

6.3.2.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.

6.3.2.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.

6.3.2.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.

6.3.2.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity...
issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

6.3.3 The pre-application report need only include existing data. A pre-application report request does not obligate the Transmission Provider to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the Transmission Provider cannot complete all or some of a pre-application report due to lack of available data, the Transmission Provider shall provide the Interconnection Customer with a pre-application report that includes the data that is available. The provision of information on “available capacity” pursuant to section 6.3.2.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions of this section, the Transmission Provider shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

SECTION 7. DEFINITIVE PLANNING PHASE.

7.1 Purpose of the Definitive Planning Phase.
The Definitive Planning Phase is designed to identify Network Upgrades that will reliably and efficiently integrate the proposed generation, including through Injection Rights requested by MHVDC Connection Customer, into the Transmission Provider’s Transmission System. The Definitive Planning Phase will be composed of three distinct phases in which Interconnection System Impact Studies and Interconnection Facilities Studies will be performed.
7.1.1 Screening Analysis Prior to Definitive Planning Phase.
Transmission Provider will perform an indicative non-binding screening analysis to identify potential thermal and voltage constraints and publish the results of that analysis for Interconnection Customers and MHVDC Connection Customers entering the Definitive Planning Phase at least fifteen (15) Calendar Days prior to the kick-off of the Definitive Planning Phase I. If the Interconnection Customer or MHVDC Connection Customer decides to withdraw its Interconnection Request before the start of the Definitive Planning Phase I, then the Transmission Provider will refund to Interconnection Customer or the MHVDC Connection Customer 100% of Definitive Planning Phase entry milestone (M2) and any remaining study deposits pursuant to Section 7.6.

7.2 Eligibility for the Definitive Planning Phase.
The Interconnection Request shall enter the Definitive Planning Phase after the Interconnection Customer or MHVDC Connection Customer has met the requirements of Section 3.3, specifically having provided the Definitive Planning Phase entry milestone, technical data requirements, and Definitive Planning Phase study deposit. The Definitive Planning Phase will start on a periodic basis, where an Interconnection Customer or MHVDC Connection Customer may elect to enter the next scheduled Definitive Planning Phase.

7.2.1 Requirements for Demonstrating Site Control for Generating Facility.
Except as otherwise provided in Section 5.7, at least ninety (90) Calendar Days prior to the kick-off of DPP Phase I the Interconnection Customer shall submit one of the following to the Transmission Provider:

(i) Proof of Site Control for the Generating Facility demonstrating that the Interconnection Customer has obtained a right to develop the site, and that such Site Control:
(a) is exclusive to the specific project referenced in the Interconnection Request and the site meets the total resource-specific acreage requirements established in the Generator Interconnection Business Practices Manual; or
(b) either is not exclusive to the specific project or includes less acreage than the standard resource-specific acreage requirements established in the Generator Interconnection Business Practice but is nonetheless sufficient to accommodate the final design of the Generating Facility, and account for any other projects that will utilize all or part of the same site; or

(ii) A cash deposit in lieu of Site Control and supporting documentation demonstrating regulatory restrictions in accordance with Section 7.2.1.2 of this GIP.

Site Control for a Generating Facility shall be demonstrated in accordance with Section 7.2.1.1 and Section 7.2.1.2 of this GIP.

All documentation establishing proof of Site Control under Sections 7.2.1 of this GIP shall be accompanied by a signed affidavit from an officer or from an agent of the Interconnection Customer stating either that the Interconnection Customer: (1) possesses Site Control in accordance with Section 7.2.1.1 of this GIP; or (2) is subject to regulatory restrictions that preclude Interconnection Customer from obtaining Site Control pursuant to Section 7.2.1.2 of this GIP. Such affidavit shall adhere to the form specified in Attachment E of Appendix 1 of Attachment X.

7.2.1.1 Site Control Demonstration.
In order to demonstrate Site Control for a Generating Facility, an Interconnection Customer must submit the following:
(i) To demonstrate that an Interconnection Customer has Site Control in accordance with Section 7.2.1(i)(a) of this GIP, a Geographic Information System (GIS) site plan map, data files, and documentation that shows the following information: (a) sufficient land to meet the acreage requirements set forth in the Generator Interconnection Business Practices Manual; (b) boundary for the proposed project indicating the boundaries of the Interconnection Customer’s leasehold/ownership interests for the site; and (c) the proposed location of each of the following: the Collector Substation, the Point of Interconnection, and the Interconnection Facilities based on the Point of Interconnection.

(ii) To demonstrate that an Interconnection Customer has obtained Site Control in accordance in accordance with Section 7.2.1(i)(b) of this GIP, Interconnection Customer must submit a Geographic Information System (GIS) site plan map, data files, and documentation that meets the requirements specified in Section 7.2.1.1(i)(b) and (c) and show the following additional information:

(a) Sufficient land to accommodate the proposed Generating Facility based on the location and approximate land utilization requirements of proposed electrical devices (i.e., turbine, solar panel, battery storage, inverter), local spacing and setback requirements, and the proposed location of the feeder routes to the Collector Substation; and

(b) In the event that Interconnection Customer elects to share a site with other projects in accordance with Section 7.2.1(i)(b) of this GIP, Interconnection Customer shall include with its Interconnection Request documentation demonstrating that the
project referenced in the Interconnection Request is concurrently feasible with the development of any other projects that will share Site Control over all or a portion of the same site. Such proof of concurrent feasibility shall include:

(1) an identification of any other Interconnection Requests or projects that will share all or a portion of the same site; and
(2) identification of the proposed location and space utilization of all projects that will share the site together with any related technical information specified in the Generator Interconnection Business Practices Manual to enable the Transmission Provider to determine that development of the project referenced in the submitted Interconnection Request is not inconsistent with development of any of the other projects that will share all or a portion of the same site.

Any GIS site plan map, and data files submitted in accordance with this Section 7.2.1.1 must be consistent with the modeling data submitted with the Interconnection Request.

7.2.1.2 Cash in lieu of Site Control.

If the Interconnection Customer is unable to obtain Site Control for its proposed Generating Facility as a result of regulatory restrictions, the Interconnection Customer shall provide a cash deposit in lieu of Site Control. In order to demonstrate regulatory restrictions, Interconnection Customer must submit: (i) a signed affidavit in accordance with the terms of Section 7.2.1 of this GIP indicating that Site Control is unobtainable due to regulatory requirements; (ii) documentation sufficiently describing and explaining the source of and effects of such regulatory restrictions,
including a description of any conditions that must be met in order to satisfy the regulatory restrictions and the anticipated time by which the Interconnection Customer expects to satisfy the regulatory restrictions. The cash deposit made in lieu of Site Control shall be $10,000 per MW of new Interconnection Service requested, and at least $500,000 but no more than $2,000,000. In the event that Interconnection Customer needs to submit a cash deposit in lieu of Site Control as a result of regulatory restrictions, Interconnection Customer must provide proof of Site Control as soon as the Interconnection Customer satisfies the regulatory requirements described in the Interconnection Customer’s affidavit and supporting documents. Interconnection Customer’s cash deposit made in lieu of Site Control shall only be refunded once the Interconnection Customer satisfies the Site Control requirements in accordance with the terms of Sections 7.2.1(i), 7.2.1.1, and 7.2.2 of the GIP or is withdrawn from the queue.

7.2.1.3 Transmission Provider Review of Site Control Sufficiency.

The Transmission Provider shall review the Site Control documentation submitted by Interconnection Customer and determine whether the Interconnection Customer has satisfied the applicable Site Control requirements specified in Section 7.2.1, and 7.2.1.1 or 7.2.1.2 of this GIP, as applicable. Transmission Provider shall evaluate the Site Control documentation using sound engineering judgement and in a non-discriminatory manner. In addition, Transmission Provider shall adhere to any guidelines for such analysis as may be included in the Generator Interconnection Business Practices Manual.

In the event that the Transmission Provider determines that the Interconnection Customer does not demonstrate sufficient Site Control, Transmission Provider shall, consistent with Section 7.2.3(ii) of this GIP,
provide a written explanation, including the technical reasons for such determination, to Interconnection Customer no later than thirty (30) Calendar Days prior to the kick-off of the DPP Phase I. Any such deficiencies shall be processed as set forth in Section 7.2.3(ii) of this GIP.

### 7.2.2 Continued Site Control for Generating Facilities; Site Control for Interconnection Facilities and Network Upgrades.

#### 7.2.2.1 Timing Requirements.

(i) After the start and prior to the end of Interconnection Customer Decision Point II, Interconnection Customer shall submit proof that Interconnection Customer continues to maintain Site Control for the Generating Facility in accordance with terms in Section 7.2.1.1 of this GIP.

(ii) Prior to conclusion of the Interconnection Customer’s GIA execution period, as defined in Section 11 of this GIP, Interconnection Customer shall submit proof of the following: (a) continued Site Control for the Generating Facility in accordance with terms in Section 7.2.1.1 of this GIP; and (b) 50% Site Control for all Interconnection Customer’s Interconnection Facilities, and, if applicable (i.e., when the Interconnection Customer is providing the site for such facilities), the Transmission Owner’s Interconnection Facilities and Network Upgrades at the POI that the Interconnection Customer will develop.

(iii) To the extent there is any change in the POI as a result of the Interconnection Facilities Study started in DPP Phase II and completed in DPP Phase III, the Transmission Provider shall
provide the Interconnection Customer additional time to procure land rights for the new Interconnection Customer’s Interconnection Facilities and, if applicable \(i.e.,\) when the Interconnection Customer is providing the site for such facilities, the Transmission Owner’s Interconnection Facilities and Network Upgrades at the POI that the Interconnection Customer will develop. The amount of additional time awarded for this purpose shall be determined on a case-by-case basis and in accordance with Section 4.4 of this GIP.

(iv) After the Interconnection Customer timely satisfies each of the requirements of this Section 7.2.2.1 and execution of the GIA, any changes made to the site layouts and interconnection facility routes shall not be construed as a failure to satisfy the requirements of this Section 7.2.2.1. In the event that the Interconnection Customer makes any modifications to the design of the site layouts or Interconnection Facility routes after execution of this GIA, Interconnection Customer shall: (1) immediately notify the Parties of such changes; and (2) provide to Transmission Provider evidence of continued Site Control for land sufficient to accommodate the changes in site layouts and/or Interconnection Facility routes in accordance with the terms of its GIA.

7.2.2.2 Content Requirements -- Demonstrating Site Control for Applicable Interconnection Facilities and Network Upgrades.

In order to demonstrate Site Control for the Interconnection Customer’s Interconnection Facilities and, if applicable \(i.e.,\) when the Interconnection Customer is providing the site for such facilities, the Transmission Owner’s Interconnection Facilities and Network Upgrades at the POI, Interconnection Customer shall submit a site plan map by the deadline...
specified in Section 7.2.2.1 of this GIP. Such site plan map shall demonstrate land that is sufficient to accommodate 50% of the total land acreage required for the Interconnection Customer’s Interconnection Facilities for the proposed Generating Facility (including the total linear miles for the associated lead line required to electrically interconnect the Generating Facility to the Transmission System) and, if applicable (i.e., when the Interconnection Customer is providing the site for such facilities), 50% of the total land acreage required for the Transmission Owner’s Interconnection Facilities and the Network Upgrades at the POI for the proposed Generating Facility.

The Site Plan submitted in accordance with Section 7.2.2 of this GIP shall identify the specific locations within the site for which Site Control is achieved, and those locations for which Site Control is not yet achieved.

To the extent that the Interconnection Customer intends to locate its Interconnection Facilities in a public right of way, Interconnection Customer shall also submit proof of submission of all requisite state and local permits.

Demonstration of Site Control pursuant to this Section 7.2.2.2 shall conform to any technical and documentation requirements as may be specified in the Generator Interconnection Business Practice Manual.

**7.2.3. Effect of Deficiencies in Demonstration of Site Control**

In the event that the Interconnection Customer fails to timely satisfy any of the requirements of Sections 7.2.1 and 7.2.2 including subsections, as applicable, Interconnection Customer’s Interconnection Request shall be deemed withdrawn as set forth below:
(i) If Interconnection Customer fails to submit all of the documentation and information required by the applicable deadline, Interconnection Customer’s Interconnection Request shall immediately be deemed withdrawn as of the date of such deadline without any cure period. Transmission Provider shall provide Interconnection Customer with notice of such withdrawal.

(ii) If Interconnection Customer has timely submitted all information required by an applicable deadline but the Transmission Provider determines after review that such submission does not meet the requirements of this GIP, Interconnection Customer’s Interconnection Request shall be deemed withdrawn in accordance with Section 3.6 of this GIP.

7.3 **Duration of the Definitive Planning Phase**

The Definitive Planning Phase will include the following three phases:

(i) Definitive Planning Phase I

(ii) Definitive Planning Phase II

(iii) Definitive Planning Phase III.

7.3.1 **Definitive Planning Phase I**

The Definitive Planning Phase I will start on a defined, periodic basis.

The Definitive Planning Phase I will include the following steps:

(i) Model Building and Review (30 Calendar Days)

(ii) Preliminary System Impact Study (90 Calendar Days)

(iii) Interconnection Customer Decision Point I (15 Business Days)

7.3.1.1 **Purpose**
The Definitive Planning Phase I is designed to provide Interconnection Customers or MHVDC Connection Customers with a preliminary detailed analysis of their Interconnection Request’s impact on the reliability of the Transmission System. Upon completion of the preliminary Interconnection System Impact Study, Transmission Provider will provide a detailed reliability analysis, pursuant to Section 7.3.1.5, to each Interconnection Customer or MHVDC Connection Customer that has an Interconnection Request in the Definitive Planning Phase I. Upon receipt of the preliminary Interconnection System Impact Study, the Interconnection Customer can either proceed to Definitive Planning Phase II or withdraw its Interconnection Request pursuant to Section 7.3.1.4 of this Attachment X.

7.3.1.2 Model Building and Point of Interconnection Review

Before starting the preliminary Interconnection System Impact Study, Transmission Provider will distribute the study models to Interconnection Customer or MHVDC Connection Customer and Transmission Owner. Interconnection Customer and Transmission Owner may recommend changes to the study model by providing a completed Interconnection Study Model Review Form, Appendix 10 to the GIP within ten (10) Business Days after receipt of the study models. Proposed changes will be incorporated in the study models after mutual agreement between Interconnection Customer or MHVDC Connection Customer, Transmission Owner and Transmission Provider, such agreement not to be unreasonably withheld. Transmission Provider shall thereafter begin the preliminary Interconnection System Impact Study. Failure of Interconnection Customer or MHVDC Connection Customer to provide the completed Interconnection Study Model Review Form within ten (10) Business Days will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.
7.3.1.3 Scope of the Preliminary Interconnection System Impact Study

The preliminary Interconnection System Impact Study shall evaluate the impact of the proposed Interconnection Request(s) in the Definitive Planning Phase I on the reliability and safety of the Transmission System. The preliminary Interconnection System Impact Study will consider the Base Case as well as all generating and MHVDC facilities (and with respect to subpart iv below, any identified Network Upgrades, System Protection Facilities, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, Shared Network Upgrades, or, if such upgrades have been determined, upgrades on Affected Systems, associated with such higher queued Interconnection Requests) that, on the date the preliminary Interconnection System Impact Study is commenced: (i) are interconnected to the Transmission System or Distribution System; (ii) are interconnected or queued to interconnect to Affected Systems and may have an impact on the Interconnection Request; (iii) have Interconnection Request is part of the same group; and (iv) have executed a GIA or a pending unexecuted GIA on file at FERC or a TCA pursuant to which Transmission Provider has granted Injection Rights.

The preliminary Interconnection System Impact Study will consist of a power flow analysis. If Transmission Provider determines in accordance with Good Utility Practice that any voltage stability analysis is needed, the preliminary Interconnection System Impact Study may include voltage stability analysis. The preliminary Interconnection System Impact Study will also include analysis needed to determine the Generating Facility’s reactive power capability required to maintain the Transmission Owner’s voltage schedule and power factor criteria at the Point of Interconnection.
Preliminary Interconnection System Impact Studies for Net Zero Interconnection Service requests will consist of short circuit and stability analyses as described in this Section 2.1.3.2. If Transmission Provider determines upon a review of the Interconnection Studies performed for the Existing Generating Facility (against which the Net Zero Interconnection Service is sought) that power flow analyses are required, then the preliminary Interconnection System Impact Study may include such analyses as well.

Determination of the full scope of the preliminary Interconnection System Impact Study in the Definitive Planning Phase I will be on a non-discriminatory basis per the methodologies listed in the Generator Interconnection Business Practices Manual. Transmission Provider shall use Reasonable Efforts to complete the preliminary Interconnection System Impact Study within ninety (90) Calendar Days.

The preliminary Interconnection System Impact Study will state the assumptions upon which it is based, state the results of the analyses, and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The preliminary Interconnection System Impact Study will provide a preliminary list of facilities (including Interconnection Facilities, Connection Facilities, Network Upgrades, Generator Upgrades, Common Use Upgrades, and Shared Network Upgrades) that are required as a result of the Interconnection Request and a preliminary non-binding good faith estimate of cost and a non-binding good faith estimated time to construct.

At the request of Interconnection Customer or MHVDC Connection
Customer, or at any time Transmission Provider determines that it will not meet the required time frame for completing the preliminary Interconnection System Impact Study, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer regarding the following:

(i) Schedule status of the preliminary Interconnection System Impact Study

(ii) Estimated completion date and an explanation of the reasons why additional time is required.

(iii) Revised cost estimate of study deposits with an explanation of the reasons why cost estimates were revised. Interconnection Customer or MHVDC Connection Customer shall then provide within thirty (30) Calendar Days of Transmission Provider’s notice, an additional deposit equal to the difference between the initial and revised cost estimate. Failure of Interconnection Customer or MHVDC Connection Customer to provide this additional deposit will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

7.3.1.4 Interconnection Customer Decision Point I

All Interconnection Customers or MHVDC Connection Customers with Interconnection Requests in the Definitive Planning Phase I will pass through Interconnection Customer Decision Point I. The Interconnection Customer Decision Point I will last for fifteen (15) Business Days beginning with the receipt of the preliminary Interconnection System Impact Study analysis including estimated upgrades and costs, as applicable. Transmission Provider shall notify all Interconnection Customers or MHVDC Connection Customers at the beginning of Interconnection Customer Decision Point I that the Interconnection Customer or MHVDC Connection Customer shall have fifteen (15)
Business Days to decide whether it wants to proceed to the Definitive Planning Phase II or withdraw its Interconnection Request. During Interconnection Customer Decision Point I, an Interconnection Customer or MHVDC Connection Customer may reduce the size of its Interconnection Request but the required Definitive Planning Phase II Milestone calculation shall be based on the DPP Phase I results. If the Interconnection Customer or MHVDC Connection Customer decides to withdraw its Interconnection Request during, or any time before, the end of Interconnection Customer Decision Point I, then the Transmission Provider will refund Interconnection Customer with 50% of Definitive Planning Phase I milestone (M2) and any remaining study deposits pursuant to Section 7.6. Any withdrawal during the Definitive Planning Phase I, but prior to Interconnection Customer Decision Point I, will neither be processed nor deemed withdrawn until Interconnection Customer Decision Point I.

If the Interconnection Customer or MHVDC Connection Customer decides to proceed to the Definitive Planning Phase II, then it will be required to pay Definitive Planning Phase II milestone (M3), pursuant to Section 7.3.1.4.1, prior to the end of Interconnection Customer Decision Point I.

If the Transmission Provider does not receive written confirmation from Interconnection Customer or MHVDC Connection Customer on whether it wants to proceed to the Definitive Planning Phase II or withdraw its Interconnection Request, during the Interconnection Customer Decision Point I, the Transmission Provider will deem the Interconnection Request as withdrawn. After Interconnection Customer or MHVDC Connection Customer enters the Definitive Planning Phase II, the Definitive Planning
Phase I (M2) milestone payment becomes 100% non-refundable, pursuant to Section 7.8.

7.3.1.4.1 **Definitive Planning Phase II Milestone (M3)**

The Definitive Planning Phase II milestone (M3) will be in the form of either cash or irrevocable letter of credit reasonably acceptable to Transmission Provider. Interconnection Customers and MHVDC Connection Customers may replace cash milestone payments with a letter of credit and may replace letters of credit with cash. The Definitive Planning Phase II milestone (M3) will be ten percent (10%) of the amount of Network Upgrades identified in the Preliminary System Impact Study less the amount previously provided at M2, but in no event shall the M3 be less than zero dollars.

7.3.2 **Definitive Planning Phase II**

The Definitive Planning Phase II start the next day after the fifteen (15) Business Days Interconnection Customer Decision Point I window expires.

The Definitive Planning Phase II will include the following steps:

(i) Model Building and Review (10 Business Days)
(ii) System Impact Study (45 Calendar Days)
(iii) Interconnection Customer Decision Point II (15 Business Days)
(iv) Interconnection Facilities Study (90 Calendar Days)

7.3.2.1 **Purpose**

The Definitive Planning Phase II is designed to provide Interconnection Customers and MHVDC Connection Customers a revised and a detailed analysis of their Interconnection Project’s impact on the reliability of the
Transmission System after incorporating updated generation and MHVDC assumptions due to potential withdrawal of Interconnection Requests during Definitive Planning Phase I. Upon completion of the revised Interconnection System Impact Study, Transmission Provider will provide a detailed reliability analysis, pursuant to Section 7.3.2.5, to each Interconnection Customer or MHVDC Connection Customer that has an Interconnection Request in the Definitive Planning Phase II. Upon receipt of the revised System Impact Study, the Interconnection Customer or MHVDC Connection Customer can either proceed to Definitive Planning Phase III or withdraw its Interconnection Request pursuant to Section 7.3.2.4 of this Attachment X.

7.3.2.2 Model Building

Before starting the revised Interconnection System Impact Study, Transmission Provider will distribute the study models to Interconnection Customer or MHVDC Connection Customer and Transmission Owner. The Transmission Provider will update the study models built during Definitive Planning Phase I, pursuant to Section 7.3.1.2, by removing all Interconnection Requests that did not proceed to the Definitive Planning Phase II. The Transmission Provider will distribute the revised study models to the Transmission Owner and Interconnection Customer or MHVDC Connection Customer for final review. Any comments or corrections from the Transmission Owner or Interconnection Customer or MHVDC Connection Customer to the revised study models must be submitted to the Transmission Provider within five (5) Business Days after receipt of the revised study models. Should the Transmission Owner or Interconnection Customer or MHVDC Connection Customer fail to provide feedback on the revised study models within five (5) Business Days, Transmission Provider will deem the models acceptable.
Transmission Provider shall thereafter begin the revised Interconnection System Impact Study.

### 7.3.2.3 Scope of the Interconnection System Impact Study

The revised Interconnection System Impact Study shall provide an updated, detailed analysis of their Interconnection Project’s impact on the reliability of the Transmission System after incorporating updated generation and MHVDC assumptions due to potential withdrawal of Interconnection Requests during Definitive Planning Phase I. The revised Interconnection System Impact Study shall follow the procedures as the Preliminary System Impact Study described in Definitive Planning Phase I Section 7.3.1.3, as well as include a short circuit analysis and stability analysis. Transmission Provider shall include in the revised Interconnection System Impact Study an analysis of the upgrades on Distribution System, if applicable, and Affected Systems. If Transmission Provider determines in accordance with Good Utility Practice that any such analyses are needed, any stability analysis performed in a revised Interconnection System Impact Study may include transient stability, large and small signal, sub-synchronous stability, dynamic voltage stability, mid- and long-term stability, voltage flicker analyses and excessive neutral current. Transmission Provider shall utilize existing studies to the extent practicable in performing the revised Interconnection System Impact Study. Transmission Provider shall use Reasonable Efforts to complete the revised Interconnection System Impact Study within forty-five (45) Calendar Days.

At the request of Interconnection Customer or MHVDC Connection Customer, or at any time Transmission Provider determines that it will not meet the required time frame for completing the revised Interconnection System Impact Study, Transmission Provider shall notify Interconnection
Customer or MHVDC Connection Customer regarding the following:

(i) Schedule status of the revised Interconnection System Impact Study

(ii) Estimated completion date and an explanation of the reasons why additional time is required.

(iii) Revised cost estimate of study deposits with an explanation of the reasons why cost estimates were revised. Interconnection Customer or MHVDC Connection Customer shall then provide within thirty (30) Calendar Days of Transmission Provider’s notice, an additional deposit equal to the difference between the initial and revised cost estimate. Failure of Interconnection Customer or MHVDC Connection Customer to provide this additional deposit will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

7.3.2.4 Interconnection Customer Decision Point II

All Interconnection Customers and MHVDC Connection Customers with Interconnection Requests in the Definitive Planning Phase II will pass through Interconnection Customer Decision Point II. The Interconnection Customer Decision Point II will last for fifteen (15) Business Days beginning with the receipt of the revised Interconnection System Impact Study analysis and Affected System analysis, including estimated upgrades and costs as applicable. Transmission Provider shall notify all Interconnection Customers and MHVDC Connection Customers at the beginning of Interconnection Customer Decision Point II that the Interconnection Customer or MHVDC Connection Customer shall have fifteen (15) Business Days to decide whether it wants to proceed to the Definitive Planning Phase III or withdraw its Interconnection Request. During Interconnection Customer Decision Point II, an Interconnection Customer or MHVDC Connection Customer may reduce the size of its...
Interconnection Request by as much as ten percent (10%) compared to what was studied in DPP Phase II, but the required M4 milestone calculation shall be based on the DPP Phase II results.

Milestone payments will be refunded in the event the Interconnection Customer or MHVDC Connection Customer withdraws because the total Network Upgrade cost estimates in the DPP Phase II System Impact Study increased by more than twenty-five percent (25%) and more than $10,000 per MW over the DPP Phase I System Impact Study as a result of Transmission Provider, or Transmission Owner error.

If the Interconnection Customer or MHVDC Connection Customer decides to withdraw its Interconnection Request during, or any time before, the end of Interconnection Customer Decision Point II, then the Transmission Provider will refund Interconnection Customer’s Definitive Planning Phase II milestone (M3) and any remaining study deposits pursuant to Section 7.8. Any withdrawal during the Definitive Planning Phase II, but prior to Interconnection Customer Decision Point II, will neither be processed nor deemed withdrawn until Interconnection Customer Decision Point II.

If the Interconnection Customer or MHVDC Connection Customer decides to proceed to the Definitive Planning Phase III, then it will be required to pay Definitive Planning Phase III milestone (M4), pursuant to Section 7.3.2.4.1, as well as provide evidence of continued Site Control for the proposed Generating Facility prior to the end of Interconnection Customer Decision Point II pursuant to Section 7.2.2.

If the Transmission Provider does not receive written confirmation from Interconnection Customer or MHVDC Connection Customer on whether it
wants to proceed to the Definitive Planning Phase III or withdraw its Interconnection Request, during the Interconnection Customer Decision Point II, the Transmission Provider will deem the Interconnection Request as withdrawn and refund Interconnection Customer’s Definitive Planning Phase II milestone (M3) and any remaining study deposits pursuant to Section 7.6. After Interconnection Customer or MHVDC Connection Customer enters the Definitive Planning Phase III, the Definitive Planning Phase II (M3) milestone payment becomes 100% non-refundable, pursuant to Section 7.8.

### 7.3.2.4.1 Definitive Planning Phase III Milestone (M4) Calculation.

The Definitive Planning Phase III milestone (M4) will be in the form of either cash or irrevocable letter of credit reasonably acceptable to Transmission Provider. Interconnection Customers and MHVDC Connection Customers may replace cash milestone payments with a letter of credit and may replace letters of credit with cash. The Definitive Planning Phase III milestone (M4) will be twenty percent (20%) of the amount of Network Upgrades identified in the revised System Impact Study less any payments made as M2 and M3, but in no event shall the M4 be less than zero dollars.

### 7.3.2.4.2 True-down of Milestone Payments.

Within ten (10) Business Days from the start of Definitive Planning Phase III, Transmission Provider shall notify the Interconnection Customer if the total posted milestone payments (*i.e.*, the sum of the M2, M3 and M4 payments) for the Interconnection Request exceed twenty percent (20%) of the total Network Upgrade cost assigned to such Interconnection Request in the revised System Impact Study. Transmission Provider shall
refund such excess amounts to the Interconnection Customer as soon as practicable.

7.3.2.5 Scope of Interconnection Facilities Study.
The first portion of the Interconnection Facilities Study focusing on the Interconnection Facilities or the Connection Facilities for the project will start the first day of Definitive Planning Phase II. This portion of the Interconnection Facilities Study will identify estimates for cost and the time required to construct the Interconnection Facilities or the Connection Facilities. Transmission Provider shall use Reasonable Efforts to complete this portion of the Interconnection Facilities Study within ninety (90) Calendar Days.

7.3.3 Definitive Planning Phase III
The Definitive Planning Phase III will start the day after the expiration of the fifteen (15) Business Day Interconnection Customer Decision Point II.

The Definitive Planning Phase III will include the following steps:
(i) Model Building and Review (10 Business Days)
(ii) Final Interconnection System Impact Study (30 Calendar Days)
(iii) Interconnection Facilities Study for Network Upgrades (90 Calendar Days)

7.3.3.1 Purpose
The Definitive Planning Phase III is designed to provide Interconnection Customers and MHVDC Connection Customers a final, detailed analysis of their Interconnection Project’s impact on the reliability of the Transmission System after incorporating updated generation and MHVDC assumptions due to potential withdrawal of Interconnection Requests during Definitive Planning Phase II. Upon completion of the final Interconnection System Impact Study, Transmission Provider will perform
Facilities Study pursuant to Section 7.3.3.5. Upon completion of the Interconnection Facilities Study, Transmission Provider will tender a draft pro forma Generator Interconnection Agreement to the Interconnection Customer and Transmission Owner.

7.3.3.2 Model Building

Before starting the final Interconnection System Impact Study, Transmission Provider will distribute the study models to Interconnection Customer or MHVDC Connection Customer and Transmission Owner. The Transmission Provider will update the study models built during Definitive Planning Phase II, pursuant to Section 7.3.2.2, by removing all Interconnection Requests that did not proceed to the Definitive Planning Phase III. The Transmission Provider will distribute the revised study models to the Transmission Owner and Interconnection Customer or MHVDC Connection Customer for final review. Any comments or corrections from the Transmission Owner or Interconnection Customer or MHVDC Connection Customer to the revised study models must be submitted to the Transmission Provider within seven (7) Calendar Days after receipt of the revised study models. Should the Transmission Owner or Interconnection Customer or MHVDC Connection Customer fail to provide feedback on the revised study models within seven (7) Calendar Days, Transmission Provider will deem the models acceptable. Transmission Provider shall thereafter begin the final Interconnection System Impact Study.

7.3.3.3 Scope of the Final Interconnection System Impact Study

The final Interconnection System Impact Study shall provide a final, detailed analysis of their Interconnection Project’s impact on the reliability of the Transmission System after incorporating updated generation assumptions due to potential withdrawal of Interconnection Requests.
during Definitive Planning Phase II. The final Interconnection System Impact Study shall follow the procedures as the Revised System Impact Study described in Definitive Planning Phase II Section 7.3.2.3. Transmission Provider shall utilize existing studies to the extent practicable in performing the final Interconnection System Impact Study.

The final Interconnection System Impact Study will start the day after the completion of the Model Review in the Definitive Planning Phase III. Transmission Provider shall use Reasonable Efforts to complete the final Interconnection System Impact Study within thirty (30) Calendar Days.

At the request of Interconnection Customer or MHVDC Connection Customer, or at any time Transmission Provider determines that it will not meet the required time frame for completing the final Interconnection System Impact Study, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer regarding the following:

(i) Schedule status of the final Interconnection System Impact Study.
(ii) Estimated completion date and an explanation of the reasons why additional time is required.
(iii) Revised cost estimate of study deposits with an explanation of the reasons why cost estimates were revised. Interconnection Customer or MHVDC Connection Customer shall then provide within thirty (30) Calendar Days of Transmission Provider’s notice, an additional deposit equal to the difference between the initial and revised cost estimate. Failure of Interconnection Customer or MHVDC Connection Customer to provide this additional deposit will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

7.3.3.4 Scope of Interconnection Facilities Study.
The second portion of the Interconnection Facilities Study shall start after the final Interconnection System Impact Study in the Definitive Planning Phase III is complete. This phase will identify estimates for the cost and time required to build necessary Network Upgrades that are identified in the final Interconnection System Impact Study. Transmission Provider shall use Reasonable Efforts to complete this portion of the Interconnection Facilities Study within ninety (90) Calendar Days.

The Interconnection Facilities Study, in its entirety, shall specify and estimate the cost of the required equipment, engineering, procurement and construction work needed to implement the Network Upgrades and Interconnection Facilities or Connection Facilities identified in the final Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facilities or the Connection Facilities to the Transmission or Distribution System, as applicable, as well as that equipment, to the extent known and available in accordance with Section 3.5 of these GIP, required by Affected Systems to accommodate the interconnection of the Generating Facility or the MHVDC Transmission Line.

The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Transmission Owner’s Interconnection Facilities or Connection Facilities and Network Upgrades, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and to the extent known and available in accordance with Section 3.5 of the GIP, upgrades on Affected Systems necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.
7.3.3.5 Interconnection Facilities Study Procedures.

Transmission Provider shall coordinate the Interconnection Facilities Study with any Affected System pursuant to Section 3.5 of this GIP. Transmission Provider shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The Interconnection Facilities Study for an Interconnection Request shall be typically performed as a Group Study with respect to Common Use Upgrades and/or Interconnection Facilities or Connection Facilities common to more than one Interconnection Request.

At the request of Interconnection Customer or MHVDC Connection Customer or at any time Transmission Provider determines that it will not meet the required time frame for completing the Interconnection Facilities Study, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer as to the schedule status of the Interconnection Facilities Study. If Transmission Provider is unable to complete the Interconnection Facilities Study and issue draft GIA or TCA appendices and, as applicable, associated draft appendices for the related FCA(s) and/or MPFCA(s) and supporting documentation within the time required, it shall notify Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. If Transmission Provider is unable to complete the Interconnection Facilities Study with the study deposit provided by Interconnection Customer or MHVDC Connection Customer, Transmission Provider shall notify Interconnection Customer or MHVDC Connection Customer and provide a revised cost estimate with an explanation of the reasons why. Interconnection Customer or MHVDC Connection Customer shall then provide within fifteen (15) Calendar Days of Transmission Provider’s notice, an additional deposit equal to the
difference between the initial and revised cost estimate. Failure of Interconnection Customer or MHVDC Connection Customer to provide this additional deposit will result in withdrawal of the Interconnection Request pursuant to Section 3.6 of this GIP.

Interconnection Customer or MHVDC Connection Customer and Transmission Owner may, within fifteen (15) Calendar Days after receipt of the draft GIA or TCA appendices and, as applicable, associated draft appendices for the related FCA(s) and/or MPFCA(s) and supporting documentation, provide written comments to Transmission Provider, which Transmission Provider shall include in the final Interconnection Facilities report. Transmission Provider shall issue the final GIA or TCA appendices and, as applicable, associated appendices for the related FCA(s) and/or MPFCA(s) and supporting documentation within ten (10) Calendar Days of receiving the Interconnection Customer’s or the MHVDC Connection Customer’s comments or promptly upon receiving Interconnection Customer’s or the MHVDC Connection Customer’s statement that it will not provide comments. Transmission Provider may reasonably extend such fifteen-day period upon notice to Interconnection Customer or MHVDC Connection Customer if the Interconnection Customer’s or the MHVDC Connection Customer’s comments require Transmission Provider to perform additional analyses or make other significant revisions prior to the issuance of the final Interconnection Facilities Report. Upon request, Transmission Provider shall provide Interconnection Customer or MHVDC Connection Customer supporting documentation, work papers, and databases or data developed in the preparation of the Interconnection Facilities Study, subject to confidentiality arrangements consistent with Section 13.1. Interconnection Customer or MHVDC Connection Customer shall maintain as confidential any information that is provided by Transmission Provider.
7.4 **Meeting with Transmission Provider.**

Within ten (10) Business Days of providing draft GIA or TCA appendices and, as applicable, associated draft appendices for the related FCA(s) and/or MPFCA(s) and supporting documentation to Interconnection Customer, Transmission Owner and Interconnection Customer may meet to discuss the results of the Interconnection Facilities Study.

7.5 **Interconnection Study Restudy.**

If a restudy of any Interconnection Study is required because an Interconnection Request withdraws or is deemed to have withdrawn prior to all GIAs, TCAs, FCAs, and/or MPFCAs, as applicable, for each respective Definitive Planning Phase cycle have been executed or filed unexecuted with the Federal Energy Regulatory Commission, Transmission Provider shall provide notice of restudy as necessary. The Transmission Provider’s notice shall include a summary of a preliminary analysis supporting the need for an Interconnection Study restudy, an explanation of why an Interconnection Study restudy is required and a good faith estimate of the cost to perform the Interconnection Study restudy. The Interconnection Study restudy shall be performed subject to the GIP and Business Practices Manuals in effect at the time notice is provided by Transmission Provider. Interconnection Customer or MHVDC Connection Customer shall notify Transmission Provider within five (5) Business Days whether Interconnection Customer or MHVDC Connection Customer wishes to proceed with the Interconnection Study restudy or withdraw its Interconnection Request. Transmission Provider shall deem Interconnection Customer’s or MHVDC Connection Customer’s failure to notify Transmission Provider to proceed to perform the Interconnection Study restudy as Interconnection Customer’s or
MHVDC Connection Customer’s withdrawal of its Interconnection Request in accordance with Section 3.6 of this GIP. Transmission Provider shall use Reasonable Efforts to complete such Interconnection Study restudy no later than sixty (60) Calendar Days from the date of notice. Transmission Provider may elect to perform any Interconnection Study restudy of Network Upgrades common to more than one Interconnection Request as a Group Study.

7.6 Refunds

7.6.1 Refunds of Study Deposits

Transmission Provider shall charge and Interconnection Customer or MHVDC Connection Customer shall pay the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded to, except as otherwise provided herein, the Interconnection Customer. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. Interconnection Customer or MHVDC Connection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice. Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer or MHVDC Connection Customer has paid all undisputed amounts in compliance herewith.

All charges associated with performing Interconnection Studies, during all three phases of the Definitive Planning Phase, are the responsibility of Interconnection Customers or MHVDC Connection Customers with active Interconnection Requests during each respective Definitive Planning Phase.
If the Interconnection Customer or MHVDC Connection Customer withdraws its Interconnection Request any time before the end of Interconnection Customer Decision Point I, the Transmission Provider will refund to the Interconnection Customer or MHVDC Connection Customer any unused portion of the study deposits. Any Interconnection Customer or MHVDC Connection Customer that withdraws its Interconnection Request, or is deemed to be withdrawn, during Definitive Planning Phase I but before Interconnection Customer Decision Point I is responsible for its pro rata portion of the group Interconnection Study costs for Definitive Planning Phase I. Any Interconnection Customer or MHVDC Connection Customer that withdraws its Interconnection Request, or is deemed to be withdrawn, prior to the expiration of Interconnection Customer Decision Point I will not be responsible to fund any Interconnection Studies that take place during or after the start of the Definitive Planning Phase II of the GIP.

If the Interconnection Customer or MHVDC Connection Customer withdraws its Interconnection Request any time after Interconnection Customer Decision Point I, but before the expiration of the Interconnection Customer Decision Point II, then the Transmission Provider will refund to the Interconnection Customer or MHVDC Connection Customer any unused portion of the study deposits. Any Interconnection Customer or MHVDC Connection Customer that withdraws its Interconnection Request, or is deemed to be withdrawn, during Definitive Planning Phase II but before Interconnection Customer Decision Point II is responsible for its pro rata portion of the group Interconnection Study costs for Definitive Planning Phase II. Any Interconnection Customer or MHVDC Connection Customer that withdraws its Interconnection Request prior to the expiration of Interconnection Customer Decision Point II will not be responsible to fund...
any Interconnection Studies that take place during or after the start of Definitive Planning Phase III of the GIP.

If the Interconnection Customer or MHVDC Connection Customer withdraws its Interconnection Request any time during Definitive Planning Phase III of the GIP, and if the Transmission Provider determines that an Interconnection Study restudy is required, then the withdrawing Interconnection Customer or MHVDC Connection Customer will be responsible to fund all such restudies in Definitive Planning Phase III of the GIP, up to the amount of that Interconnection Customer’s total study deposit. However, if the Transmission Provider determines that no Interconnection Study restudy is required due to the withdrawal of Interconnection Customer’s or MHVDC Connection Customer’s Interconnection Request, then the withdrawing Interconnection Customer or MHVDC Connection Customer will not be responsible to fund any further Interconnection Studies during Definitive Planning Phase III of the GIP and the Transmission Provider shall refund to the Interconnection Customer or MHVDC Connection Customer any unused portion of the study deposit paid to enter the Definitive Planning Phase.

7.6.2 Refunds of Definitive Planning Phase Milestones (M2, M3, M4)

7.6.2.1 Refunds of Definitive Planning Phase entry milestone (M2)
Interconnection Customers and MHVDC Connection Customers are eligible to receive one hundred percent (100%) refund of the Definitive Planning Phase entry milestone (M2) only when the Interconnection Request is withdrawn or deemed withdrawn prior to the start of Definitive Planning Phase I. Interconnection Customers and MHVDC Connection Customers are eligible to receive fifty percent (50%) refund of the Definitive Planning Phase entry milestone (M2) only when the
Interconnection Request is withdrawn or deemed withdrawn during Definitive Planning Phase I or at any time before the end of Interconnection Customer Decision Point I. The remaining 50% of the Definitive Planning Phase entry milestone (M2) becomes non-refundable pursuant to Section 7.8 of the GIP. If the Interconnection Request is withdrawn any time after the Interconnection Customer Decision Point I, then the entire Definitive Planning Phase entry milestone (M2) becomes non-refundable pursuant to Section 7.8 of the GIP.

7.6.2.2 Refund of Definitive Planning Phase II milestone (M3)
Interconnection Customers and MHVDC Connection Customers are eligible to receive one hundred percent (100%) refund of the Definitive Planning Phase II milestone (M3) only when the Interconnection Request is withdrawn or deemed withdrawn after Interconnection Customer Decision Point I and before the end of Interconnection Customer Decision Point II. If the Interconnection Request is withdrawn any time after the end of Interconnection Customer Decision Point II, then the Definitive Planning Phase II milestone (M3) becomes non-refundable pursuant to Section 7.8 of the GIP.

7.6.2.3 Refund of Definitive Planning Phase II milestone (M4)
If the Interconnection Customer or MHVDC Connection Customer decides to withdraw its Interconnection Request any time after entering the Definitive Planning Phase III, then the Definitive Planning Phase III milestone (M4) becomes non-refundable pursuant to Section 7.8 of the GIP.

7.6.2.4 Withdrawal and refund due to increase in Network Upgrade costs
Milestone payments will be refunded in the event the Interconnection Customer or MHVDC Connection Customer withdraws because the total Network Upgrade cost estimates in the DPP Phase III System Impact Study increased by more than twenty-five percent (25%) and more than $10,000 per MW over the DPP Phase II System Impact Study as a result of Transmission Provider, Affected System or Transmission Owner error.

Milestone payments will also be refunded in the event the Interconnection Customer or MHVDC Connection Customer withdraws and the total Network Upgrade cost estimates in the Facilities Study increased by more than twenty-five percent (25%) and more than $10,000 per MW over the Network Upgrade cost estimates in the DPP Phase III Interconnection System Impact Study.

Milestone payments will also be refunded in the event the Interconnection Customer or MHVDC Connection Customer withdraws within the later of five (5) Business Days or at the end of a Decision Point, if applicable, of results indicating designated increases in estimated upgrade costs across the following intervals:

1. DPP Phase I to DPP Phase II
   a. An increase in MISO Network Upgrade costs of twenty-five percent (25%) and more than $10,000 per MW from the Preliminary SIS to the Revised SIS; or
   b. Affected System upgrade costs on transmission systems other than the MISO Transmission System of more than $10,000 per MW.

2. DPP Phase II to DPP Phase III
   a. An increase in MISO Network Upgrade costs of thirty-five percent (35%) and more than $15,000 per MW from the Revised SIS to any DPP Phase III SIS; or
b. An increase in Affected System upgrade costs on transmission systems other than the MISO Transmission System of forty percent (40%) and more than $15,000 per MW.

3. DPP Phase I to DPP Phase III (or beyond)
   a. An increase in MISO Network Upgrade costs of fifty (50%) and more than $20,000 per MW from the Preliminary SIS to any DPP Phase III SIS (or any subsequent restudy).

7.7 **Applicability of Definitive Planning Phase Milestone Payments (M2, M3, and M4) to Generator Interconnection Agreement Initial Payment or Transmission Connection Agreement Initial Payment**

In the event the Interconnection Customer has elected to make its milestones in the form of cash, Transmission Provider will transfer the Definitive Planning Phase milestones to the appropriate Transmission Owner to satisfy the initial payment requirement of the Generator Interconnection Agreement, TCA or other applicable service agreement within forty-five (45) Calendar Days of the effective date of the Generator Interconnection Agreement, TCA or other applicable service agreement. The Transmission Provider shall refund Milestone cash payments exceeding the initial payment requirement to the Interconnection Customer, MHVDC Connection Customer or the applicable Transmission Owner upon Interconnection Customer’s or MHVDC Connection Customer’s request with Transmission Owner’s consent, within forty-five (45) Calendar Days of the effective date of the Generator Interconnection Agreement, TCA or other applicable service agreement. In the event the milestone payments are less than the initial payment requirement, the Interconnection Customer or MHVDC Connection Customer shall be responsible for the remaining payment to the Transmission Owner.

In the event milestone payments were provided pursuant to an irrevocable letter of credit, such letter of credit shall be released upon satisfaction of the initial
payment requirement in the Generator Interconnection Agreement, TCA or other applicable service agreement.

7.8 Use of Definitive Planning Phase Entry Milestone Payments (M2, M3 and M4) of Withdrawn Projects

Upon completion of the Definitive Planning Phase III and after any subsequent restudy performed after Definitive Planning Phase III, Transmission Provider will determine the financial impact of withdrawn projects on each remaining Interconnection Request in the same cycle. This financial impact will be determined using the following two steps.

First, Transmission Provider will determine the cost of upgrades that are shifted from withdrawn projects to remaining projects that were co-participants in Common Use Upgrades or Shared Network Upgrades. For each remaining Interconnection Request in a given queue cycle, the Transmission Provider shall compare the planning level cost estimates of each Common Use Upgrades and Shared Network Upgrade between each of the following: (i) Definitive Planning Phase I to Definitive Planning Phase III; (ii) Definitive Planning Phase II to Definitive Planning Phase III; and (iii) Definitive Planning Phase III to any subsequent restudy that was performed before the execution of the last GIA from the given cycle. If the comparative planning level cost analysis indicates that a project withdrawal causes an increase in financial impact to any remaining co-participants, those remaining co-participants will be credited using the milestones that were forfeited by the withdrawn Interconnection Customers or MHVDC Connection Customers in the same cycle.

Second, the Transmission Provider will calculate the financial impact to each remaining Interconnection Request that is obligated to fund Network Upgrades other than Common Use Upgrades or Shared Network Upgrades. In order to determine whether a withdrawal caused financial impact to those remaining Interconnection Requests, the Transmission Provider shall compare the total planning level cost estimates of all Network Upgrades
other than Common Use Upgrades or Shared Network Upgrades between each the
following: (i) comparison of Definitive Planning Phase I to Definitive Planning Phase III;
(ii) comparison of Definitive Planning Phase II to Definitive Planning Phase III; and (iii)
comparison of Definitive Planning Phase III to any subsequent restudy that was
performed after Definitive Planning Phase III. If any portion of the comparative analyses
described supra indicates that the withdrawal of a project causes an increase in the total
cost of Network Upgrades, other than Common Use Upgrades or Shared Network
Upgrades, for any of the remaining Interconnection Requests, the Transmission
Provider will use the Definitive Planning Phase milestones (M2, M3 and M4),
collected from the withdrawn Interconnection Requests in the current Definitive
Planning Phase cycle, to offset the cost difference for those remaining
Interconnection Requests in the same cycle. If any portion of the comparative
analyses described supra indicated that the withdrawal of a project causes a
decrease in the total cost of Network Upgrades, other than Common Use
Upgrades or Shared Network Upgrades, for any of the remaining Interconnection
Requests, those remaining Interconnection Customers and MHVDC Connection
Customers shall not receive any reimbursement from the collected Definitive
Planning Phase milestones. If any portion of the comparative analyses described
supra indicates that the withdrawal of a project causes the total cost of Network
Upgrades, other than Common Use Upgrades or Shared Network Upgrades, for
any of the remaining Interconnection Requests to remain the same, those
remaining Interconnection Customers and MHVDC Connection Customers shall
not receive any reimbursement from the collected Definitive Planning Phase
milestones.

The total allocation to any remaining Interconnection Requests will not exceed
the total Definitive Planning Phase milestones collected from the Interconnection
Customers and MHVDC Connection Customers that withdrew their
Interconnection Requests from the same Definitive Planning Phase cycle. In
instances where the total cost of Network Upgrades has increased for multiple
Interconnection Requests, but the collected Definitive Planning Phase milestones
are insufficient to cover the increase in total cost of Network Upgrades for all affected Interconnection Requests, the Transmission Provider will allocate the collected Definitive Planning Phase milestones equally as a percentage of increased Network Upgrade costs.

If any collected Definitive Planning Phase milestones remain after allocating to remaining affected Interconnection Requests, the Transmission Provider will refund the remaining collected Definitive Planning Phase milestones to each Interconnection Customer and MHVDC Connection Customer in proportion to that customer’s forfeited milestone payments as a pro rata share of the total collected Definitive Planning Phase milestones.

### 7.9 Provisional Generator Interconnection Agreement

The Transmission Provider may provide a provisional Generator Interconnection Agreement for limited operation at the discretion of Transmission Provider based upon the results of available studies. An Interconnection Customer may request such provisional Generator Interconnection Agreement by providing written notice to the Transmission Provider beginning upon Interconnection Request submission and through Interconnection Customer Decision Point II (Section 7.3.2.4 of this GIP).

If scheduled Interconnection Customer Decision Point I, Interconnection Customer Decision Point II, or the Interconnection Facilities Study for Network Upgrades becomes delayed by more than sixty (60) Calendar Days, Interconnection Customers may also request a provisional Generator Interconnection Agreement from Transmission Provider. A request for a provisional Generator Interconnection Agreement at any other time shall be deemed invalid by the Transmission Provider.
All provisions of the Definitive Planning Phase (Section 7 of this GIP) apply, except as provided in Section 7.9.1. After receiving a request for a provisional Generator Interconnection Agreement, the Transmission Provider will begin the first portion of the Interconnection Facilities Study as discussed in Section 7.3.3.4 as well as the Preliminary System Impact Study as discussed in Section 7.3.1.3. The Transmission Provider will perform a Provisional Interconnection Study. After completing required studies, the Transmission Provider will issue a draft provisional Generator Interconnection Agreement pursuant to Section 11.2.

7.9.1 Additional Definitive Planning Phase Requirements for Provisional Generator Interconnection Agreements

Interconnection Customers seeking a provisional Generator Interconnection Agreement must submit Definitive Planning Phase II and Definitive Planning Phase III Milestones (M3 and M4). If M3 and M4 have not been calculated at the time of Interconnection Customer’s request for a provisional Generator Interconnection Agreement, M3 and M4 shall each be initially $4,000 per MW. The Transmission Provider shall then calculate the M3 and M4 as provided in Sections 7.3.1.4.1 and 7.3.2.4.1. If the actually calculated M3 and M4 values are higher than the M3 and M4 previously paid, Interconnection Customer shall pay any difference between the M3 and M4 previously paid and the actually calculated values within thirty (30) Calendar Days of those amounts being calculated by the Transmission Provider. Failure to pay any difference between the calculated M3 and M4 and the initially paid M3 and M4 within thirty (30) Calendar Days shall result in automatic withdrawal of the Interconnection Request. If the actually calculated M3 and M4 values are lower than the M3 and M4 previously paid, Transmission Provider shall refund any difference between the M3 and M4 previously paid and the actually calculated values.
7.9.2 Consent to Proceed Through Definitive Planning Phase Decision Points

Interconnection Customers seeking a provisional Generator Interconnection Agreement automatically consent to the Transmission Provider moving the Interconnection Request through Definitive Planning Phases II and III without regard to Interconnection Customer Decision Point II unless notification of withdrawal is provided to the Transmission Provider.

7.9.3 Withdrawal

Interconnection Customers seeking a provisional Generator Interconnection Agreement are eligible to receive one hundred percent (100%) refund of all Definitive Planning Phase milestones (M2, M3, and M4) only when the Interconnection Request is withdrawn prior to the start of Definitive Planning Phase I and unencumbered study deposits remaining. Interconnection Customers seeking a provisional Generator Interconnection Agreement at the time of Interconnection Request submission may withdraw before the end of Interconnection Customer Decision Point I and Transmission Provider will refund fifty percent (50%) of the Definitive Planning Phase entry milestone (M2), all of the Definitive Planning Phase Milestone payments M3 and M4, and unencumbered study deposits remaining. After Interconnection Customer Decision Point I, Interconnection Customers seeking a provisional Generator Interconnection Agreement may withdraw from the Transmission Provider’s interconnection queue at any time, but all Definitive Planning Phase Milestone (M2, M3, and M4) payments are non-refundable and will be used in accordance to Section 7.8.

7.9.4 Reversion to Standard Definitive Planning Phase Process

Effective On: March 11, 2020
Interconnection Customers seeking a provisional Generator Interconnection Agreement may notify Transmission Provider before and during Interconnection Customer Decision Point I that the Interconnection Customer wishes to revert to the standard Definitive Planning Phase process. Transmission Provider will subsequently refund the Definitive Planning Phase III (M4) milestone payment. Interconnection Customer must then continue to abide by all Definitive Planning Phase requirements.

SECTION 8. {RESERVED}

SECTION 9. ENGINEERING & PROCUREMENT ("E&P") AGREEMENT.

Prior to executing an GIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and Transmission Provider shall offer Interconnection Customer, an E&P Agreement that authorizes Transmission Owner to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, Transmission Provider shall not be obligated to offer an E&P Agreement if Interconnection Customer is in Dispute Resolution as a result of an allegation that Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the GIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer’s Definitive Planning Phase Queue Position or In-Service Date. The E&P Agreement shall provide for Interconnection Customer to pay the cost of all activities authorized by Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its Interconnection Request, which cannot be mitigated as hereafter described, whether or not such
items or equipment later become unnecessary. If Interconnection Customer withdraws its application for interconnection or a Party to the E&P Agreement terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, Transmission Owner may elect: (i) to take title to the equipment, in which event Transmission Owner shall refund Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to Interconnection Customer, in which event Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

SECTION 10. OTHER INTERCONNECTION STUDIES.

10.1 Optional Interconnection Study

10.1.1 Optional Interconnection Study Agreement.

Optional Interconnection Studies are for informational purposes only and are to be completed within an agreed upon time period using Reasonable Efforts. The request for an Optional Interconnection Study can be made on a stand-alone basis or in parallel with the processing of valid Interconnection Request. The request shall describe the assumptions that Interconnection Customer or MHVDC Connection Customer wishes Transmission Provider to study within the scope described in Section 10.1.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, Transmission Provider shall provide to Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5.

The Optional Interconnection Study Agreement shall: (i) specify the
technical data that Interconnection Customer or MHVDC Connection Customer must provide for each phase of the Optional Interconnection Study, and (ii) specify Interconnection Customer’s or MHVDC Connection Customer’s assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case. Notwithstanding the above, Transmission Provider shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request and shall continue processing the Interconnection Request in accordance with these GIP.

Interconnection Customer or MHVDC Connection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the technical data and a deposit equal to sixty thousand dollars ($60,000.00) to Transmission Provider.

10.1.2 Scope of Optional Interconnection Study.

The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by Interconnection Customer or MHVDC Connection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify the Transmission Owner’s Interconnection Facilities, System Protection Facilities, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the results of the Optional Interconnection Study. The
Optional Interconnection Study shall be performed solely for informational purposes. Transmission Provider shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the types of Interconnection Services that are being studied. Transmission Provider shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.

**10.1.3 Optional Interconnection Study Procedures.**

The executed Optional Interconnection Study Agreement, the prepayment, and technical and other data called for therein must be provided to Transmission Provider within ten (10) Business Days of Interconnection Customer or MHVDC Connection Customer receipt of the Optional Interconnection Study Agreement. Transmission Provider shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed upon time period specified within the Optional Interconnection Study Agreement. If Transmission Provider is unable to complete the Optional Interconnection Study within such time period, it shall notify Interconnection Customer or MHVDC Connection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Any difference between the study payment and the actual cost of the study shall be paid to Transmission Provider or refunded to Interconnection Customer, as appropriate. Upon request, Transmission Provider shall provide Interconnection Customer or MHVDC Connection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study, subject to confidentiality arrangements consistent with Section 13.1.

**10.2 Provisional Interconnection Study**

**10.2.1 Scope of Provisional Interconnection Study**
The Provisional Interconnection Study will consist of stability, short circuit, and voltage analysis to identify issues that would result if the Generating Facility were interconnected without project modifications or system modifications. The Provisional Interconnection Study will also identify the Transmission Owner’s Interconnection Facilities, System Protection Facilities, Distribution Upgrades, Generator Upgrades, Common Use Upgrades, and the Network Upgrades, and the estimated cost thereof, that may be required to provide Energy Resource Interconnection Service on a provisional basis based upon the results of the Provisional Interconnection Study. Transmission Provider shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the type of Interconnection Service that is being studied. Transmission Provider shall utilize existing studies to the extent practicable in conducting the Provisional Interconnection Study.

10.2.2 Provisional Interconnection Study Procedures

Transmission Provider must receive the information and milestones as described in Sections 7.9 and 7.9.1 prior to beginning the Provisional Interconnection Study. Transmission Provider shall use Reasonable Efforts to complete the Provisional Interconnection Study within a mutually agreed upon time. If Transmission Provider is unable to complete the Provisional Interconnection Study within such time period, it shall notify Interconnection Customer or MHVDC Connection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. Actual cost of the Provisional Interconnection Study shall be paid by Interconnection Customer or MHVDC Connection Customer pursuant to Section 7.6.1. Upon request, Transmission Provider shall provide Interconnection Customer or MHVDC Connection Customer supporting documentation and workpapers and databases or data developed in the preparation of the

11.1 Tender.

Interconnection Customer and Transmission Owner shall return comments on the draft GIA, and as applicable, draft FCA(s) and/or MPFCA(s) including appendices and supporting documentation within thirty (30) Calendar Days of receipt of the document, along with the completion of the parts of the appendices for which Interconnection Customer is responsible. Within fifteen (15) Calendar Days after the comments are submitted, Transmission Provider shall tender for next day delivery a draft GIA, and as applicable, draft FCA(s) and/or MPFCA(s) to the Parties, together with draft appendices. The draft GIA shall be in the form of Transmission Provider’s FERC-approved standard for GIA, which is in Appendix 6 of Attachment X. The draft FCA and MPFCA shall be in the form of Transmission Provider’s FERC-approved standard form, which are in the Appendices 8 and 9 of these GIP.

If Transmission Provider determines that more than one Interconnection Request causes the need for Network Upgrades or System Protection Facilities, Transmission Provider shall determine whether such Network Upgrades or System Protection Facilities are Common Use Upgrades requiring the use of a MPFCA. For a MPFCA, Transmission Provider shall provide the draft MPFCA to all Interconnection Customers that create the need and share the responsibility for the Common Use Upgrade. If Transmission Provider determines that an Interconnection Customer should be added to an MPFCA as a party, Transmission Provider shall tender a draft MPFCA to the prospective Interconnection Customer.
and include the prospective Interconnection Customer in Group Studies as applicable.

11.2 Negotiation.

Notwithstanding Section 11.1, at the request of any party, the Parties shall begin negotiations concerning the appendices to the GIA, and, as applicable, FCA(s) and/or MPFCA(s) at any time after: 1) the preliminary draft Facility Study Report is issued or 2) upon agreement by all the Parties that a Facility Study is not required. Transmission Provider, Transmission Owner and Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft GIA, and, as applicable, draft FCA(s) and/or MPFCA(s) for not more than sixty (60) Calendar Days after tender of the final Facilities Study Report appendices, and, as applicable, appendices for FCA(s) and/or MPFCA(s) and support documentation. If Interconnection Customer, Transmission Owner or Transmission Provider determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft GIA, and, as applicable, draft FCA(s) and/or MPFCA(s) pursuant to Section 11.1 and request submission of the unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s) with FERC or initiate Dispute Resolution procedures pursuant to Section 13.5. If an Interconnection Customer requests termination of its negotiations, but within sixty (60) Calendar Days thereafter fails to request the filing of the unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s), it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if Interconnection Customer has not executed the GIA, and, as applicable, FCA(s) and/or MPFCA(s), requested filing of an unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s), within sixty (60) Calendar Days of tender of completed draft GIA, and, as applicable, draft FCA(s) and MPFCA(s), it shall be deemed to have withdrawn its Interconnection Request. Transmission Provider shall provide to Interconnection Customer and Transmission Owner a final GIA, and, as applicable, FCA(s) and/or MPFCA(s) within fifteen (15)
Business Days after the completion of the negotiation process. The Interconnection Customer’s sixty (60) Calendar Day deadline for execution will not reset upon a change to the agreement after the final GIA, FCA, or MPFCA has been tendered, irrespective of changes proposed and agreed to by the parties.

**11.3 Execution and Filing.**

Within one-hundred and eighty (180) Calendar Days after receipt of the final GIA Interconnection Customer shall provide Transmission Provider with reasonable evidence that one or more of the following milestones in the development of the Generating Facility has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Generating Facility; (iv) execution of a contract for the sale of electric energy or capacity from the Generating Facility, or a statement signed by an authorized officer from or agent of Interconnection Customer attesting that Interconnection Customer owns the Generating Facility and it is required to serve load; or (v) documentation of application for state and local air, water, land or federal nuclear permits and that the application is proceeding per regulations. Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered GIA, and, as applicable, FCA(s) and/or MPFCA(s) and either tender them to Transmission Owner for its execution, which shall then be returned to Transmission Provider, or return them to Transmission Provider; or (ii) request in writing that Transmission Provider file with FERC the GIA, and, as applicable, FCA(s) and/or MPFCA(s) in unexecuted form. Within thirty (30) Calendar Days following execution of the GIA, and, as applicable, FCA(s) and/or MPFCA(s) by Interconnection Customer, or a request by Interconnection Customer that the GIA, and, as applicable, FCA(s) and/or MPFCA(s) be filed unexecuted pursuant to Section 11.2, Transmission Owner shall either (i) execute the tendered GIA, and, as applicable, FCA(s) and/or MPFCA(s) and tender them
to Transmission Provider for its execution, or (ii) request in writing that
Transmission Provider file with FERC the GIA, and, as applicable, FCA(s) and/or
MPFCA(s) in unexecuted form. As soon as practicable, but not later than ten (10)
Business Days after receiving either the executed tendered GIA or the request to
file an unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s),
Transmission Provider shall file the GIA, and, as applicable, FCA(s) and/or
MPFCA(s) with FERC, together with its explanation of any matters as to which
Interconnection Customer, Transmission Owner and Transmission Provider
disagree and support for the costs that Transmission Owner proposes to charge to
Interconnection Customer under the GIA, and, as applicable, FCA(s) and/or
MPFCA(s). An unexecuted GIA should contain terms and conditions deemed
appropriate by Transmission Provider for the Interconnection Request. If the
Parties agree to proceed with design, procurement, and construction of facilities
and upgrades under the agreed-upon terms of the unexecuted GIA, they may
proceed pending Commission action.

11.4 Commencement of Interconnection Activities.
If Interconnection Customer executes the final GIA, and, as applicable, FCA(s)
and/or MPFCA(s) Transmission Provider, Transmission Owner and
Interconnection Customer shall perform their respective obligations in accordance
with the terms of the GIA, and, as applicable, FCA(s) and/or MPFCA(s), subject
to modification by FERC. Upon submission of an unexecuted GIA, and, as
applicable, FCA(s) and/or MPFCA(s), the Parties shall promptly comply with the
unexecuted GIA, and, as applicable, FCA(s) and/or MPFCA(s), subject to
modification by FERC. As applicable, compliance with the terms of such
unexecuted FCA(s) and/or MPFCA(s) or execution and performance under a FCA
and/or MPFCA will be a requirement under the GIA.

11.5 Special Considerations.
The maximum permissible output of the Generating Facility in the provisional Generator Interconnection Agreement will be updated on a quarterly basis, and determined by finding the transfer limit of energy commensurate with the analysis for Energy Resource Interconnection Service. This study shall be performed assuming the system topology represented by the base cases used to calculate Available Flowgate Capability as described in Attachment C of this Tariff with dispatch and optimization algorithms posted on the MISO internet site. Limits will be posted on the Transmission Provider’s OASIS site, and operation above those limits will be deemed as unauthorized use of the transmission system and subject to provisions in this Tariff surrounding that use. Interconnection Customer assumes all risks and liabilities with respect to changes, which may impact the Generator Interconnection Agreement including, but not limited to, change in output limits and future Network Upgrade cost responsibilities.

11.6 Quarterly Operating Limit Studies.

Interconnection Customers subject to Quarterly Operating Limits shall be responsible for the cost of performing the required quarterly studies. Interconnection Customers shall submit a Quarterly Operating Limit study deposit in the amount of $10,000 sixty (60) Calendar Days prior to the start of the first applicable binding quarter. Any difference between the study deposit and the actual cost of the applicable Quarterly Operating Limit studies shall be paid by, or refunded to, the Interconnection Customer. MISO will refund any difference the quarter following the Interconnection Customer no longer being subject to Quarterly Operating Limits.

SECTION 12. CONSTRUCTION OF TRANSMISSION OWNER’S OR AFFECTED SYSTEM TRANSMISSION OWNER’S INTERCONNECTION FACILITIES, SYSTEM PROTECTION FACILITIES, DISTRIBUTION UPGRADES AND NETWORK UPGRADES.
12.1 Schedule.

Transmission Owner, Interconnection Customer, and, as applicable, Interconnection Customers in an MPFCA and a Transmission Owner that is an Affected System and, at its election, Transmission Provider shall negotiate in good faith concerning a schedule for the construction of the Transmission Owner’s Interconnection Facilities, System Protection Facilities, Distribution Upgrades, Network Upgrades, Common Use Upgrades, and the Stand-Alone Network Upgrades. Interconnection Customer and Transmission Owner shall each provide the other Parties its detailed construction schedule.

12.2 Construction Sequencing.

12.2.1 General

In general, the In-Service Date of an Interconnection Customer seeking interconnection to the Transmission System will determine the sequence of construction of Transmission Owner’s Interconnection Facilities, System Protection Facilities, Distribution Upgrades, if any, and Network Upgrades, including any Common Use Upgrades. If the time required to build the facilities described in the GIA, and, as applicable, FCA(s) and/or MPFCA(s) is greater than the time between execution of the GIA, and, as applicable, FCA(s) and/or MPFCA(s) and the requested In-Service Date, the In-Service Date will be adjusted through the milestones delineated in the GIA, and as applicable, FCA(s) and/or MPFCA(s) appendices prior to the execution of the Generator Interconnection Agreement.

12.2.2 Advance Construction of Network Upgrades, System Protection Facilities, Distribution Upgrades or Generator Upgrades that are an Obligation of an Entity other than Interconnection Customer
An Interconnection Customer with a GIA, and, as applicable, FCA(s) and/or MPFCA(s), in order to maintain its In-Service Date, may request that Transmission Owner advance to the extent necessary the completion of Network Upgrades, System Protection Facilities or Distribution Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such In-Service Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than Interconnection Customer that is seeking interconnection to the Transmission System, in time to support such In-Service Date. Upon such request, Transmission Owner will use Reasonable Efforts to advance the construction of such Network Upgrades, System Protection Facilities or Distribution Upgrades, to the extent it is obligated for any such construction, to accommodate such request; provided that Interconnection Customer commits to pay Transmission Owner: (i) any associated expediting costs and (ii) the cost of such Network Upgrades, System Protection Facilities or Distribution Upgrades. Transmission Owner will refund to Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the GIA, and, as applicable, FCA(s) and/or MPFCA(s). Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that Transmission Owner has not refunded to Interconnection Customer. Payment by that entity shall be due on the date that it would have been due had there been no request for advance construction. Transmission Owner shall forward to Interconnection Customer (with copy to Transmission Provider) the amount paid by the entity with a contractual obligation to construct the Network Upgrades as payment in full for the outstanding balance owed to Interconnection Customer. Transmission Owner then shall refund to that entity the amount that it paid for the
Network Upgrades, in accordance with Article 11.4 of the GIA, and, as applicable, FCA(s) and/or MPFCA(s).

12.2.3 Advancing Construction of Network Upgrades that are Part of an Expansion Plan of Transmission Provider

An Interconnection Customer with a GIA, and, as applicable, FCA(s) and/or MPFCA(s), in order to maintain its In-Service Date, may request that Transmission Owner advance to the extent necessary the completion of Network Upgrades, System Protection Facilities or Distribution Upgrades that: (i) are necessary to support such In-Service Date, including those listed as a contingent element in the Interconnection Customer’s GIA, and, as applicable, FCA(s) and/or MPFCA(s); and (ii) would otherwise not be completed, pursuant to an expansion plan of Transmission Provider, in time to support such In-Service Date. Upon such request, Transmission Owner will use Reasonable Efforts to advance the construction of such Network Upgrades, System Protection Facilities or Distribution Upgrades to accommodate such request; provided that Interconnection Customer commits to pay Transmission Owner any associated expediting costs. Interconnection Customer shall be entitled to transmission credits, if any per Attachment FF, for any expediting costs paid associated with the Network Upgrades.

12.2.4 Amended Interconnection System Impact and/or Interconnection Facilities Study

The Interconnection System Impact Study resulting from the Definitive Planning Phase and/or Interconnection Facilities Study(ies) will be amended to determine the facilities necessary to support the requested In-Service Date. Any amended study will follow the procedures provided in the GIP, as applicable, regarding such study and study cost,
and include those transmission and Generating Facilities that are expected to be in service on or before the requested In-Service Date.

SECTION 13. MISCELLANEOUS.

13.1 Confidentiality.
Confidential Information shall include, without limitation, all information relating to a Party’s technology, research and development, business affairs, and pricing, and any information supplied by any Party to another Party prior to the execution of a GIA, and, as applicable, FCA(s) and/or MPFCA(s).

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by the receiving Party, the disclosing Party shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

13.1.1 Scope
Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a non-Party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the
disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the GIA, and, as applicable, FCA(s) and/or MPFCA(s); or (6) is required, in accordance with Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the GIA, and, as applicable, FCA(s) and/or MPFCA(s). Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the receiving Party that it no longer is confidential.

13.1.2 Release of Confidential Information

No Party shall release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements) employees, agents, consultants, or to non-parties who may be or considering providing financing to or equity participation with Interconnection Customer or MHVDC Connection Customer, or to potential purchasers or assignees of Interconnection Customer or MHVDC Connection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section 13.1.

13.1.3 Rights
Each Party retains all rights, title, and interest in the Confidential Information that it discloses to the receiving Party. The disclosure by a Party to the receiving Party of Confidential Information shall not be deemed a waiver by the disclosing Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

13.1.4 No Warranties

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to another Party nor to enter into any further agreements or proceed with any other relationship or joint venture.

13.1.5 Standard of Care

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to another Party under these procedures or its regulatory requirements.

13.1.6 Order of Disclosure

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the disclosing Party with prompt notice of such request(s) or requirement(s) so that the disclosing Party may seek an appropriate protective order or waive compliance with the terms of the
GIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

13.1.7 Remedies
The Parties agree that monetary damages would be inadequate to compensate a Party for another Party’s breach of its obligations under this Section 13.1. Each Party accordingly agrees that the disclosing Party shall be entitled to equitable relief, by way of injunction or otherwise, if the receiving Party breaches or threatens to breach its obligations under this Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the breaching Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this Section 13.1, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 13.1.

13.1.8 Disclosure to FERC, Its Staff, or a State.
Notwithstanding anything in this Section 13.1 to the contrary, and pursuant to 18 C.F.R Section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from a Party that is otherwise required to be maintained in confidence pursuant to these GIP, the Party shall provide the requested information to FERC.
or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. Section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. The Party is prohibited from notifying the other Parties prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Parties to the GIA when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. Section 388.112.

Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

13.1.9 Subject to the exception in Section 13.1.8, any information that a disclosing Party claims is competitively sensitive, commercial or financial information (“Confidential Information”) shall not be disclosed by the receiving Party to any person not employed or retained by the receiving Party, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the disclosing Party, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under the GIP or as the Regional Transmission Organization or a Local Balancing Authority operator including disclosing the Confidential Information to a subregional, regional or national reliability organization or planning group. The Party
asserting confidentiality shall notify the receiving Party in writing of the information that Party claims is confidential. Prior to any disclosures of that Party’s Confidential Information under this subparagraph, or if any non-Party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the receiving Party agrees to promptly notify the disclosing Party in writing and agrees to assert confidentiality and cooperate with the disclosing Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

13.1.10 This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

13.1.11 At the Interconnection Customer’s or MHVDC Connection Customer’s election, Transmission Provider shall cause the party in lawful possession of Confidential Information to, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

13.2 Delegation of Responsibility.

Transmission Provider may use the services of subcontractors as it deems appropriate to perform its obligations under the GIP. Transmission Provider shall remain primarily liable to Interconnection Customer or MHVDC Connection Customer for the performance of such subcontractors and compliance with its obligations of the GIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and for no other purpose.

13.3 Obligation for Study Costs.
Transmission Provider shall charge and Interconnection Customer or MHVDC Connection Customer shall pay the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to Interconnection Customer or MHVDC Connection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. Interconnection Customer or MHVDC Connection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice. Transmission Provider shall not be obligated to perform or continue to perform any studies unless Interconnection Customer or MHVDC Connection Customer has paid all undisputed amounts in compliance herewith.

In the event Interconnection Customer’s or MHVDC Connection Customer’s project is withdrawn, terminated or suspended, Transmission Provider shall not be required to refund any unused portion of the study deposit paid to enter the Definitive Planning Phase that is necessary to account for study costs associated with the project or restudy costs associated with any affected lower-queued projects, any other project with which Interconnection Customer’s or MHVDC Connection Customer’s project shares responsibility for funding a Common Use Upgrade, or, in the event the project is included in a Group Study, any other affected projects in the Group Study. Unused study deposits from the Definitive Planning Phase that are not otherwise required due to the withdrawals, termination or suspension of the project will be refunded upon Commercial Operation.

13.4 Non-Parties Conducting Studies.

If (i) at the time of the signing of an Interconnection Study Agreement there is
disagreement as to the estimated time to complete an Interconnection Study, (ii) Interconnection Customer or MHVDC Connection Customer receives notice pursuant to the GIP that Transmission Provider will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) Interconnection Customer or MHVDC Connection Customer receives neither the Interconnection Study nor a notice under the GIP within the applicable timeframe for such Interconnection Study, then Interconnection Customer or MHVDC Connection Customer may require Transmission Provider or its agent to utilize a consultant reasonably acceptable to Interconnection Customer or MHVDC Connection Customer and Transmission Provider to perform such Interconnection Study under the direction of Transmission Provider. At other times, Transmission Provider may also utilize a consultant to perform such Interconnection Study, either in response to a general request of Interconnection Customer or MHVDC Connection Customer, or on its own volition.

In all cases, use of a consultant shall be in accord with Article 26 of the GIA (subcontractors), and, as applicable, FCA(s) and/or MPFCA(s) and limited to situations where Transmission Provider determines that doing so will help maintain or accelerate the study process for the Interconnection Customer’s or MHVDC Connection Customer’s pending Interconnection Request and not interfere with the Transmission Provider’s progress on Interconnection Studies for other pending Interconnection Requests. In cases where Interconnection Customer or MHVDC Connection Customer requests use of a consultant to perform such Interconnection Study, Interconnection Customer or MHVDC Connection Customer and Transmission Provider shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. Transmission Provider shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection
Request as soon as soon as practicable upon Interconnection Customer’s or MHVDC Connection Customer’s request subject to the confidentiality provision in Section 13.1. In any case, such consultant contract may be entered into with either Interconnection Customer or MHVDC Connection Customer or Transmission Provider at the Transmission Provider’s discretion. In the case of (iii), Interconnection Customer or MHVDC Connection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such consultant study. Such consultant shall be required to comply with the GIP, Article 26 of the GIA (subcontractors), and, as applicable, FCA(s) and/or MPFCA(s), and the relevant Tariff procedures and protocols as would apply if Transmission Provider were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes. Transmission Provider shall cooperate with such consultant and Interconnection Customer or MHVDC Connection Customer to complete and issue the Interconnection Study in the shortest reasonable time.

13.5 Disputes.

13.5.1 Submission.
In the event any Party has a dispute, or asserts a claim, that arises out of or in connection with the GIA, or, as applicable, FCA(s) and/or MPFCA(s), the GIP, or their performance, such Party (the “disputing Party”) shall provide the other Parties with written notice of the dispute or claim (“Notice of Dispute”). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Parties. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other non-disputing Parties’ receipt of the Notice of Dispute, such claim or dispute shall be submitted in accordance with the dispute resolution procedures of the Tariff. In the event
the designated representatives are able to resolve the claim or dispute within the
above-described thirty (30) Calendar Day period, the disputing Party shall submit
a written explanation of the resolution to the non-disputing Parties and shall
obtain the written acknowledgement and acceptance from each non-disputing
Party.

Disputes received after the GIA, or, as applicable, FCA(s) and/or MPFCA(s) has
been tendered for execution pursuant to section 11.1 of this GIP will not affect
any applicable deadline pursuant to Section 11.2 of this GIP.

13.6 Local Furnishing Bonds.

13.6.1 Transmission Owners That Own Facilities Financed by Local
Furnishing Bonds.
This provision is applicable only to a Transmission Owner that has
financed facilities for the local furnishing of electric energy with tax-
exempt bonds, as described in Section 142(f) of the Internal Revenue
Code (“local furnishing bonds”). Notwithstanding any other provision of
the GIP or GIA, and, as applicable, FCA(s) and/or MPFCA(s),
Transmission Provider and Transmission Owner shall not be required to
provide Interconnection Service to Interconnection Customer or MHVDC
Connection Customer pursuant to this GIA and GIP if the provision of
such Transmission Service would jeopardize the tax-exempt status of any
local furnishing bond(s) used to finance Transmission Owner’s facilities
that would be used in providing such Interconnection Service.

13.6.2 Alternative Procedures for Requesting Interconnection Service.
If Transmission Provider determines that the provision of Interconnection
Service requested by Interconnection Customer or MHVDC Connection
Customer could jeopardize the tax-exempt status of any local furnishing
bond(s) used to finance Transmission Owner’s facilities that would be used in providing such Interconnection Service. Transmission Provider shall notify Transmission Owner who then shall confirm the tax-exempt status of any local furnishing bond(s) used by Transmission Owner and shall advise Interconnection Customer or MHVDC Connection Customer and Transmission Provider within thirty (30) Calendar Days of Transmission Provider’s notice to Transmission Owner. Interconnection Customer or MHVDC Connection Customer thereafter may renew its request for interconnection using the process specified in Article 5.2(ii) of the Transmission Provider’s Tariff.

SECTION 14.    FAST TRACK PROCESS.

14.1   Applicability.

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Small Generating Facility with the Transmission System if the Small Generating Facility is no larger than 5 MW and if the Interconnection Customer’s proposed Small Generating Facility meets the codes, standards, and certification requirements of Appendix 3 of this GIP, or Transmission Provider has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

14.1.1   Capacity of the Small Generating Facility

The Interconnection Request shall be evaluated using the maximum capacity that the Small Generating Facility is capable of injecting into the Transmission Provider’s electric system. However, if the maximum capacity that the Small Generating Facility is capable of injecting into the Transmission Provider’s electric system is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the Transmission Provider’s agreement, with such agreement not to be
unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and reliability of the Transmission Provider’s system. If the Transmission Provider does not so agree, then the Interconnection Request must be withdrawn or revised to specify the maximum capacity that the Small Generating Facility is capable of injecting into the Transmission Provider’s electric system without such limitations. Furthermore, nothing in this section shall prevent a Transmission Provider from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

14.2 Initial Review.
Within fifteen (15) Business Days after Transmission Provider notifies Interconnection Customer it has received a complete Interconnection Request, Transmission Provider shall perform an initial review using the screens set forth below, shall notify Interconnection Customer of the results, and include with the notification copies of the analysis and data underlying the Transmission Provider’s determinations under the screens.

14.2.1 Screens.

14.2.1.1 The proposed Small Generating Facility’s Point of Interconnection must be on a portion of the Transmission System or Distribution System that is subject to the Transmission Provider’s control under the Tariff.

14.2.1.2 For interconnection of a proposed Small Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Small Generating Facility, on the circuit shall not exceed fifteen percent (15%) of the line section annual peak load as most recently measured at the relevant substation. A line section is that
portion of a Transmission Provider controlled electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

14.2.1.3 For interconnection of a proposed Small Generating Facility to the load side of spot network protectors, the proposed Small Generating Facility must use an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of five percent (5%) of a spot network’s maximum load or 50 kW.

14.2.1.4 The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than ten percent (10%) to the distribution circuit’s maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

14.2.1.5 The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed eighty-seven and one half percent (87.5%) of the short circuit interrupting capability; nor shall the interconnection proposed for a circuit that already exceeds eighty-seven and one half (87.5%) of the short circuit interrupting capability.

14.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer,
including line configuration and the transformer connection to limit the potential for creating over-voltages on the Transmission Provider’s electric power system due to a loss of ground during the operating time of any anti-islanding function.

<table>
<thead>
<tr>
<th>Primary Distribution Line Type</th>
<th>Type of Interconnection to Primary Distribution Line</th>
<th>Result/Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three-phase, three wire</td>
<td>3-phase or single phase, phase-to-phase</td>
<td>Pass screen</td>
</tr>
<tr>
<td>Three-phase, four wire</td>
<td>Effectively-grounded 3 phase or Single-phase, line-to-neutral</td>
<td>Pass screen</td>
</tr>
</tbody>
</table>

14.2.1.7 If the proposed Small Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Small Generating Facility, shall not exceed 20 kW.

14.2.1.8 If the proposed Small Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than twenty percent (20%) of the nameplate rating of the service transformer.

14.2.1.9 The Small Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Small Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the Point of Interconnection).

Effective On: March 11, 2020
14.2.1.10 No construction of facilities by Transmission Provider on its own system shall be required to accommodate the Small Generating Facility.

14.2.2 If the proposed interconnection passes the screens, the Interconnection Request shall be approved and Transmission Provider will provide Interconnection Customer an executable interconnection agreement within five (5) Business Days after the determination.

14.2.3 If the proposed interconnection fails the screens, but Transmission Provider determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, Transmission Provider shall provide Interconnection Customer an executable interconnection agreement within five (5) Business Days after the determination.

14.2.4 If the proposed interconnection fails the screens, but Transmission Provider does not or cannot determine from the initial review that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless Interconnection Customer is willing to consider minor modifications or further study, Transmission Provider shall provide Interconnection Customer with the opportunity to attend a customer options meeting.

14.3 Customer Options Meeting.
If Transmission Provider determines the Interconnection Request cannot be approved without (1) minor modifications at minimal cost, (2) a supplemental study or other additional studies or actions, or (3) incurring significant cost to address safety, reliability, or power quality problems, the Transmission Provider shall notify Interconnection Customer of that determination within five (5)
Business Days after that determination and provide copies of all data and analyses underlying its conclusion. Within ten (10) Business Days of the Transmission Provider’s determination, Transmission Provider shall offer to convene a customer options meeting with Transmission Provider to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the Transmission Provider’s determination, or at the customer options meeting, Transmission Provider shall:

14.3.1 Offer to perform facility modifications or minor modifications to the Transmission System (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Transmission System. If the Interconnection Customer agrees to pay for the modifications to the Transmission System, the Transmission Provider will provide the Interconnection Customer with an executable interconnection agreement within ten (10) Business Days of the customer options meeting; or

14.3.2 Offer to perform a supplemental review in accordance with Section 14.4 and provide a non-binding good faith estimate of the costs of such review; or

14.3.3 Obtain the Interconnection Customer’s agreement to continue evaluating the Interconnection Request under the Attachment X Generator Interconnection Procedures.

14.4 Supplemental Review.
14.4.1 To accept the offer of a supplemental review, Interconnection Customer shall agree in writing and submit a deposit for the estimated costs of the supplemental review in the amount of the Transmission Provider’s good faith estimate of the costs of such review, both within 15 Business Days of the offer. If the written agreement and deposit have not been received by the Transmission Provider within that timeframe, the Interconnection Request shall continue to be evaluated under the Attachment X Generator Interconnection Procedures unless it is withdrawn by the Interconnection Customer.

14.4.2 The Interconnection Customer may specify the order in which the Transmission Provider will complete the screens in section 14.4.4.

14.4.3 The Interconnection Customer shall be responsible for the Transmission Provider’s actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within 20 Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the Transmission Provider will return such excess within 20 Business Days of the invoice without interest.

14.4.4 Within thirty (30) Business Days following receipt of the deposit for a supplemental review, the Transmission Provider shall (1) perform a supplemental review using the screens set forth below; (2) notify in writing the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the Transmission Provider’s determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the
Transmission Provider shall notify the Interconnection Customer following the failure of any of the screens, or if it is unable to perform the screen in section 14.4.4.1, within two Business Days of making such determination to obtain the Interconnection Customer’s permission to: (1) continue evaluating the proposed interconnection under this section 14.4.4; (2) terminate the supplemental review and continue evaluating the Small Generating Facility (the Attachment X Generator Interconnection Procedures); or (3) terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.

14.4.4.1 Minimum Load Screen: Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed Small Generating Facility) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate Generating Facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed Small Generating Facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the Transmission Provider shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under section 14.4.4.

14.4.4.1.1 The type of generation used by the proposed Small Generating Facility will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of screen 14.4.1.1. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum
load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.

14.4.4.2 When this screen is being applied to a Small Generating Facility that serves some station service load, only the net injection into the Transmission Provider’s electric system will be considered as part of the aggregate generation.

14.4.4.3 Transmission Provider will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

14.4.4.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.

14.4.4.3 Safety and Reliability Screen: The location of the proposed Small Generating Facility and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The Transmission Provider shall give due
consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

14.4.4.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

14.4.4.3.2 Whether the loading along the line section is uniform or even.

14.4.4.3.3 Whether the proposed Small Generating Facility is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity.

14.4.4.3.4 Whether the proposed Small Generating Facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

14.4.4.3.5 Whether operational flexibility is reduced by the proposed Small Generating Facility, such that transfer of the line section(s) of the Small Generating Facility to a neighboring distribution circuit/substation may trigger overloads or voltage issues.
14.4.4.3.6 Whether the proposed Small Generating Facility employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

14.4.5 If the proposed interconnection passes the supplemental screens in sections 14.4.4.1, 14.4.4.2, and 14.4.4.3 above, the Interconnection Request shall be approved and the Transmission Provider will provide the Interconnection Customer with an executable interconnection agreement within the timeframes established in sections 14.4.5.1 and 14.4.5.2 below. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall continue to be evaluated under the Attachment X Generator Interconnection Procedures consistent with section 14.4.5.3 below.

14.4.5.1 If the proposed interconnection passes the supplemental screens in sections 14.4.1.1, 14.4.1.2, and 14.4.1.3 above and does not require construction of facilities by the Transmission Provider on its own system, the interconnection agreement shall be provided within ten Business Days after the notification of the supplemental review results.

14.4.5.2 If interconnection facilities or minor modifications to the Transmission Provider’s system are required for the proposed interconnection to pass the supplemental screens in sections 14.4.1.1, 14.4.1.2, and 14.4.1.3 above, and the Interconnection Customer agrees to pay for the modifications to the Transmission Provider’s electric system, the interconnection agreement, along
with a non-binding good faith estimate for the interconnection facilities and/or minor modifications, shall be provided to the Interconnection Customer within 15 Business Days after receiving written notification of the supplemental review results.

14.4.5.3 If the proposed interconnection would require more than interconnection facilities or minor modifications to the Transmission Provider’s system to pass the supplemental screens in sections 14.4.1.1, 14.4.1.2, and 14.4.1.3 above, the Transmission Provider shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results, that the Interconnection Request shall be evaluated under the Attachment X Generator Interconnection Procedures unless the Interconnection Customer withdraws its Small Generating Facility.

SECTION 15. PROVISIONS FOR CONNECTION TO HVDC FACILITIES SUBJECT TO SECTION 27A OF THE TARIFF.

Interconnection Requests to HVDC Facilities that are subject to Section 27A of the Tariff shall follow the same process as detailed in Sections 2 through 13 of the GIP, except as specified in this Section 15.

15.1 Availability of ER Interconnection Service and NR Interconnection Service for HVDC Facilities subject to Section 27A of this Tariff.

ER Interconnection Service and NR Interconnection Service are both available for HVDC Facilities subject to Section 27A of this Tariff. In the case where Interconnection Customer identified a point-to-point transmission service request under Section 27A of this Tariff, NR Interconnection Service will qualify the
Generating Facility to be designated as a Network Resource so long as (and to the extent that) HVDC Service is confirmed across the HVDC Facilities. NR Interconnection Service will be limited to the confirmed megawatts in the transmission service request. When applicable, the HVDC Service requirement will be listed in Appendix A of the GIA, and such listing will be added during the negotiation phase of the document, as set forth in Section 11.2 of the GIP.

SECTION 16. PROVISIONS FOR OBTAINING INJECTION RIGHTS AND THEIR CONVERSION TO EXTERNAL NETWORK RESOURCE INTERCONNECTION SERVICE

16.1 Request for Injection Rights

MHDVC Connection Customers electing to request Injection Rights on the Transmission System pursuant to the procedures set forth in Section 3.2.3 of Attachment GGG to the Tariff shall make such requests for Injection Rights by submitting to Transmission Provider a completed Appendix 1 to Attachment X. The MHVDC Connection Customer must select “Injection Rights” in Appendix 1 and shall include all other relevant information required by Appendix 1 and its attachments. Requests for Injection Rights shall be studied and granted by Transmission Provider pursuant to the terms and conditions of the GIP, including requisite milestones and study deposits within the prescribed schedule deadlines.

Injection Rights serve as a pre-certification of the Transmission System’s capability to receive capacity and energy from the MHVDC Transmission Line at the requested Point of Connection, in the specified MW quantity, without degrading the reliability of the Transmission System. Injection Rights do not convey transmission service or Interconnection Service to the MHVDC Connection Customer or any other entity. Any such Injection Rights granted by Transmission Provider, and any increases or reductions to those Injection Rights, shall be documented in Appendix F to the Transmission Connection Agreement. Requests for Injection
Rights will be treated similar to requests for Interconnection Service from a queue priority perspective.

### 16.2 Conversion of Injection Rights to External Network Resource Interconnection Service

Before an Interconnection Customer with an Existing Generating Facility that is external to the Transmission System may offer energy or capacity across the MHVDC Transmission Line into the MISO markets, the Injection Rights granted pursuant to Section 3.2.3 of Attachment GGG to the Tariff and this Section 16 must be converted to external Network Resource Interconnection Service and transferred to that Interconnection Customer. Upon the request of an Interconnection Customer with an Existing Generating Facility for external Network Resource Interconnection Service via the MHVDC Transmission Line, Transmission Provider will convert the Injection Rights to external Network Resource Interconnection Service in an amount up to, but not greater than, the capacity of the MHVDC Transmission Line, and transfer that amount of external Network Resource Interconnection Service to that Interconnection Customer, subject to the conditions set forth below.

Prior to effectuating this conversion, Transmission Provider must receive the following information:

(a) from the Interconnection Customer seeking conversion:

(i) a request for external Network Resource Interconnection Service pursuant to Appendix 1 of Attachment X, by including the requested MW quantity to be converted and transferred;

(ii) documentation of the agreement between the Interconnection Customer and the MHVDC Connection Customer authorizing the conversion and transfer of the requested amount of Injection Rights;

(iii) documentation that the Interconnection Customer has long-term firm transmission service from the Existing Generating Facility to the Point of Connection, including any transmission service agreements over the MHVDC.
Transmission Line, that complies with the requirements included in the Service Agreement for Network Resources Interconnection Service for an Existing Generating Facility as set forth in Appendix 13 of Attachment X; and

(b) from the MHVDC Connection Customer that holds the Injection Rights being converted:

(i) documentation of the MHVDC Connection Customer’s procedures for the allocation of Injection Rights to Interconnection Customers, which shall be non-discriminatory and consistent with the Commission’s approval of the MHVDC Connection Customer’s right to charge negotiated (market based) rates for service on the applicable MHVDC Transmission Line.

Upon receipt of the required information, Transmission Provider will convert the requested amount of the MHVDC Connection Customer’s Injection Rights into external Network Resource Interconnection Service and grant the external Network Resource Interconnection Service to the Interconnection Customer, subject to the Interconnection Customer executing the Service Agreement for external Network Resource Interconnection Service for an Existing Generating Facility as set forth in Appendix 13 to Attachment X. All terms and conditions of such Service Agreement for external Network Resource Interconnection Service for an Existing Generating Facility and all the terms and conditions of Attachment X, including the rights to termination of Interconnection Service, shall apply to the Interconnection Customer’s external Network Resource Interconnection Service granted under this Article 16. After conversion of the Injection Rights, Transmission Provider shall document any remaining Injection Rights in Appendix F of the MHVDC Connection Customer’s Transmission Connection Agreement and shall post the Interconnection Customer’s external Network Resource Interconnection Service pursuant to the posting guidelines contained in Attachment X.

A request by an Interconnection Customer for a conversion of Injection Rights into external Network Resource Interconnection Service pursuant to this Section 16.2, shall not require any additional studies in the Definitive Planning Phase to the extent such studies have been performed as part of the MHVDC Connection Customer’s request for Injection Rights. To
the extent the MHVDC Connection Customer made the Definitive Planning Phase Milestone Payments (M2, M3, and M4) required in connection with its request for Injection Rights and evaluation, an Interconnection Customer obtaining a conversion to external Network Resource Interconnection Service based on the same request for Injection Rights shall not be required to make any additional Milestone Payments to Transmission Provider.

Any conversion to external Network Resource Interconnection Service under this Section 16.2 shall occur within three (3) years from the Commercial Operation Date for the MHVDC Transmission Line, as set forth in Appendix C of the Transmission Connection Agreement. Failure to convert any amount of the Injection Rights to external Network Resource Interconnection Service within the time period specified above shall result in termination of Injection Rights with respect to such unconverted amount. In the event any external Network Resource Interconnection Service obtained pursuant to this Section 16 terminates more than three (3) years after the Commercial Operation Date for the MHVDC Transmission Line, as set forth in Appendix C of the Transmission Connection Agreement, such terminated external Network Resource Interconnection Service may not revert back to Injection Rights.

SECTION 17. FACILITIES SERVICE AGREEMENT.

In the event that the Transmission Owner elects to fund the capital for the Network Upgrades and the Transmission Owner’s System Protection Facilities, the Interconnection Customer, Transmission Owner, and Transmission Provider shall enter into a Facilities Service Agreement to memorialize the terms of repayment for those Network Upgrades and Transmission Owner’s System Protection Facilities that the Transmission Owner elected to self-fund. The Facilities Service Agreement shall take the form of the pro forma Facilities Service Agreement that is included as Appendix 14 of Attachment X of the MISO Tariff. The Facilities Service Agreement shall be subject to the terms and conditions of Attachment X, including the rights to termination of Interconnection Service.
APPENDICES TO GIP

APPENDIX 1  INTERCONNECTION REQUEST FOR A GENERATING FACILITY

APPENDIX 2  RESERVED

APPENDIX 3  CERTIFICATION CODES AND STANDARDS AND CERTIFICATION
OF SMALL GENERATOR EQUIPMENT PACKAGES

APPENDIX 4  APPLICATION, PROCEDURES, AND TERMS AND CONDITIONS
FOR INTERCONNECTING A CERTIFIED INVERTER-BASED
SMALL GENERATING FACILITY NO LARGER THAN 10 KW (“10
KW INVERTER PROCESS”)

APPENDIX 5  OPTIONAL INTERCONNECTION STUDY AGREEMENT

APPENDIX 6  STANDARD GENERATOR INTERCONNECTION AGREEMENT

APPENDIX 7  INTERCONNECTION PROCEDURES FOR A WIND GENERATING
PLANT

APPENDIX 8  FACILITIES CONSTRUCTION AGREEMENT

APPENDIX 9  MULTI-PARTY FACILITIES CONSTRUCTION AGREEMENT

APPENDIX 10  INTERCONNECTION STUDY MODEL REVIEW FORM

APPENDIX 11  MONITORING AND CONSENT AGREEMENT

APPENDIX 12  ENERGY DISPLACEMENT AGREEMENT

APPENDIX 13  EXTERNAL NETWORK RESOURCE INTERCONNECTION
SERVICE AGREEMENT

APPENDIX 14  FACILITIES SERVICE AGREEMENT
ATTACHMENT FF

TRANSMISSION EXPANSION PLANNING PROTOCOL

I. Transmission Expansion Plan - Purpose and Scope, Definition and Role of OMS Committee: This Attachment FF describes the process to be used by the Transmission Provider to develop the MISO Transmission Expansion Plan (“MTEP”), subject to review and approval by the Transmission Provider Board. The provisions of this Attachment FF are consistent with the applicable provisions of Appendix B of the ISO Agreement and this Tariff. For purposes of this Attachment FF, all references to Transmission Owner(s) will include ITC(s). The costs incurred by the Transmission Provider in the performance of data collection, analyses and review, and in the development of the MTEP report, costs incurred under Section I.C of this Attachment FF, and costs incurred under Section I.D of this Attachment FF shall be recovered from all Transmission Customers under Schedule 10 of the Tariff.

A. Enrollment Process: The MTEP is developed to facilitate the timely and orderly expansion of and/or modification to the Transmission System to maintain reliability, promote efficiency in bulk power markets and facilitate compliance with applicable Federal and state laws, regulatory mandates and regulatory obligations. Any transmission provider that wishes to enroll in the Transmission Provider planning process for purposes of Order No. 1000 compliance must become a Transmission Owner, by signing the ISO Agreement, and by, within a reasonable period of time: (1) turning over functional control of its transmission facilities to the Transmission Provider; and (2) taking service under this Tariff for all its load that is physically located within the geographic area comprising the Transmission System. All Transmission Owners enrolled in the Transmission Provider’s transmission planning region are listed in either
(1) Attachment FF-4 of this Tariff, for Transmission Owners without a separately filed local planning process or (2) Attachment FF-5 of this Tariff, for Transmission Owners with a separately filed local planning process.

B. **OMS Committee Input to MTEP Process:** To the extent not otherwise specifically addressed in other portions of this Attachment FF, with respect to the MTEP process, the OMS Committee may provide input to the Transmission Provider planning staff and the System Planning Committee of the Transmission Provider Board, as appropriate, regarding the following:

1. At the start of a planning cycle, the OMS Committee may suggest to the Transmission Provider Board modifications to the Transmission Provider’s planning principles and planning objectives for that planning cycle;
2. At the start of a planning cycle, the OMS Committee may suggest additional scope elements in the MTEP;
3. Modeling inputs or assumptions used in the development of the MTEP and related appropriate cost/benefit analyses with respect to certain projects that are not proposed strictly for reliability; and
4. Concerns about general or specific issues with the MTEP process as they arise during the planning year.

Furthermore, at the end of the MTEP development process, but before the MTEP is submitted to the Transmission Provider Board for its review, the OMS Committee may submit a reconsideration request to the Transmission Provider planning staff, which shall respond prior to
submitting the final MTEP report to the Transmission Provider Board. This reconsideration request can be made only with respect to Network Upgrades eligible to receive regional cost allocation under Attachment FF if such projects: (1) will be recommended to the Transmission Provider Board for MTEP Appendix A approval, but have not been considered through the complete MTEP process or (2) will have a change in project cost of twenty-five percent (25%) or greater between the final Subregional Planning Meeting in the current planning year and the project being submitted to the Transmission Provider Board for approval. The Transmission Provider shall consider such a reconsideration request only if it is endorsed by the OMS acting by a vote of sixty-six percent (66%) or more of the OMS members.

At the end of each MTEP cycle, the OMS Committee may submit its assessment of the MTEP process to the Planning Advisory Committee, Transmission Provider, and the System Planning Committee of the Transmission Provider Board. Upon receipt of any such assessment from the OMS Committee, the Transmission Provider planning staff shall provide an appropriate response in a reasonably timely manner.

The manner in which the OMS Committee shall provide its assessment shall be set forth in the Transmission Planning Business Practices Manual procedures. The general procedures adopted with respect to the OMS Committee input into the MTEP shall remain unchanged until June 1, 2015, unless otherwise mutually agreed to by the Transmission Provider and the OMS Committee. Changes to the Transmission Planning Business Practices Manual procedures which describe OMS Committee input into the MTEP process may not be adopted with less than sixty
(60) days’ notice to the OMS Committee unless the OMS Committee consents to such earlier adoption. At the end of the two year period the Transmission Provider, the OMS, and other stakeholders will assess the success of the input procedures and provide suggestions for improvement.

C. **Development of the MTEP:** The Transmission Provider, working in collaboration with representatives of the Transmission Owners, OMS, and the Planning Advisory Committee, shall develop the MTEP, consistent with Good Utility Practice and taking into consideration long-range planning horizons, as appropriate. The Transmission Provider shall develop the MTEP for expected use patterns and analyze the performance of the Transmission System in meeting both reliability needs and the needs of the competitive bulk power market, under a wide variety of contingency conditions. The MTEP will give full consideration to the needs of all Market Participants, will include consideration of demand-side options, and will identify expansions or enhancements needed to i) support competition and efficiency in bulk power markets; ii) comply with Applicable Laws and Regulations; and iii) maintain reliability. Transmission expansions or enhancements may include any facilities that are eligible to be included in the Transmission System as provided for under this Tariff, including SATOA. Any SATOA may only participate in the Transmission Provider’s markets to the extent necessary to receive Energy from the Transmission System and to inject Energy into the Transmission System to provide the services for which the SATOA was included in the MTEP. SATOA may not otherwise participate in the Energy and Operating Reserve Markets and/or the Planning Resource Auction unless and until the Tariff includes provisions for storage facilities recovering cost-based revenues as transmission assets to also participate in these or other Market Activities. This
analysis and planning process shall integrate into the development of the MTEP among other things:

(i) the Transmission Issues identified from Facilities Studies carried out in connection with specific transmission service requests; (ii) Transmission Issues associated with generator interconnection service; (iii) the Transmission Issues, including proposed transmission projects, identified by the Transmission Owners in connection with their planning analyses in accordance with local planning process described in Section I.D.1.a to this Attachment FF and the coordination processes of Section I.D.1.b., or developed by Transmission Owners utilizing their own FERC-approved local transmission planning process described in Section I.D.2, as applicable, to provide reliable power supply to their connected load customers and to expand trading opportunities, better integrate the grid and alleviate congestion; (iv) the transmission planning obligations of a Transmission Owner, imposed by federal or state law(s) or regulatory authorities, which can no longer be performed solely by the Transmission Owner following transfer of functional control of its transmission facilities to the Transmission Provider; (v) plans and analyses developed by the Transmission Provider to provide for a reliable Transmission System and to expand trading opportunities, better integrate the grid and alleviate congestion; (vi) the identification, evaluation, and analysis of expansions to enable the Transmission System to fully support the simultaneous feasibility of all Stage 1A ARRs; (vii) the inputs provided by the Planning Advisory Committee; (viii) the inputs, if any, provided by the state and local regulatory authorities having jurisdiction over any of the Transmission Owners; (ix) the inputs of the OMS Committee; and (x) the transmission needs driven by
public policy requirements selected to be included as Transmission Issues pursuant to Section I.C.1.b.ii in accordance with Applicable Laws and Regulations.

1. Planning Cycle and Milestones: The ISO Agreement requires that a regional transmission plan be developed biennially or more frequently. An MTEP planning cycle is established for each calendar year. The development of the MTEP for a planning cycle with a given calendar year designation begins on June 1 of the year prior to the MTEP calendar year designation and ends with the approval of the final MTEP report by the Transmission Provider Board. This approval typically occurs at the Transmission Provider Board Meeting in December of the MTEP designated year. For example, the development of the MTEP14 transmission plan will commence on June 1 of 2013 and typically end with approval in December 2014. The development of the MTEP will follow specified process steps that are detailed, including process diagrams, in the Transmission Provider’s Transmission Planning Business Practices Manual (“TPBPM”). The TPBPM shall be posted on the website of the Transmission Provider.

   a. Planning Functions: The planning process includes the following functions which are described in detail in the TPBPM:

      i. Model Development;

      ii. Generator Interconnection Planning;

      iii. Transmission Service Planning;

      iv. Cyclical Regional Expansion Planning activities;

      v. Interregional coordination with neighboring transmission planning regions;
vi. System Support Resource ("SSR") Studies for unit decommissioning;

vii. Transmission-to-Transmission Interconnections;

viii. Load Interconnections; and

ix. Focus Studies. These are studies initiated during the cyclical baseline planning process that cannot be delayed until the next planning cycle (for example, NERC/FERC directives, or near-term critical operational issues).

Each of these planning functions may develop system expansions that are taken into consideration in developing the entirety of the MTEP.

b. Planning Cycle: The regional planning process is performed through a continuous series of planning cycles, with each cycle typically addressing Transmission Issues through a rolling planning horizon. Each cycle commences with regional model development, identification of potential expansions from the local planning processes of the Transmission Owners, identification and selection of transmission needs driven by public policy requirements pursuant to Section I.C.1.b.ii to be included as Transmission Issues, and identification by stakeholders or the Transmission Provider of potential expansions that address the Transmission Issues. Each cycle concludes with recommendations to the Transmission Provider Board of recommended solutions to the Transmission Issues evaluated. Transmission Owner plans developed through local planning processes described in Section I.D.1.a are included in the beginning of each
regional planning cycle as potential alternatives to local Transmission Issues identified by the Transmission Owners.

i. Key Planning Cycle Milestones: The regional planning process evaluates, with stakeholder input throughout the cycle, the local plans of the Transmission Owners, as one input to the development of the regional plan. Key milestones in the typical MTEP development process are listed below and requirements and timelines for data submittal, review, and comment at each of these milestone points are described in the TPBPM:

(a). Model development;

(b) Identification and selection of transmission needs driven by public policy requirements pursuant to Section I.C.1.b.ii to be included as Transmission Issues;

(c) Testing models against applicable planning criteria;

(d) Development of possible solutions to identified Transmission Issues;

(e) Selection of preferred solution;

(f) Determination of funding and cost responsibility; and

(g) Monitoring progress on solution implementation.

ii. Transmission needs driven by public policy requirements: The process for selecting transmission needs driven by public policy requirements, out of the larger set of transmission needs driven by public policy requirements that stakeholders may propose, to be included in the Transmission Issue(s) for which...
transmission solutions will be evaluated shall be as follows:

a. At the beginning of the MTEP cycle, stakeholders submit to the Transmission Provider, proposals to consider transmission needs driven by public policy requirements, as part of the Transmission Issues they may raise, in accordance with Section I.C.2.b, through Sub-Regional Planning Meetings, the Planning Subcommittee and/or the Planning Advisory Committee. The Transmission Provider may also identify transmission needs driven by public policy requirements to be evaluated.

b. The Transmission Provider will then consolidate all such identified transmission needs driven by public policy requirements that it receives into a list that will be distributed to stakeholders through the Planning Subcommittee and/or the Planning Advisory Committee and to other stakeholder forums as the Transmission Provider deems necessary.

c. Transmission needs driven by public policy requirements will be discussed in the Sub-Regional Planning Meetings, Planning Subcommittee and/or the Planning Advisory Committee in accordance with Section I.C.2.b.

d. The Transmission Provider will assess such identified
transmission needs driven by public policy requirements that it receives, considering the feedback received from stakeholders and the Sub-Regional Planning Meetings, Planning Subcommittee and/or the Planning Advisory Committee, and select the public policy requirements that will be further studied in the MTEP process. This selection will be based on:

1. the effective dates, nature and magnitude of the public policy requirements in the Applicable Laws and Regulations;
2. the immediacy or other estimated timing, and extent, of the potential impact on the identified transmission needs;
3. the availability of the resources, and any limitations thereto, that would be required by consideration of such transmission needs driven by public policy requirements;
4. the relative significance of other Transmission Issues that have been raised for consideration; and
5. other appropriate factors that can aid the prioritization of Transmission Issues to be considered by the regional transmission planning
iii. The Transmission Provider shall address each of these milestones throughout the planning cycle through Sub-regional Planning Meetings, Planning Subcommittee and Planning Advisory Committee meetings.

2. Stakeholders Input in Planning Process: The Transmission Provider shall facilitate discussions with its Transmission Customers, Transmission Owners, OMS Committee, and other stakeholders about the Transmission Issues and solutions involving both transferred and non-transferred facilities, as described in Section I.D.1 of this Attachment FF.

These discussions will take place at Sub-regional Planning Meetings and at regularly scheduled meetings of the Transmission Provider’s Planning Subcommittee, at locations provided by the Transmission Provider and with communication capabilities for those participants unable to have in person representation at these meetings. Once the MTEP report for a specific planning cycle has been completed but prior to recommendation to the Transmission Provider Board for approval, the Transmission Provider shall seek feedback on the proposed MTEP, including Network Upgrades recommended for approval, from the Transmission Provider’s stakeholders and the OMS Committee.

a. Planning Advisory Committee (“PAC”): The Planning Advisory Committee is a standing committee reporting to the Transmission Provider’s Advisory Committee, and functions subject to the Stakeholder Governance Guide developed by the Stakeholder Governance Working Group, as approved by the
Advisory Committee. The PAC is responsible for addressing planning policy issues of importance to stakeholders and within the responsibilities of the Transmission Provider. The PAC charter is maintained on the Transmission Provider’s website.

b. Planning Subcommittee (“PS”): The Planning Subcommittee is a standing stakeholder-chaired subcommittee of the Planning Advisory Committee, and functions subject to the Stakeholder Governance Guide developed by the Stakeholder Governance Working Group, as approved by the Advisory Committee. Planning Subcommittee membership is open to interested parties, including, but not limited to: transmission delivery service and interconnection service customers, marketers, developers, Transmission Owners, state and local regulatory authorities, federal regulatory staff, other Market Participants, and all interested parties. The charter for the committee is developed by stakeholders and is maintained on the Transmission Provider’s website. The Transmission Provider will seek guidance from Transmission Owners, state and local regulatory authorities, and other stakeholders through the Planning Subcommittee and/or the Planning Advisory Committee prior to the beginning of each new planning cycle. Guidance will include the scope of planning studies to be undertaken, the development of future scenarios to be modeled and analyzed in long-term planning studies, and the development of suitable models and assumptions to support such studies. The Transmission Provider will also seek guidance from Transmission Owners, state and local regulatory authorities, and other
stakeholders through the Planning Subcommittee and/or the Planning Advisory Committee prior to implementing changes or revisions to the scope, models, and assumptions during the planning cycle. The Planning Subcommittee and/or the Planning Advisory Committee may form working groups at the discretion of stakeholders to perform specific tasks supporting the planning processes, such as model development and detail review of study results and draft plan reports.

c. Sub-regional Planning Meetings ("SPMs"): The Transmission Provider shall utilize SPMs to provide opportunity for Transmission Owners, state and local regulatory authorities, and other stakeholders to provide input to the planning process, and to carry out the tasks of coordinating transmission plans among the Transmission Owners and proposals to address the Transmission Issues identified in the scope of transmission planning studies. Input and planned coordination may occur through the use of existing sub-regional planning groups ("SPGs") where they exist, or through the establishment of new sub-regional meeting forums. One or more SPMs will be used or established for each of the four regional Planning Sub-regions of the Transmission Provider. Planning Sub-regions shall be defined based upon the Transmission Provider Planning Sub-regions: West, Central, South, and East as defined in Attachment FF-3.

i) SPM Participants: Participants at an SPM will consist of representatives of the Transmission Owners operating within the associated Planning Sub-region that integrate their local planning processes with the regional process, representatives from state and local
regulatory authorities, and any other parties interested in or impacted by the planning process. For those Transmission Owners engaged in local planning under their own FERC approved local planning processes, such Transmission Owners shall participate in the SPM in order to coordinate their planning activities.

Neighboring transmission-owning utilities and regulatory participants are eligible and encouraged to participate in the SPM to promote joint planning between the Transmission Provider and neighboring transmission systems.

ii) SPM Guidelines. The Sub-regional Planning Meeting participants shall:

(a) Make recommendations for a coordinated sub-regional Plan, after considering sub-regional and regional needs and alternatives, for the ensuing ten years, for all transmission facilities in the sub-region;

(b) Review and comment on proposed Transmission Owners plans identified in local planning processes described in Section I.D.1.a. of this Attachment FF, for additions and modifications to the sub-regional transmission system, as potential solutions to identify Transmission Issues and review the transmission plans developed by those Transmission Owners that have their own FERC-approved local planning process (described in Section
I.D.2) to ensure coordination of the projects set forth in such plans with the potential regional planning solutions developed in the SPM process consistent with the requirements of Appendix B of the Transmission Owners’ Agreement;

(c) Form technical study task forces as required to carry out the sub-regional planning responsibilities;

(d) Encourage non-Transmission Provider member participation to improve understanding by the SPM participants, the Planning Subcommittee, and the Transmission Provider staff of facility changes outside the Transmission Provider Region to ensure the impact of such changes are considered in the planning studies;

(e) Promote other stakeholder (i.e., environmental agencies, and load and generation developers) involvement in development of the sub-regional plans.

(f) Recommend to the Planning Subcommittee proposed sub-regional plans to be included in the MTEP. In addition, the transmission projects developed by any Transmission Owner or Owners utilizing the provisions of their own FERC-approved local planning process shall be submitted for inclusion in the regional MTEP after being evaluated by the Transmission Provider in the regional evaluation of SPMs in accordance with Appendix B of the
Transmission Owners’ Agreement in determining the Transmission Provider’s recommendation for inclusion in the MTEP.

(g) Reflect, as desired, minority opinions to the Transmission Provider or the Planning Subcommittee.

(h) SPM Frequency, Location and Agenda: SPMs should meet at least two times per year or as otherwise provided for in the TPBPM, to provide input in the planning process, review plans and recommend changes, if any, needed to address stakeholder needs and to coordinate proposed plans.

Meetings involving CEII or confidential materials shall be handled under Section I.C.12 of this Attachment FF.

3. Meeting Notifications: Notice shall be provided by way of email distribution lists by the Transmission Provider of all SPMs, Planning Subcommittee, and Planning Advisory Committee meetings. These email distribution lists are established and maintained by the Transmission Provider and it is the responsibility of stakeholders to have registered as described on the Transmission Provider website. Meeting dates, times, locations, and materials will also be posted on the meeting calendar page of the Transmission Provider’s website. Meeting notification guidelines are set forth in the stakeholder developed Stakeholder Governance Guidelines.

4. Other Meeting Schedules: Planning Subcommittee meetings are regularly scheduled meetings that occur no less than bimonthly. Annual meeting schedules and
objectives are developed at the December meeting each year for the subsequent year.

Planning Advisory Committee meetings are scheduled as per the PAC Charter.

5. Planning Criteria: The Transmission Provider shall evaluate the system to address Transmission Issues in a manner consistent with the ISO Agreement and this Attachment FF. Projects included in the MTEP may be based upon any applicable planning criteria, including accepted NERC reliability standards and reliability standards adopted by Regional Entities, local planning reliability or economic planning criteria of the Transmission Owner, or required by State or local authorities, any economic or other planning criteria or metrics defined in this Attachment FF, and any Applicable Laws and Regulations. Transmission Owners are required to annually provide updated copies of local planning criteria for posting on the Transmission Provider’s website.

The Transmission Provider will post on its website an explanation of which transmission needs driven by public policy requirements will be evaluated for potential solutions in the local or regional transmission planning process, as well as an explanation of why other suggested potential transmission needs will not be evaluated.

6. Planning Analysis Methods: Planning analyses performed by the Transmission Provider will test the Transmission System under a wide variety of conditions as described in Section II and using standard industry applications to model steady state power flow, angular and voltage stability, short-circuit, and economic parameters, as determined appropriate by the Transmission Provider to be compliant with applicable criteria and this Tariff.
7. Planning Models: The Transmission Provider shall collaborate with Transmission Owners, other transmission providers, Transmission Customers, and other stakeholders to develop appropriate planning models that reflect expected system conditions for the planning horizon. The planning models shall reflect the projected Load growth of existing Network Customers and other transmission service and interconnection commitments. The models shall include any transmission projects identified in Service Agreements or Interconnection Agreements that are entered into in association with requests for transmission delivery service or interconnection service, as determined in Facilities Studies associated with such requests. Load forecasts applied to models will consider the forecast Load of Network Customers reported to the Transmission Provider in accordance with the requirements of Module B and RAR of this Tariff, and the Business Practices Manuals of the Transmission Provider. Models will be posted on an FTP site maintained by the Transmission Provider and accessible to stakeholders with security measures as provided for in the TPBPM. The Transmission Provider will provide an opportunity for stakeholders to review and comment on the posted models before commencing planning studies. The schedules for such reviews are maintained in the TPBPM. Stakeholders shall be afforded opportunities to provide input on Load projections from Tariff reporting requirements or from Transmission Owner forecasts. After the base line forecast and model are established, the Transmission Provider and/or Transmission Owners may adjust the forecast as necessary on an ad hoc basis throughout the planning year to...
address customer requests for new Load interconnections arising from on-going dialogue with existing and prospective customers.

8. Planning Assumptions: Each MTEP report shall list in detail the planning assumptions upon which the analyses are based. In general, planning analyses will be based on the following:

   a. Planning Horizons: The MTEP will identify Transmission Issues for a minimum planning horizon of five years and a maximum planning horizon of twenty years.

   b. Load: Load demand will generally be modeled by the Transmission Provider as the most probable (“50/50”) coincident Load projection for each Transmission Owner’s service territory, for the season under study. Specific studies may model alternative Load probabilities or peak Load for areas within a Transmission Owner’s service territory as dictated by operational and planning experience and/or local planning criteria, but in any case shall be treated consistently in the planning for native Load and transmission access requests.

   c. Generation: Planning models of five years or longer will model generation, taking into consideration applicable planning reserve requirements, that are: (i) existing and expected to be in existence in the planning horizon; (ii) not existing but with executed interconnection agreements; and (iii) additional generation as determined with stakeholder input, as necessary to adequately and efficiently meet demand forecasted through the planning horizon and to facilitate compliance with statutory or regulatory mandates. The Transmission Provider
shall apply a scenario analysis to determine alternative future generation portfolio possibilities.

Generation portfolio development for planning model purposes will be developed with input from the Planning Advisory Committee and its subcommittees, working groups, and task forces. Point-To-Point Transmission Service and Network Integration Transmission Service customers will have an opportunity to guide new generation portfolio development that is reflective of customer future resource plans.

d. Demand Response Resources: Planning solutions will be based upon the best available information regarding the expected amount and location of Load that can be effectively and efficiently reduced by demand response or energy efficiency programs, as well as the amount of behind-the-meter generation that can reliably be expected to produce Energy that could impact planning solutions. The Transmission Provider shall perform and report on sensitivity analyses that indicate the effectiveness of potential demand response as alternative planning solutions, to the extent that appropriate methodology for such analyses is developed with stakeholders and documented in the TPBPM.

e. Topology: Each planning study will use the best known topology based upon the most recently approved MTEP. Planning studies will include all projects approved by the Transmission Provider Board, and shall identify, as appropriate, and as detailed in the TPBPM, any system needs already identified in the most recent approved MTEP.
9. Evaluation of Alternatives: When the planning analyses, based on the foregoing principles, identifies Transmission Issues, the Transmission Provider will consider the inputs from stakeholders derived from the SPM processes, the inputs from the Planning Subcommittee and the Planning Advisory Committee, the plans of any Transmission Owner with its own FERC-approved local planning process, and the MTEP aggregate system analyses against applicable planning criteria, in determining the solutions to be included in the MTEP and recommended to the Transmission Provider Board for implementation.

10. Facility Design: Facility design and system configuration (such as conductor sizes, transformer design, bus configuration, protection schemes) are selected by the Transmission Owner, and must be consistently applied by the Transmission Owner for comparable system service conditions. Comparable application of system design does not preclude the consideration or selection of advanced or alternative transmission technology. For Competitive Transmission Facilities associated with Competitive Transmission Projects, the Transmission Provider may provide limitations or requirements regarding facility design when necessary due to a planning driver or to ensure compatibility with existing transmission facilities to which the Competitive Transmission Facilities will interconnect as further described in Section VIII.C.2.c of this Attachment FF.

11. Status of Recommended Facilities: The status of all project facilities recommended for implementation in the MTEP shall be reported to the Transmission Provider on a quarterly basis and upon solicitation from the Transmission Provider. Each

Effective On: March 11, 2020
Selected Developer and Transmission Owner is required to provide such status updates regarding the facilities for which it is responsible to construct to the Transmission Provider as further specified in this Section I.C.11 of Attachment FF of the Tariff and the Business Practices Manuals.

The Transmission Provider shall report on such status to the Transmission Provider Board on a quarterly basis, or as otherwise directed by the Transmission Provider Board. The Transmission Provider shall also publicly post such status in a form consistent with the Business Practices Manuals to the Transmission Provider’s website on a quarterly basis, redacting any CEII and/or confidential information as necessary.
(a) Status of Eligible Project facilities approved after December 1, 2015:

Each Selected Developer and incumbent Transmission Owner shall provide quarterly status reports to the Transmission Provider regarding the facilities included in an Eligible Project approved after December 1st, 2015 for which it is responsible to construct until the quarter after all such facilities have been placed into service and transferred to the Transmission Provider’s functional control, or the facilities and/or Eligible Project are otherwise reassigned, canceled, or terminated.

Quarterly status reports shall conform to the format set forth in the Business Practices Manuals and include, at a minimum, the following: (i) project schedule, including each facility’s estimated in-service date and any material changes therein; (ii) estimated project costs, including the estimated cost to complete each facility, any material changes therein as compared to the applicable Baseline Cost Estimate as set forth in Section IX.C.1.1, the total project expenditures to date, and the total project expenditures to date expressed as a percentage of the Baseline Cost Estimate, as set forth in Section IX.C.1.1; (iii) facility development status (i.e. under construction, in service, completed, or withdrawn); (iv) status of obtaining necessary regulatory and or environmental permits, certificates, or approvals, including meeting necessary licensing requirements; (v) status of land and right-of-way acquisition; (vi) status of design and engineering; (vii) status of any necessary interconnection agreements; (viii) an explanation of the causes of, or reasons for, any material changes to or deviations from the MTEP in-service date, Baseline Cost-Estimate as set forth in Section IX.C.1.1, and information provided in the last quarterly status report; and (ix) an assessment of the
impact of any material changes on the project, including the continued ability to meet the MTEP in-service date.

Within one hundred eighty (180) Calendar Days after the date the Selected Developer or Transmission Owner have placed all of the facilities included in a Eligible Project for which it is responsible to construct into service, including the transfer of functional control to the Transmission Provider, unless the Transmission Provider and Selected Developer or Transmission Owner agree on a different date, shall provide the Transmission Provider with the following:

1. the final costs to construct the facilities;
2. copies of the final “as-built” drawings and specifications of the facilities;
3. copies of any inspection reports performed on the facilities; and
4. geo-spatial information specific to the facilities (i.e. GIS compatible maps, GPS coordinates, etc.)

(b) Additional status requirements for Competitive Transmission Facilities:

In addition to the requirements specified above in Section I.C.11.a of Attachment FF, each Selected Developer shall also include in its status reports the following:

(i) status of any necessary project financing; (ii) the percentage (%) of the total project expenditures to date as compared to the total projected project cost schedule provided in the Selected Proposal; (iii) whether any rate filings associated with the Competitive Transmission Facilities were made during the previous quarter or expected to be made in the upcoming quarter; (iv) any changes in the continuing ability to meet the obligations of the Selected Developer Agreement according to the schedules and milestones agreed to
therein, including any binding cost caps or cost-containment measures that were included in the Selected Proposal; (v) an explanation of the causes of, or reasons for, any changes from the specifications included in the Selected Proposal; and (vi) an assessment of the impact of any such changes on the Competitive Transmission Facilities included in the Competitive Transmission Project.

(c) **Status of all other facilities recommended for implementation in the MTEP:**

The requirements and obligations set forth in this section I.C.11.c of Attachment FF, shall be applicable to all facilities recommended for implementation in the MTEP except for those facilities that are included in an Eligible Project approved by the Transmission Provider Board after December 1, 2015.

Each incumbent Transmission Owner shall provide status reports to the Transmission Provider regarding the facilities that are included in projects other than those specified in Attachment FF §I.C.11.a for which it is responsible to construct, until the quarter after such facilities have been placed into service and transferred to the Transmission Provider’s functional control. Status reports shall conform to the format set forth in the Business Practices Manuals and at a minimum, include the following: (i) material changes to the schedule and to the estimated project cost; (ii) an explanation of the causes of, or reasons for, any such changes; and (iii) changes in project status (i.e., under construction, in service, completed, or withdrawn). The Transmission Provider shall report such progress to the Transmission Provider Board on a quarterly basis, or as otherwise directed by the Transmission Provider Board.
12. Treatment of Critical Energy Infrastructure Information (“CEII”) and Confidential Data: The Transmission Provider shall utilize a Non-Disclosure and Confidentiality Agreement (“NDA”) to address sharing of CEII transmission planning information. FTP sites containing such information will require such agreements to be executed in order to obtain access to those sites. Stakeholder meetings at which CEII may be available shall be noticed to email distribution lists and shall require execution of NDAs prior to participation in such meetings. In the alternative, such meetings will be structured to have separate discussion of issues involving CEII data only with participants that agree to execute the NDA. Confidential information related to economic (e.g., congestion) studies, as well as CEII, is clearly sensitive information which must remain confidential. The Transmission Provider shall use generic, publicly available, cost information from industry sources in the economic studies to prevent the accidental release of confidential information. This approach will promote an open planning process because the results of economic studies are available to all interested parties.

13. Resolution of Stakeholder Input: The Transmission Provider shall solicit input and comments from all stakeholders, including Transmission Owners, during and after stakeholder planning meetings, and will use reasonable efforts to reply to comments that the Transmission Provider does not elect to implement, together with reasons for such actions. The Transmission Provider shall develop a process for the documentation and resolution of stakeholder issues raised in the planning process, including but not limited to issues related to planning criteria.
14. Dispute resolution: Consistent with Attachment HH of this Tariff, the Transmission Provider shall resolve disputes concerning MTEP issues. The first step will be for designated representatives of the affected parties to work together to resolve the relevant issues in a manner that is acceptable to all parties. If that step is unsuccessful, each affected party shall designate an officer who shall review disputes involving them that their designated representatives are unable to resolve. The applicable officers of the parties involved in such dispute shall work together to resolve the disputes so referred in a manner that meets the interests of such parties, either until such agreement is reached, or until an impasse is declared by any party to such dispute. If such officers are unable to satisfactorily resolve the issues, the matter shall be referred to mediation. Parties that are not satisfied with the dispute resolution procedures may only file a complaint with the Commission during the negotiation or mediation steps.

If a matter remains unresolved, the affected parties may pursue arbitration.

D. Project Coordination: In the course of the MTEP process, the Transmission Provider shall seek out opportunities to coordinate or consolidate, where possible, individually defined transmission projects into more comprehensive cost-effective developments subject to the limitations imposed by prior commitments and lead-time constraints. The Transmission Provider shall coordinate with Transmission Owners, and shall consider the input from the SPMs, Planning Subcommittee, and Planning Advisory Committee to develop expansion plans to meet the needs of the system. This multi-party collaborative process will allow for all projects with regional and inter-regional impact to be analyzed for their combined effects on the Transmission System. Moreover, this collaborative process is designed to ensure that the MTEP
address Transmission Issues within the applicable planning horizon in the most efficient and cost effective manner, while giving consideration to the inputs from all stakeholders. In addition to the requirements of this Attachment FF, there may be state or local procedural requirements applicable to the planning or siting of transmission facilities by the Transmission Owners. A current list of those requirements can be found on the Transmission Provider’s website.

1. Transmission Owners Electing to Integrate their Local Planning Processes into the Transmission Provider’s Processes: Some Transmission Owners have agreed to integrate internal planning process with the Transmission Provider’s open and coordinated planning processes for all of their transmission facilities to comply with Order 890 Planning Principles instead of filing a separate Attachment K. Through this election, the local planning for all transmission facilities of these Transmission Owners, regardless of whether the facilities are ultimately transferred to the functional control of the Transmission Provider, shall be integrated with and included in the regional planning processes of the Transmission Provider. These regional planning processes, as provided for in this Attachment FF and in additional detail in the TPBPM, ensure that the planning decisions for all such facilities are made in an open and transparent environment.

This planning environment provides opportunity for input from, and review by, stakeholders of the Open Access Transmission Tariff services throughout the planning process, and is in accordance with the Planning Principles of the Order 890 Final Rule. The open and transparent planning provisions of this Attachment FF shall not preclude interaction between stakeholders and Transmission Owners prior to the submittal of proposed projects to the regional planning process.

Effective On: March 11, 2020
Transmission Owners integrating local planning processes into the regional planning processes are listed in Attachment FF-4. Such Transmission Owners shall be responsible for providing the Transmission Provider with sufficient information regarding all planning activities to enable the Transmission Provider to adequately review and incorporate all of the Transmission Owner’s transmission facilities into the regional planning process of the Transmission Provider, as described in Sections I.D.1.a. and I.D.1.b. of this Attachment FF.

The foregoing Transmission Owners will utilize the planning stakeholder forums of the Transmission Provider to demonstrate the need for, identify the alternatives to, and report the status of non-transferred transmission facilities using the same open, transparent and coordinated planning process provided by the Transmission Provider for transferred facilities as described in this Attachment FF.

a. Local Planning Processes of Transmission Owners: In accordance with the ISO Agreement, each Transmission Owner engages in local system planning in order to carry out its responsibility for meeting its respective transmission needs in collaboration with the Transmission Provider subject to the requirements of applicable state law or regulatory authority. In meeting its responsibilities under the ISO Agreement, the Transmission Owners may, as appropriate, develop and propose plans involving modifications to any of the Transmission Owner’s transmission facilities which are part of the Transmission System. The Transmission Owners shall include the following specific local planning steps in order to develop plans for potential inclusion in the regional plan, in accordance with the annual regional planning process as described in
Section I.D.1.b. of this Attachment FF, and in accordance with the regional planning principles of Section I.C of this Attachment. In addition to the local planning steps below, Transmission Owners shall adhere to any applicable state or local regulatory planning processes.

i. Define local study area and study horizon;

ii. Develop appropriate power system models;
   a) Utilize existing NERC or Transmission Provider cases to model external systems;
   b) Insert detailed model of Transmission Owner system if required;
   c) Insert updated detailed models of neighboring system models if required; and
   d) Verify model topology and generation.

iii. Update loads (spatial and magnitude) in study area;
   a) Review historical MW and MVAR data to develop growth trends;
   b) Obtain Load forecasts from customers in study area; and
   c) Obtain input from local distribution planners in the study area.

iv. Perform contingency analysis using applicable Transmission Owner planning criteria;

v. Identify any violations to planning criteria for each of study period;

vi. Develop alternative solutions to the criteria violations and test against the planning criteria;
a) Obtain cost estimates for each alternative and perform economic analyses; and
b) Determine non-cost attributes of each alternative such as operating flexibility, robustness, among others.

vii. Select alternative based on cost and non-cost attributes;
viii. Submit proposed solution and list of alternatives and assumptions to the Transmission Provider;
ix. Participate in stakeholder evaluations and discussions as a part of annual regional plan development process;
x. Perform additional analysis as required based on feedback from stakeholder groups (SPM/PS) in the regional planning process;
xii. Consider regional planning process results, including stakeholder feedback on needs, proposed solutions, and alternatives, in determining whether or not to proceed with implementation of Transmission Owner proposed expansions; and
xiii. Post the planning criteria and assumptions, and power flow models used in development of each Transmission Owner’s current local planning proposal in accordance with Section I.D.1.b below. To the extent that the Transmission Owner uses the MISO MTEP models in developing its list of newly proposed projects, the Transmission Owner shall indicate as per Section I.D.1.b. below, the associated MTEP model used.
The Transmission Provider will maintain a link to applicable MTEP models on its website together with instructions for accessing such models consistent with CEII criteria and suitable non-disclosure agreements. In the event that the Transmission Owner applies its own power flow models in developing its proposed local plans, the Transmission Owner shall provide such models to the Transmission Provider for posting, or shall provide to the Transmission Provider a link to the location of such Transmission Owner model(s) and to instructions for accessing such models consistent with the Transmission Owner’s CEII and non-disclosure requirements. Transmission Provider shall post on its website links to such postings on Transmission Owner’s website.

b. Integration of Local Planning Processes of Transmission Owners:

Transmission Owners listed on Attachment FF-4 as integrating local planning processes with those of the Transmission Provider, shall integrate proposals for transmission expansions into the regional planning process as follows. Each Transmission Owner shall submit its proposals for transmission plans to the Transmission Provider prior to the start of each regional planning cycle. Each Transmission Owner’s local plan, which consists of a list of proposed projects, shall be made available on the Transmission Provider’s website for review by the PAC, the PS, and the SPM participants, subject to CEII and the confidentiality provisions in this Attachment FF. Such local plans shall be posted by September 15 each year in order to provide time for written comments by stakeholders. In addition to the list of proposed projects, each Transmission Owner submitting newly proposed projects by September 15 in any MTEP annual cycle shall
provide to the Transmission Provider by June 1 of the same year identification of any MISO base power flow model used by the Transmission Owner in support of the identification of the list of proposed projects to be subsequently posted in September, or in the event that the Transmission Owner uses a non-MISO base power flow model in support of the identification of the list of proposed projects the Transmission Owner shall provide to the Transmission Provider such base power flow model or a link to the power flow model and assumptions used.

Each Transmission Owner’s local planning model and associated assumptions shall be accessible on or through a link on the Transmission Provider’s website for review, subject to CEII and the confidentiality provisions in this Attachment FF and consistent with section I.D.1.a. In the event that the Transmission Owner uses a non-MISO base power flow model, the Transmission Owner shall provide for posting updates if there are significant changes in the model by July 15, August 15, and September 15 of each year. Comments by stakeholders on the local planning models and assumptions that are provided to the Transmission Provider SPM Planning Contact by July 1, or August 1 or September 1 with respect to updates, shall be forwarded to the applicable Transmission Owner by July 8, August 8, or September 8, respectively. The Transmission Provider shall address any unresolved stakeholder issues through the SPM process.

Each Transmission Owner shall also provide to the Transmission Provider by June 1 of each year any updates to the posted transmission planning criteria, or a notification that the posted documents have not changed. In the event a Transmission Owner has additional significant updates to the posted transmission planning criteria, the
Transmission Owner shall provide such updates for posting by July 15, August 15, and September 15 of each year.

The Transmission Provider shall post on its website the lists of newly proposed projects, criteria and assumptions, and supporting base power flow models or links to supporting base power flow models, as provided by the Transmission Owners. Initial comments by stakeholders to the proposed projects should be provided to the Transmission Provider SPM Planning Contact 45 days after the posting of local plans otherwise comments may be made pursuant to Section I.C.2.c.ii. The Transmission Provider SPM Planning Contact shall be identified on the Transmission Provider’s website page devoted to Expansion Planning. The Transmission Provider shall provide to the applicable Transmission Owner within five working days of receipt, a copy of all stakeholder comments received within 45 days of the posted information regarding Transmission Owner planning criteria and assumptions, models applied, and list of proposed projects. The Transmission Provider shall address any unresolved stakeholder issues through the SPM process. Each Transmission Owner must participate in SPMs in the respective Planning sub-region as indicated in the Transmission Providers meeting schedule. Such SPMs shall provide input to and review of the results of the needs assessments and adequacy of plans proposed by the Transmission Owners, or by stakeholders to the planning process, or by the Transmission Provider, to best meet the needs of the sub-region.

Transmission Owners identified in Attachment FF-4, must submit to the Transmission Provider, on an annual basis and at a time to be determined by the Transmission Provider,
which shall be prior to the beginning of each regional planning cycle, all proposed transmission plans for both transferred and non-transferred transmission facilities. The submitted projects of such Transmission Owners shall be considered potential alternatives to system needs identified, and as such must be submitted when initially identified as a potential system solution, in order to permit the evaluation of such projects along with other potential alternatives that may be proposed by stakeholders or the Transmission Provider, in the SPM processes. Such alternatives may include transmission, generation, and demand-side resources. The Transmission Provider will review and evaluate such alternatives on a comparable basis and select the most appropriate solution. Comparability includes the ability of the Transmission Provider to obtain contractual assurances that the selected solution will be implemented by the required in-service dates. Contractual commitments associated with the construction of an MTEP Appendix A approved project by MISO Transmission Owner(s) and/or Selected Developer(s) are provided for by the ISO Agreement, this Tariff, and the Selected Developer Agreement.

Contractual commitments associated with generation solutions require that a generator interconnection agreement be filed with the Commission pursuant to Attachment X of this Tariff by the time the alternative transmission solution would need to be committed to in order to ensure installation on the required need date. Contractual commitments associated with demand-side resource solutions require demonstration to the Transmission Provider of an executed contract between LSE and End-Use Customers. Such demand-side contracts must be in place by the time that the transmission solution
would otherwise need to be committed to in order to ensure a timely solution to the
identified planning need, and must span the five year planning horizon to ensure the
ability to provide adequate lead time for an alternative transmission solution should the
demand contracts terminate. Notwithstanding the provisions of Section VII of the ISO
Agreement regarding the Transmission Provider review of Transmission Owner plans, no
proposed project of a Transmission Owner that has elected to integrate their local
planning processes into the Transmission Provider’s processes, as indicated on
Attachment FF-4, shall be recommended in the MTEP for implementation until
completion of the annual needs analysis carried out in the annual MTEP cycle, as
described in Section I.C. of this Attachment FF, except as provided for in Section I.D.1.c.
of this Attachment FF.

c. Out-of-Cycle Review of Transmission Owner Plans: In the event that a
Transmission Owner determines that system conditions warrant the urgent development
of system enhancements that would be jeopardized unless the Transmission Provider
performs an expedited review of the impacts of the project, Transmission Provider shall
use a streamlined approval process for reviewing and approving projects proposed by the
Transmission Owners so that decisions will be provided to the Owner within thirty (30)
days of the projects submittal to the MISO unless a longer review period is mutually
agreed upon.

2. Transmission Owners Filing Separate Attachment K: Some Transmission Owners as
listed on the last page of Attachment FF-5 have developed individual open, local planning
processes for their facilities, that comply with the Planning Principles of the Order 890 Final
Rule. These Transmission Owners have an Attachment K that describes how the Transmission Owner will comply with the Order No. 890 Planning Principles for all transmission facilities that they plan for, regardless of whether those facilities are ultimately transferred to the functional control of the Transmission Provider. With the exception of Sections I.D.1.a and I.D.1.b., the provisions of this Attachment FF remain applicable to all Transmission Owners notwithstanding the filing by any Transmission Owner of an Attachment K pursuant to the Order 890 Final Rule.

E. Interregional Coordination and Cost Allocation: The MTEP shall be developed in accordance with the principles of interregional coordination through collaboration with representatives from adjacent transmission providers, their designated regional planning organizations, or regional transmission organizations, as provided for in this Attachment FF, or as otherwise provided for in existing joint agreements between the Transmission Provider and other regional entities that engage in planning activities. The Transmission Provider has developed region-specific interregional coordination and cost allocation provisions with regard to the following neighboring transmission planning regions:

- PJM Interconnection, L.L.C. (“PJM”), as provided for under Article IX and other applicable provisions of the Joint Operating Agreement between the Transmission Provider and PJM, as may be amended from time to time, including revisions the effective date of which is pending Commission approval in Docket No. ER13-1943-000;
- Southeastern Regional Transmission Planning (“SERTP”), as provided for under Section X of this Attachment FF, the effective date of which is pending Commission approval in Docket No. ER13-1923-000; and
• Southwest Power Pool (“SPP”), as provided for under Article IX and other applicable provisions of the Joint Operating Agreement between the Transmission Provider and SPP, as may be amended from time to time, including revisions the effective date of which is pending Commission approval in Docket No. ER13-1938-000;

The Transmission Provider also has planning coordination provisions as part of its coordination agreement with Manitoba Hydro.

The following interregional coordination provisions shall continue to apply with regard to interregional coordination activities between the Transmission Provider and the Mid Continent Area Power Pool (“MAPP”) transmission planning region. Moreover, the following interregional coordination provisions shall remain in effect for interregional coordination activities between the Transmission Provider and the SERTP transmission planning region until the Commission approves and grants an effective date for the SERTP interregional coordination and cost allocation filing pending in Docket No. ER13-1923-000.

1. Initial Contact: The Transmission Provider will initiate a meeting with representatives of adjacent transmission providers, their designated regional planning organizations, or regional transmission organizations with which existing joint agreements are not already established with the Transmission Provider (“Regional Planning Coordination Entities” or “RPCEs”), in order to establish a Joint Planning Committee.

2. Joint Planning Committee. The Transmission Provider shall offer to form a Joint Planning Committee (“JPC”) with the RPCE. The JPC shall be comprised of representatives of the Transmission Provider and the RPCE in numbers and functions to
be identified from time to time. The JPC may combine with or participate in similarly established joint planning committees amongst multiple RPCEs or established under joint agreements to which the Transmission Provider is a signatory, for the purpose of providing for broader and more effective inter-regional planning coordination. The JPC shall have a Chairman. The Chairman shall be responsible for: the scheduling of meetings; the preparation of agendas for meetings; the production of minutes of meetings; and for chairing JPC meetings. The Chairmanship shall rotate amongst the Transmission Provider and the RPCEs on a mutually agreed to schedule, with each party responsible for the Chairmanship for no more than one planning study cycle in succession. The JPC shall coordinate planning of the systems of the Transmission Provider and the RPCEs, including the following:

a. Coordinate the development of common power system analysis models to perform coordinated system planning studies including power flow analyses and stability analyses. For studies of interconnections in close electrical proximity at the boundaries among the systems of the Transmission Provider and the RPCEs the JPC or its designated working group will coordinate the performance of a detailed review of the appropriateness of applicable power system models.

b. Conduct, on a regular basis, a Coordinated Regional Transmission Planning Study (CRTPS), as set forth in Section E.4.d.

c. Coordinate planning activities under this Section 8, including the exchange of data and developing necessary report and study protocols.
d. Maintain an Internet site and e-mail or other electronic lists for the communication of information related to the coordinated planning process. Such sites and lists may be integrated with those existing for the purpose of communicating the open and transparent planning processes of the Transmission Provider.

e. Meet at least semi-annually to review and coordinate transmission planning activities.

f. Establish working groups as necessary to address specific issues, such as the review and development of the regional plans of the RPCE and the Transmission Provider, and localized seams issues.

3. Data and Information Exchange. The Transmission Provider shall make available to each RPCE the following planning data and information. Unless otherwise indicated, such data and information shall be provided annually. The Transmission Provider shall provide such data in accordance with the applicable CEII policy, and maintain data and information received from each RPCE in accordance with their applicable confidentiality policies.

a. Data required for the development of power flow cases, and stability cases, incorporating up to a ten year load forecasts as may be requested, including all critical assumptions that are used in the development of these cases.
b. Fully detailed planning models (up to the next ten (10) years as requested) on an annual basis and updates as necessary to perform coordinated studies that reflect system enhancement changes or other changes.

c. The regional plan documents, any long-term or short-term reliability assessment documents, and any operating assessment reports produced by the Transmission Provider and the RPCE.

d. The status of expansion studies, system impact studies and generation interconnection studies, such that the Transmission Provider and the RPCE have knowledge that a commitment has been made to a system enhancement as a result of any such studies.

e. Transmission system maps for the Transmission Provider and the RPCE bulk transmission systems and lower voltage transmission system maps that are relevant to the coordination of planning between or among the systems.

f. Contingency lists for use in load flow and stability analyses, including lists of all contingency events required by applicable NERC or Regional Entity planning standards, as well as breaker diagrams for the portions of the Transmission Provider and the RPCE transmission systems that are relevant to the coordination of planning between or among the systems. Breaker diagrams to be provided on an as requested basis.

g. The timing of each planned enhancement, including estimated completion dates, and indications of the likelihood that a system enhancement will be completed and whether the system enhancement should be included in system expansion studies, system impact studies and generation interconnection studies, and as requested the status of
related applications for regulatory approval. This information shall be provided at the completion of each planning cycle of the Transmission Provider, and more frequently as necessary to indicate changes in status that may be important to the RPCE system.

h. Quarterly identification of interconnection requests that have been received and any long-term firm transmission services that have been approved, that may impact the operation of the Transmission Provider or the RPCE system.

i. Quarterly, the status of all interconnection requests that have been identified.

j. Information regarding long-term firm transmission services on all interfaces relevant to the coordination of planning between or among the systems.

k. Load flow data initially will be exchanged in PSS/E format. To the extent practical, the maintenance and exchange of power system modeling data will be implemented through databases. When feasible, transmission maps and breaker diagrams will be provided in an electronic format agreed upon by the Transmission Provider and the RPCE. Formats for the exchange of other data will be agreed upon by the Transmission Provider and the RPCE.

4. Coordinated System Planning. The Transmission Provider shall agree to coordinate with the RPCEs studies required to assure the reliable, efficient, and effective operation of the transmission system. Results of such coordinated studies will be included in the Coordinated System Plan. The Transmission Provider shall agree to conduct with the RPCEs such coordinated planning as set forth below.
a. Single Entity Planning. The Transmission Provider shall engage in such transmission planning activities, including expansion plans, system impact studies, and generator interconnection studies, as necessary to fulfill its obligations under the Tariff. Such planning shall conform to applicable reliability requirements of NERC, applicable regional reliability councils, and any successor organizations thereto. Such planning shall also conform to any and all applicable requirements of Federal or State regulatory authorities. The Transmission Provider will prepare a regional transmission planning report that documents the procedures, methodologies, and business rules utilized in preparing and completing the report. The Transmission Provider shall agree to share the transmission planning reports and assessments with each RPCE, as well as any information that arises in the performance of its individual planning activities as is necessary or appropriate for effective coordination among the Transmission Provider and the RPCEs on an ongoing basis. The Transmission Provider shall provide such information to the RPCEs in accordance with the applicable CEII policy and shall maintain such information received from the RPCEs in accordance with their applicable confidentiality policies.

b. Analysis of Interconnection Requests. In accordance with the procedures under which the Transmission Provider provides interconnection service, the Transmission Provider will agree to coordinate with each RPCE the conduct of any studies required in determining the impact of a request for generator or merchant transmission interconnection. Results of such coordinated studies will be included in the
impacts reported to the interconnection customers as appropriate. Coordination of studies shall include the following:

i. When the Transmission Provider receives a request under its interconnection procedures for interconnection, it will determine whether the interconnection potentially impacts the system of a RPCE. In that event, the Transmission Provider will notify the RPCE and convey the information provided in the interconnection queue posting. The Transmission Provider will provide the study agreement to the interconnection customer in accordance with applicable procedures.

ii. If the RPCE determines that it may be materially impacted by an interconnection on the Transmission Provider System, the RPCE may request participation in the applicable interconnection studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the interconnection on the RPCE System, and who will perform the studies. The Transmission Provider will strive to minimize the costs associated with the coordinated study process undertaken by agreement with the RPCE.

iii. Any coordinated studies associated with requests for interconnection to the Transmission Provider’s system will be performed in accordance with the study timeline requirements and scope of the applicable generation interconnection procedures of the Transmission Provider.
iv. The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider, or by providing input to the studies to be performed by the Transmission Provider. The study cost estimates indicated in the study agreement between the Transmission Provider and the interconnection customer, will reflect the costs, and the associated roles of the study participants including the RPCE. The Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation, and responsibilities in the study. If the RPCE agrees to perform any aspects of the study, the RPCE must comply with the timelines and schedule of the Transmission Provider’s interconnection procedures.

v. The Transmission Provider will collect from the interconnection customer the costs incurred by the RPCE associated with the performance of such studies and forward collected amounts, no later than thirty (30) days after receipt thereof, to the RPCE. Upon the reasonable request of the RPCE, the Transmission Provider will make their books and records available to the requestor pertaining to such requests for collection and receipt of collected amounts.

vi. The Transmission Provider will report the combined list of any transmission infrastructure improvements on either the RPCE and/or the
Transmission Provider’s system required as a result of the proposed interconnection.

vii. Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the proposed interconnection shall be accomplished under the terms of the applicable OATT, Transmission Service Guidelines, controlling agreements, and consistent with applicable Federal or State regulatory policy and applicable law.

viii. Each transmission provider will maintain separate interconnection queues. The JPC will maintain a composite listing of interconnection requests for all interconnection projects that have been identified as potentially impacting the systems of the Transmission Provider and coordinating RPCEs. The JPC will post this listing on the Internet site maintained for the communication of information related to the coordinated system planning process.

c. Analysis of Long-Term Firm Transmission Service Requests. In accordance with applicable procedures under which the Transmission Provider provides long-term firm transmission service, the Transmission Provider will coordinate the conduct of any studies required to determine the impact of a request for such service. Results of such coordinated studies will be included in the impacts reported to the transmission service customers as appropriate. Coordination of studies will include the following:
i. The Transmission Provider will coordinate the calculation of ATC values associated with the service, based on contingencies on their systems that may be impacted by the granting of the service.

ii. When the Transmission Provider receives a request for long-term firm transmission service, it will determine whether the request potentially impacts the system of the RPCE. If the Transmission Provider determines that the RPCE system is potentially impacted, and that the RPCE would not receive a transmission service request to complete the service path, the transmission provider will notify the RPCE and convey the information provided in the posting.

iii. If the RPCE determines that its system may be materially impacted by granting the service, it may contact the Transmission Provider and request participation in the applicable studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the requested service on the RPCE system, and will strive to minimize the costs associated with the coordinated study process. The JPC will develop screening procedures to assist in the identification of service requests that may impact systems of the JPC members other than the transmission provider receiving the request.

iv. Any coordinated studies for request on the transmission Provider’s system will be performed in accordance with the study timeline and scope.
requirements of the applicable transmission service procedures of the Transmission Provider.

v. The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider or by providing input to the studies to be performed by the Transmission Provider. The study cost estimates indicated in the study agreement between the Transmission Provider and the transmission service customer will reflect the costs and the associated roles of the study participants. The Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation and responsibilities in the study.

vi. The Transmission Provider will collect from the transmission service customer, and forward to the RPCE, the costs incurred by the RPCE with the performance of such studies.

vii. The Transmission Provider receiving the request will identify any transmission infrastructure improvements required as a result of the transmission service request.

viii. Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the transmission service request shall be accomplished under the terms of the applicable OATT, Transmission Service Guidelines, controlling agreements, and
consistent with applicable Federal or State regulatory policy and
applicable law.

d. Coordinated Regional Transmission Planning Study: The Transmission Provider agrees to participate in the conduct of a periodic Coordinated Regional Transmission Planning Study (CRTPS). The CRTPS shall have as input the results of ongoing analyses of requests for interconnection and ongoing analyses of requests for long-term firm transmission service. The Parties shall coordinate in the analyses of these ongoing service requests in accordance with Sections E.4.b and E.4.c. The results of the CRTPS shall be an integral part of the expansion plans of each Party. Construction of upgrades on the Transmission System of the Transmission Provider that are identified as necessary in the CRTSP shall be under the terms of the Owners Agreement of the Transmission Provider, applicable to the construction of upgrades identified in the expansion planning process. Coordination of studies required for the development of the Coordinated System Plan will include the following:

i. Every three years, the Transmission Provider shall participate in the performance of a CRTPS. Sensitivity analyses will be performed, as required, during the off years based on a review by the JPC of discrete reliability problems or operability issues that arise due to changing system conditions.

ii. The CRTPS shall identify all reliability and expansion issues, and shall propose potential resolutions to be considered by The Transmission Provider and the coordinating RPCEs.
iii. As a result of participation in the CRTPS, except as provided for in Section II.A.1., the Transmission Provider is not obligated in any way to construct, finance, operate, or otherwise support any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS. Any decision to proceed with any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS shall be based on the applicable reliability, operational and economic planning criteria established for the Transmission Provider as applicable to the development of the MTEP and set forth in this Attachment FF.

iv. As a result of participation in the CRTPS, the RPCEs are not entitled to any rights to financial compensation due to the impact of the transmission plans of the Transmission Provider upon the RPCE system, including but not limited to its decisions whether or not to construct any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS.

v. The JPC will develop the scope and procedure for the CRTPS. The scope of the CRTPSs performed over time will include evaluations of the transmission systems against reliability criteria, operational performance criteria, and economic performance criteria applicable to the Transmission Provider and the RPCEs.
vi. In the conduct of the CRTPS, the Transmission Provider and the coordinating RPCEs will use planning models that are developed in accordance with the procedures to be established by the JPC. Exchange of power flow models will be in a format that is acceptable to the coordinating parties.

vii. Stakeholder Review Processes. The Transmission Provider, in coordination with coordinating RPCEs shall review the scope and results of the CRTPS with impacted stakeholders, and shall modify the study scope as deemed appropriate by the Transmission Provider in agreement with the coordinating RPCEs, after receiving stakeholder input. Such reviews will utilize the existing planning stakeholder forums of the coordinating parties including as applicable joint Sub Regional Planning Meetings.

II. Development Process for MTEP Projects: The Transmission Provider will develop the MTEP biennially or more frequently. The MTEP will identify expansion projects for inclusion in the MTEP according to the factors set forth in Appendix B of the ISO Agreement and Section I.C of this Attachment FF. For purposes of assigning cost responsibility, expansion projects in the MTEP shall be categorized pursuant to the following criteria.

A. Reliability Needs: Reliability projects are identified either in the periodically performed Baseline Reliability Study, or in Facilities Studies associated with the request.
processes for new transmission access. Transmission access includes requests for both new transmission delivery service and new generation interconnection service.

1. Baseline Reliability Projects: Baseline Reliability Projects are Network Upgrades identified in the base case as required to ensure that the Transmission System is in compliance with applicable national Electric Reliability Organization (“ERO”) reliability standards and reliability standards adopted by Regional Reliability Organizations and applicable within the Transmission Provider Region. Baseline Reliability Projects include projects that are needed to maintain reliability while accommodating the ongoing needs of existing Market Participants and Transmission Customers. Baseline Reliability Projects may consist of a number of individual facilities that in the judgment of the Transmission Provider constitute a single project for cost allocation purposes. The Transmission Provider shall collaborate with Transmission Owning members, other transmission providers, Transmission Customers, and other stakeholders to develop appropriate planning models that reflect expected system conditions for the planning horizon. The planning models shall reflect the projected load growth of existing network customers and other transmission service and interconnection commitments, and shall include any transmission projects identified in Service Agreements or interconnection agreements that are entered into in association with requests for transmission delivery service or transmission interconnection service, as determined in Facilities Studies associated with such requests. The Transmission Provider shall test the MTEP for
adequacy and security based on commonly applicable national Electric Reliability Organization ("ERO") standards, and under likely and possible dispatch patterns of actual and projected Generation Resources within the Transmission System and of external resources, including dispatch reflective of Long-Term Transmission Rights of Transmission Customers, and shall produce an efficient expansion plan that includes all Baseline Reliability Projects determined by the Transmission Provider to be necessary through the planning horizon of the MTEP. The Transmission Provider shall obtain the approval of the Transmission Provider Board, as set forth in Section VI, for each MTEP published.

2. New Transmission Access Projects: New Transmission Access Projects are defined for the purposes of Attachment FF as Network Upgrades identified in Facilities Studies and agreements pursuant to requests for transmission delivery service or transmission interconnection service under the Tariff. New Transmission Access Projects include projects that are needed to maintain reliability while accommodating the incremental needs associated with requests for new transmission or interconnection service, as determined in Facilities Studies associated with such requests. New Transmission Access Projects may consist of a number of individual facilities, which in the judgment of the Transmission Provider constitute a single project for cost allocation purposes. New Transmission Access Projects are either Generation Interconnection Projects or Transmission Delivery Service Projects as defined in Sections II.A.2.a. and II.A.2.b. The Transmission Provider shall consider the Baseline Reliability
Projects already determined to be needed in the most current MTEP, as well as any other base-case needs not associated with the request for new service that may be identified during the impact study process when determining the need for New Transmission Access Projects. Any identified base-case needs determined in the impact study process that are not a part of the Baseline Reliability Projects already identified in the most current MTEP shall become new Baseline Reliability Projects and shall be included in the next MTEP. New Transmission Access Projects identified in Facilities Studies and agreements pursuant to requests for transmission delivery service or transmission interconnection service under this Tariff shall be included in the next MTEP.

a. Generation Interconnection Projects: Generation Interconnection Projects are New Transmission Access Projects that are associated with interconnection of new, or increase in generating capacity of existing, generation under Attachment X to this Tariff.

b. Transmission Delivery Service Projects: Transmission Delivery Service Projects are New Transmission Access Projects that are needed to provide for requests for new Point-To-Point Transmission Service, or requests under Module B of the Tariff for Network Service or a new designation of a Network Resource(s).

B. Market Efficiency Projects: Market Efficiency Projects are Network Upgrades:
   (i) that are proposed by the Transmission Provider, Transmission Owner(s), ITC(s), Market Participant(s), or regulatory authorities; (ii) that are found to be eligible for inclusion in the
MISO or are approved pursuant to Appendix B, Section VII of the ISO Agreement after June 16, 2005, applying the factors set forth in Section I.C. of this Attachment FF; (iii) that, except if qualifying as an Interregional Market Efficiency Project under Section IX of the MISO-PJM Joint Operating Agreement, have a Project Cost of $5 million or more; (iv) that, except if qualifying as an Interregional Market Efficiency Project under Section IX of the MISO-PJM Joint Operating Agreement, involve facilities with voltages of 345 kV or higher; and that may include any lower voltage facilities of 100kV or above that collectively constitute less than fifty percent (50%) of the combined project cost, and without which the 345 kV or higher facilities could not deliver sufficient benefit to meet the required benefit-to-cost ratio threshold for the project as established in Section II.B.1.e, or that otherwise are needed to relieve applicable reliability criteria violations that are projected to occur as a direct result of the development of the 345 kV or higher facilities of the project; (v) that are not determined to be Multi-Value Projects; (vi) that are found to have regional benefits under the criteria set forth in Section II.B.1 of this Attachment FF. In the event that a Network Upgrade qualifies as an Interregional Market Efficiency Project under Section IX of the MISO-PJM Joint Operating Agreement, the cost threshold of Section II.B(iii) does not apply, and the voltage threshold of Section II.B.(iv) shall be 100 kV or higher.

1. Criteria to Determine Whether a Project Should be Included as a Market Efficiency Project: The Transmission Provider shall employ multiple future scenarios and multi-year analysis including sensitivity analyses guided by input from the Planning

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1 Transformer voltage is defined by the voltage of the low-side of the transformer for these purposes.

2 A transformer is considered to operate above 100 kV when at least two sets of transformer terminals operate at voltages above 100 kV.
Advisory Committee to evaluate the anticipated benefits of a proposed Market Efficiency Project in order to determine if such a project meets the criteria for inclusion in the regional plan as a Market Efficiency Project eligible for regional cost sharing. Sensitivity analyses shall include, among other factors, consideration of: (i) variations in amount, type, and location of future generation supplies as dictated by future scenarios developed with stakeholder input and guidance; (ii) alternative transmission proposals; (iii) impacts of variations in load growth; and (iv) effects of demand response resources on transmission benefits.

The Transmission Provider shall perform this inclusion analysis as follows:

a. The Transmission Provider shall utilize a weighted futures, no loss ("WFNL") metric to analyze the anticipated annual economic benefits of construction of a proposed Market Efficiency Project to Transmission Customers in each of the Cost Allocation Zones, as defined in Attachment WW, based upon adjusted production cost ("APC") savings. APC savings will be calculated as the difference in total production cost of the Resources in each Cost Allocation Zone adjusted for import costs and export revenues with and without the proposed Market Efficiency Project as part of the Transmission System. The WFNL metric for each Cost Allocation Zone shall be calculated using the weighted APC savings determined for each future scenario included in the analysis.

i. The WFNL metric shall utilize the future scenarios determined and identified by the Transmission Provider through the planning process, with input from all stakeholders. The weights applied to the results of each future scenario
shall also be determined by the Transmission Provider with input from all stakeholders.

b. Project benefit evaluations will include benefits for the first 20 years of project life after the projected in-service date, with a maximum planning horizon of 25 years from the approval year. The annual benefit for a proposed Market Efficiency Project shall be determined as the sum of the WFNL values for each Cost Allocation Zone, as defined in Attachment WW. The total project benefit shall be determined by calculating the present value of annual benefits for the multiple year scenarios and multi-year evaluations.

c. The costs applied in the benefit to cost ratio shall be the present value, over the same period for which the project benefits are determined, of the annual Network Upgrade Charges for the project as determined in accordance with the formula in Attachment GG.

d. The present value calculation for both the annual benefits and annual costs will apply a discount rate representing the after-tax weighted average cost of capital of the Transmission Owners that make up the Transmission Provider Transmission System.

e. The Transmission Provider shall employ a benefit to cost ratio test to evaluate a proposed Market Efficiency Project. Only projects that meet a benefit to cost ratio of 1.25 or greater shall be included in the MTEP as a Market Efficiency Project and be eligible for regional cost sharing.

f. The benefits of the project used to determine the associated cost allocations as a percentage of project cost shall be determined one time at the time that the project is
presented to the Transmission Provider Board for approval. Estimated Project Cost will be used to estimate the benefit to cost ratio and the eligibility for cost sharing at the time of project approval. To the extent that the Commission approves the collection of costs in rates for Construction Work in Progress (“CWIP”) for a constructing Transmission Owner, costs will be allocated and collected prior to completion of the project.

g. The aforementioned Market Efficiency Project inclusion criteria shall be used for the exclusive purpose of determining whether projects are eligible for regional cost sharing in accordance with Section III.A.2.f below. These criteria shall not affect the existing criteria set forth in Appendix B of the ISO Agreement for determining whether projects are eligible for inclusion in the MTEP. Moreover, the costs of projects included in the MTEP, but not eligible for regional cost sharing, shall continue to be eligible for inclusion in the calculation of Transmission Owner revenue requirements under Attachment O of this Tariff.

C. Multi-Value Projects: A Multi-Value Project is one or more Network Upgrades that address a common set of Transmission Issues and satisfy the conditions listed in Sections II.C.1, II.C.2, and II.C.3 of Attachment FF. All Network Upgrades associated with a Multi-Value Project including any lower voltage facilities that may be needed to relieve applicable reliability criteria violations that are projected to occur as a direct result of the development of the Multi-Value Project; may be cost shared per Section III.A.2.g of Attachment FF except for (i) any Network Upgrade cost associated with constructing an underground or underwater transmission line above and beyond the cost of a feasible alternative overhead transmission line that provides comparable regional benefits, and (ii) any DC transmission line and associated terminal equipment
when scheduling and dispatch of the DC transmission line is not turned over to the Transmission Provider's markets, real-time control of the DC transmission line is not turned over to the Transmission Provider's automatic generation control system and/or the DC transmission line is operated in a manner that requires specific users to subscribe for DC transmission service.

1. A Multi-Value Project must be evaluated as part of a Portfolio of projects, as designated in the transmission expansion planning process, whose benefits are spread broadly across the footprint.

2. A Multi-Value Project must meet one of the three criteria outlined below:

   a. Criterion 1. A Multi-Value Project must be developed through the transmission expansion planning process for the purpose of enabling the Transmission System to reliably and economically deliver energy in support of documented energy policy mandates or laws that have been enacted or adopted through state or federal legislation or regulatory requirement that directly or indirectly govern the minimum or maximum amount of energy that can be generated by specific types of generation. The MVP must be shown to enable the transmission system to deliver such energy in a manner that is more reliable and/or more economic than it otherwise would be without the transmission upgrade.

   b. Criterion 2. A Multi-Value Project must provide multiple types of economic value across multiple pricing zones with a Total MVP Benefit-to-Cost ratio of 1.0 or higher where the Total MVP Benefit-to-Cost ratio is described in Section II.C.7 of this Attachment FF. The reduction of
production costs and the associated reduction of LMPs resulting from a transmission congestion relief project are not additive and are considered a single type of economic value.

c. Criterion 3. A Multi-Value Project must address at least one Transmission Issue associated with a projected violation of a NERC or Regional Entity standard and at least one economic-based Transmission Issue that provides economic value across multiple pricing zones. The project must generate total financially quantifiable benefits, including quantifiable reliability benefits, in excess of the total project costs based on the definition of financial benefits and Project Costs provided in Section II.C.7 of Attachment FF.

3. All of the following conditions must be satisfied in order for a project to be classified as a Multi-Value Project:

a. Facilities associated with the transmission project must not be in service, under construction, or approved for construction by the Transmission Provider Board prior to July 16, 2010 or the date a Transmission Owner becomes a signatory member of the ISO Agreement, whichever is later. This Section II.C.3.a shall not preclude the Multi-Value Project classification of a Competitive Transmission Project that makes a Selected Developer(s) eligible to become a Transmission Owner.

b. The transmission project must be evaluated through the Transmission Provider's transmission planning process and approved for construction by
the Transmission Provider Board prior to the start of construction, where
construction does not include preliminary site and route selection activities.
c. The transmission project must not contain any transmission facilities listed
in Attachment FF-1 of this Tariff.
d. The total capital cost of the transmission project must be greater than or
equal to $20,000,000.00.
e. The transmission project must include, but not necessarily be limited to, the
construction or improvement of transmission facilities operating at voltages
above 100 kV. A transformer is considered to operate above 100 kV when
at least two sets of transformer terminals operate at voltages above 100 kV.
f. Network Upgrades driven solely by an Interconnection Request, as defined
in Attachment X of the Tariff, or a Transmission Service request will not be
considered Multi-Value Projects.
4. Any transmission project that qualifies as a Multi-Value Project shall be
classified as an MVP irrespective of whether such project is also a Baseline
Reliability Project and/or Market Efficiency Project.
5. The specific types of economic value provided by a Multi-Value Project
include the following:
   a. Production cost savings where production costs include generator
      startup, hourly generator no-load, generator energy and generator
      Operating Reserve costs. Production cost savings can be realized
      through reductions in both transmission congestion and transmission
energy losses. Productions cost savings can also be realized through reductions in Operating Reserve requirements within Reserve Zones and, in some cases, reductions in overall Operating Reserve requirements for the Transmission Provider.

b. Capacity losses savings where capacity losses represent the amount of capacity required to serve transmission losses during the system peak hour including associated planning reserve.

c. Capacity savings due to reductions in the overall Planning Reserve Margins resulting from transmission expansion.

d. Long-term cost savings realized by Transmission Customers by accelerating a long-term project start date in lieu of implementing a short-term project in the interim and/or long-term cost savings realized by Transmission Customers by deferring or eliminating the need to perform one or more projects in the future.

e. Any other financially quantifiable benefit to Transmission Customers resulting from an enhancement to the Transmission System and related to the provisions of Transmission Service.

6. Any project to facilitate like-for-like capital replacements of plant originally installed as part of a Multi-Value Project where replacement is due to aging, failure, damage or relocation requirements where such replacement is not the result of negligence by the constructing Transmission Owner will be treated as a Multi-Value Project. The minimum project cost limitation for Multi-Value Projects
described in Section II.C.3.d of Attachment FF will not apply to the like for-like capital replacement projects described in this Section.

7. The following Total MVP Benefit-to-Cost Ratio will be applied to any Multi-Value Project justified solely on the basis of Sections II.C.2.b or II.C.2.c of this Attachment FF to ensure such project qualifies as a Multi-Value Project:

   Total MVP Benefit-to-Cost Ratio = financial benefits / Project Costs.

For the purpose of this calculation, Financial Benefits will be set equal to the present value of all financially quantifiable benefits provided by the project projected for the first 20 years of the project's life and Project Costs will be set equal to the present value of the annual revenue requirements projected for the first 20 years of the project's life.

8. The aforementioned Multi-Value Project inclusion criteria shall be used for the exclusive purpose of determining whether projects are eligible for regional cost sharing in accordance with Section III.A.2.g below. These criteria shall not affect the existing criteria set forth in Appendix B of the ISO Agreement for determining whether projects are eligible for inclusion in the MTEP. Moreover, the costs of projects included in the MTEP, but not eligible for regional cost sharing, shall continue to be eligible for inclusion in the calculation of Transmission Owner revenue requirements under Attachment O of this Tariff.

D. **Market Participant Funded Projects:** Market Participant funded projects (MPFPs) are defined as Network Upgrades fully funded by one or more market participants but owned and operated by an incumbent Transmission Owner. These projects apply to those Network
Upgrades that are neither currently included in the MTEP Appendix A nor targeted for approval within the current planning cycle.

The development of the MPFPs will follow specified process steps that are detailed in the Transmission Provider’s Transmission Planning Business Practices Manual ("TPBPM"). These process steps shall include, at a minimum, the following:

1. Consistent with the MTEP process the submittal deadline for a proposed MPFP project shall be September 15 of the current planning cycle and the proposed MPFP shall be submitted to the Transmission Provider planning contact, indicated on the MPFP submittal form posted on the Planning page of the Transmission Provider website.

2. An MPFP proposed by a Market Participant shall follow the same analysis and approval timeline as an MTEP Target Appendix A project for the current planning cycle.

3. In the event that multiple Market Participants submit project proposals that are electrically similar, Transmission Provider shall make a determination in collaboration with the affected Transmission Owner(s) as to whether the projects are effectively the same project. Such consideration shall include whether the proposals have the same terminal stations, substantially address the same market congestion issues or otherwise serve similar system purposes, and can each be physically accommodated together with the other similar proposals. If the projects are determined to be effectively the same project, the priority for the
E. Identification of Potential Impacts of a Market Efficiency Project or Multi-Value Project on Neighboring Transmission Planning Region(s)

As part of the evaluation of any proposed Market Efficiency Project or Multi-Value Project, the Transmission Provider will determine whether the proposed Market Efficiency Project or Multi-Value Project causes any violations of NERC reliability standards on the transmission system(s) of the adjacent neighboring transmission planning region(s). If the Transmission Provider’s evaluation identifies any such violations of NERC reliability standards, the Transmission Provider will contact and coordinate with the other potentially affected adjacent neighboring transmission planning region(s) on any further evaluation.

F. Targeted Market Efficiency Projects:

A Targeted Market Efficiency Project is an upgrade that is identified in a Targeted Market Efficiency Project Study initiated by the Joint RTO Planning Committee as provided for under Article IX of the Joint Operating Agreement between the Transmission Provider and PJM and that satisfies the criteria for a Targeted Market Efficiency Project as set forth in Article IX of the Joint Operating Agreement between the Transmission Provider and PJM. Any Targeted Market Efficiency Project that is recommended by the Joint RTO Planning Committee under Article IX of the Joint Operating Agreement between the Transmission Provider and PJM shall be presented to the Transmission Provider Board for approval in the MTEP.

Effective On: March 11, 2020
G. Treatment of Storage as a Transmission-Only Asset (SATOA)

1. SATOA May Be Included in MTEP as a Solution to a Transmission Issue

A storage facility proposed as a Storage as Transmission Only Asset (“SATOA”) may be considered in the transmission planning process as a solution to a Transmission Issue. A SATOA may be any one of the transmission project types described in Sections II.A through II.D and II.F of this Attachment FF that meet the definitions, criteria, or factors applicable to those project types. A SATOA is eligible for cost recovery consistent with the cost recovery for its project type under Attachment FF, including cost recovery under Attachment FF, Section III.A.2.k.

   a. Comparative Evaluations of Proposed SATOA.

The Transmission Provider will evaluate the appropriateness of proposed SATOAs as solutions to Transmission Issues identified in the development of the MTEP comparably to any other transmission asset. Considerations will include:

   i. Ability of the proposed SATOA to address the Transmission Issue (e.g., loading, voltage, stability) in all hours that the Transmission Issue is determined to exist, with a life-cycle cost that is comparable to other proposed solutions or as otherwise needed to address the Transmission Issue, and after consideration of the comparability in system performance to other proposed solutions, including any non-transmission alternatives consistent with the provisions of Section I.D.1.b.
ii. The minimum and maximum Capacity required to address the Transmission Issue to ensure that excess storage Capacity is not treated as a transmission asset. Cost recovery under transmission rates is limited to the cost of the maximum Capacity determined to be needed to address the Transmission Issue and will be pro-rated on that basis if a SATOA of higher Capacity is proposed, selected for inclusion in Appendix A of MTEP, and installed.

iii. Assurance of sufficient Energy and/or reactive capability (MWh/MVAr) to charge or discharge Energy for any period identified as necessary in the planning study.

iv. Assessment of system reliability impacts applicable to inverter-based facilities on the same basis and in a manner comparable to such analysis in the Generator Interconnection Procedures applicable to storage Resources as inverter-based facilities.

v. Life-cycle cost comparisons, including consideration of the period that is required to address the Transmission Issue, which may be less than the life cycle of alternatives, and including the factors described in Section II.G.1.b.

vi. Additional considerations that may support comparative evaluation to other solutions to the Transmission Issue, such as lead-time to develop, right of way or substation impacts, expandability, operational flexibility, or others.
b. Life Cycle, Degradation, and Cost Assumptions

Selection of the proposed SATOA as the preferred solution will consider similar cost and effectiveness considerations as applied to any other proposed transmission solution. The entity proposing the SATOA shall provide the planning estimate of the SATOA’s:

i. Direct capital cost;

ii. Expected useful life;

iii. Equipment replacement schedules and associated life-cycle costs and other ongoing costs to maintain the SATOA at its required Capacity and Energy capability necessary to address the Transmission Issue identified, or otherwise comparable to a traditional wires solution; and

iv. Other cost and performance information as the Transmission Provider may determine is necessary to compare cost and performance with other proposed solutions to the Transmission Issue identified.

c. Selection of proposed SATOA as a Preferred Solution in MTEP

To be selected for inclusion in the MTEP, in addition to the requirements of Section II.G.1.a., the proposed SATOA must:

i. Demonstrate a basis to be recommended for inclusion in Appendix A of the MTEP as a transmission asset by:

   a. Unique characteristics or circumstances of the proposed SATOA necessary to meet the identified Transmission System performance
requirements and not otherwise available at comparable costs from other proposed solutions, including speed of operation, lead-time to implement, right-of-way or other property considerations.

b. A need to resolve the Transmission Issue(s) through the storage facility’s functioning as a SATOA instead of as a Resource that participates in the Transmission Provider’s markets.

ii. Meet the criteria to be designated in the MTEP as one of the transmission project types consistent with the provisions of Sections II.A through II.D and II.F of this Attachment FF, or as eligible for cost recovery pursuant to Section III.A.2.k.

d. Consideration of Impacts on Resources in the Interconnection Queue

If the Transmission Provider or stakeholder identifies a potential impact to newly interconnecting Generation Resource(s) in the interconnection study process, the Transmission Provider will assess whether the proposed SATOA will impact the newly-interconnecting Generation Resource(s). Such assessment may include targeted contingency analyses applying NERC TPL and applicable regional and local planning criteria to evaluate the incremental impact of the proposed SATOA on interconnection queue projects in proximity to the SATOA in the MTEP model to compare loading and other system performance impacts attributable to the addition of the SATOA. If such assessment demonstrates that the necessary operating mode of the proposed SATOA would cause the need for additional system mitigation, the cost of such mitigation will be included in the evaluation of the proposed SATOA against other potential transmission solutions.
2. Development of Operating Guides Associated with SATOA Selected for MTEP

Operation of SATOA in real time will be under the functional control of the Transmission Provider as provided for in Rate Schedule 1 (Transmission Owners Agreement), Article Three, Section I.A. For each SATOA included in the MTEP, the Transmission Provider will develop an Operating Guide specifying the operating practices applicable to the SATOA and consistent with the system performance requirements determined through the planning study supporting the selection of the SATOA for inclusion in the MTEP. The Operating Guide will include limitations on the operation of the SATOA above the maximum Capacity determined to be needed to address the Transmission Issue, consistent with Section II.G.1.a.ii.

3. Storage as Non-Transmission Alternatives

As provided for under Section I.D.1.b, storage facilities that are not proposed as SATOA may be considered as alternatives to transmission assets to address system needs when participating as generation or demand-side resources.

4. SATOA Participation in Markets

SATOA may only participate in the Transmission Provider’s markets to the extent necessary to receive Energy from the Transmission System and to inject Energy into the Transmission System to provide the services for which the SATOA was included in the MTEP. SATOA may not otherwise participate in the Energy and Operating Reserve Markets and/or the Planning Resource Auction.

5. Transmission Service Associated with SATOA Operation

No Transmission Service charges are applicable to the operation of a SATOA.

6. Responsibility for Market-Derived Costs and Revenues Associated with SATOA
a. Accounting for Costs Incurred in the Market

Costs resulting from Market Activities of a SATOA directed under the Transmission Provider’s functional control shall be collected through transmission rates in a manner consistent with the treatment of costs associated with the transmission project type that the SATOA is included as in Appendix A of the MTEP pursuant to Section II.G.1.c.ii. As an example, costs for charging a SATOA battery storage device may be included in transmission rates in a manner consistent with the inclusion in transmission rates as a Baseline Reliability Project if the battery storage device operates to serve as a Baseline Reliability Project.

b. Credit Back of Market Revenues

Revenues collected from Market Activities of a SATOA directed under the Transmission Provider’s functional control shall be credited back through transmission rates in a manner consistent with the treatment of costs associated with the project category in transmission rates.

7. Removal

No SATOA may be removed from service permanently unless the removal is submitted into the annual MTEP planning process as a proposed project removal, reviewed by the Transmission Provider for its impact on Transmission System performance, and accepted by the Transmission Provider based on such review.

III. Designation of Cost Responsibility for MTEP Projects:

Based on the planning analysis performed by the Transmission Provider, which shall take into consideration all appropriate input from Market Participants or external entities, including, but not limited to, any indications of a willingness to bear cost responsibility for an enhancement or
expansion, the recommended MTEP shall, for any enhancement or expansion that is included in the plan, designate: (i) the Market Participant(s) in one or more pricing zones that will bear cost responsibility for such enhancement or expansion, as and to the extent provided by any applicable provision of the Tariff, including Attachments N, X, or any applicable cost allocation method ordered by the Commission; or, (ii) in the event and to the extent that no provision of the Tariff so assigns cost responsibility, the Market Participant(s) or Transmission Customer(s) in one or more pricing zones from which the cost of such enhancements or expansions shall be recovered through charges established pursuant to Attachment GG of this Tariff, or as otherwise provided for under this Attachment FF.

Any designation under clause (ii) of the preceding sentence shall be determined as provided for in Section III.A of this Attachment FF. For all such designations, the Transmission Provider shall calculate the cost allocation impacts to each pricing zone. The results will be reviewed for unintended consequences by the Transmission Provider and the Tariff Working Group and any such identified consequences shall be reported to the Planning Advisory Committee, and the OMS.

A. Allocation of Costs Within the Transmission Provider Region

1. Default Cost Allocation: Except as otherwise provided for in this Attachment FF, or by any other applicable provision of this Tariff and consistent with the ISO Agreement, the responsibility for Network Upgrades included in the approved MTEP will be addressed in accordance with the provisions of the ISO Agreement.
2. Cost Allocation: The Transmission Provider will designate and assign cost responsibility on a regional, and sub-regional basis for Network Upgrades identified in the MTEP subject to the grand-fathered project provisions of Section III.A.2.b.

a. Market Participant’s Option to Fund: Notwithstanding the Transmission Provider’s assignment of cost responsibility for a project included in the MTEP, one or more Market Participants may elect to assume cost responsibility for any or all costs of a Network Upgrade that is included in the MTEP. Provided however, in the event the Market Participant is also a Transmission Owner such election of the option to fund must be made on a consistent, non-discriminatory basis.

b. Grandfathered Projects: The cost allocation provisions of this Attachment FF shall not be applicable to transmission projects identified in Attachment FF-1, which is based on the list of projects designated as Planned Projects in the MTEP approved by the Transmission Provider Board on June 16, 2005 (MTEP 05) and some additions of proposed projects that the Transmission Provider has determined to be in the advanced stages of planning.

c. Baseline Reliability Projects: Costs of Baseline Reliability Projects shall be recovered pursuant to Attachment O of this Tariff by the Transmission Owner(s) and/or ITC(s) developing such projects, such that the Transmission Owner(s) and/or ITC(s) developing a Baseline Reliability Project shall be responsible for all of the costs of the portion of the
Baseline Reliability Project that is physically located in the Transmission Owner’s and/or ITC’s pricing zone, subject to the requirements of the ISO Agreement.

d. Generation Interconnection Projects: Costs of Generation Interconnection Projects that are not determined by the Transmission Provider to be Baseline Reliability Projects, Market Efficiency Projects, or Multi-Value Projects and the Network Upgrade costs associated with advancing a Baseline Reliability Project, Market Efficiency Project, or Multi-Value Project associated with a generator interconnection will be paid for by the Interconnection Customer(s) in accordance with Attachment X.

For Generation Interconnection Projects interconnecting to the American Transmission Company LLC transmission system, such costs will be subject to the provision of Attachment FF – ATCLLC.

1) For Network Upgrades to facilities in voltage classes at or above 345 kV, the Interconnection Customer shall be repaid 10 percent of the costs of the Generation Interconnection Project funded by the Interconnection Customer once Commercial Operation is achieved. The Transmission Owner(s) constructing the Generation Interconnection Project will repay 10% of the Generation Interconnection Project costs associated with Network Upgrade facilities in a voltage class of 345 kV or greater to the
Interconnection Customer under repayment terms consistent with the schedules and other terms of Attachment X.

The 10% of the Project Cost associated with Network Upgrade facilities of voltage class 345 kV or above and repaid to the Interconnection Customer shall be allocated on a system-wide basis and recovered pursuant to Attachment GG of this Tariff.

2) An Interconnection Customer may be required to contribute to the cost of Shared Network Upgrades, as defined in Attachment X to the Tariff, that are funded by another Interconnection Customer as a Generation Interconnection Project pursuant to Attachment X. Each Interconnection Customer with one or more Shared Network Upgrade(s) identified in Appendix A of its Generator Interconnection Agreement shall make a one-time payment under Schedule 26-B to the Transmission Provider in accordance with the terms in the Generator Interconnection Agreement. The one-time payment will reflect the cost of the Shared Network Upgrade assigned to the Interconnection Customer as determined by the Transmission Provider.

All revenue collected by the Transmission Provider through Schedule 26-B shall be distributed to the appropriate Interconnection Customer(s).
3) The Interconnection Customer shall be entitled, pursuant to
Section 46 of this Tariff, to any Financial Transmission Rights or
other rights to the extent provided for under this Tariff, for any
Network Upgrade costs funded by or charged to the
Interconnection Customer and not subject to repayment under the
provisions of this Section III.A.2.d. In the event that a Generation
Interconnection Project defers or displaces a Baseline Reliability
Project, the costs of the Generation Interconnection Project up to
the costs of the deferred or displaced Baseline Reliability Project
shall be allocated consistent with the cost allocation for the
Baseline Reliability Project.

4) International Transmission/Michigan Electric Transmission
Company:

   (a) For those Generation Interconnection Projects for
which International Transmission Company or Michigan
Electric Transmission Company, LLC, (“International” or
“METC”) as Transmission Owners will be a signatory to
the interconnection agreement under the terms of
Attachment X of this Tariff or any successor provision of
the Tariff executed by the parties after the effective date of
this Attachment FF Section III.A.2.d.4, this Attachment FF
Section III.A.2.d.4 shall apply.
(b) Generation Interconnection Projects: The cost of Network Upgrades for Generation Interconnection Projects that are not determined by the Transmission Provider to be Baseline Reliability Projects shall be reimbursed by the Transmission Owner as provided in this Section III.A.2.d.4. All costs of Network Upgrades for Generation Interconnection Projects will initially be paid by the Interconnection Customer in accordance with the terms of the Interconnection Agreement entered into pursuant to Attachment X of this Tariff. To the extent the Interconnection Customer demonstrates at the time of Commercial Operation of the Generating Facility one of the following:

i. Generating Facility has been designated as a Network Resource in accordance with the Tariff, or

ii. Contractual commitment has been entered into with a Network Customer for capacity, or in the case of an Intermittent Resource, for energy, from the Generating Facility for a period of one (1) year or longer.
The Interconnection Customer will receive up to one hundred percent (100%) reimbursement of reimbursable costs within ninety (90) days of the Commercial Operation Date, such reimbursement prorated by the percentage of the Generating Facility capacity or annual available energy output contracted for and as demonstrated to the satisfaction of the Transmission Provider.

If the Interconnection Customer is unable to demonstrate to the satisfaction of the Transmission Provider at the time of Commercial Operation of the Generating Facility that the Generating Facility has met the repayment obligations set forth in Attachment FF Sections III.A.2.d.4.b.i. or III.A.2.d.4.b.ii. the Interconnection Customer shall be directly assigned 100% of the costs of the Generation Interconnection Project. The Transmission Owner may effect this direct assignment of costs by either foregoing any repayment of costs funded by the Interconnection Customer, or by electing to repay 100% of the costs under repayment terms consistent with the schedules and other terms of Attachment X.

The Interconnection Customer shall be entitled, pursuant to Section 46 of this Tariff, to any Financial Transmission...
Rights or other rights to the extent provided for under this Tariff, for any Network Upgrade costs funded by or charged to the Interconnection Customer and not subject to repayment under the provisions of this Attachment FF Section III.A.2.d.4. In the event that a Generation Interconnection Project defers or displaces a Baseline Reliability Project, the costs of the Generation Interconnection Project up to the costs of the deferred or displaced Baseline Reliability Project shall be allocated consistent with the cost allocation for the Baseline Reliability Project.

(c) For all amounts to be reimbursed by a Transmission Owner to an Interconnection Customer in accordance with this Attachment FF Section III.A.2.d.4, the Transmission Owner will reimburse the sums received from the Interconnection Customer in cash together with any applicable interest, in accordance with the terms of the Interconnection Agreement.

(d) Allocation of Generation Interconnection Reimbursement. For all amounts reimbursed by a Transmission Owner to an Interconnection Customer under
this Attachment FF Section III.A.2.d.4, the reimbursement will be allocated as follows:

i. Projects of Voltage Below 345 kV: 50% of the applicable Project Cost for Generation Interconnection Projects with a voltage class below 345 kV shall be allocated on a sub-regional basis to all Transmission Customers in designated pricing zones. The designated pricing zones and the sub-regional allocation of the Project Cost shall be determined on a case-by-case basis in accordance with a Line Outage Distribution Factor Table ("LODF Table") developed by the Transmission Provider which is similar in form to that attached hereto as Attachment FF-2. The LODF Table is based on Transmission System topology and Line-Outage Distribution Factors associated with the project under consideration and is used to determine the pricing zones to be included in the sub-regional allocation of the Project Cost. The percentage of the sub-regional
allocation assigned to each designated pricing zone shall be determined based on the relative share between pricing zones of the sum of the absolute value of the product of the Line-Outage Distribution Factor on each Branch Facility in a pricing zone and the length in miles of the Branch Facility. The remaining fifty percent (50%) of the reimbursement will not be subject to any regional or sub-regional cost allocation, but will be recovered by that Transmission Owner under its Attachment O transmission rate formula under this Tariff.

ii. Projects of Voltage 345 kV and Higher:

10% of the applicable Project Cost for Generation Interconnection Projects with a voltage class of 345 kV or higher shall be allocated on a system-wide basis to all Transmission Customers and recovered through a system-wide rate. 40% of the applicable Project Cost for Generation Interconnection Projects with a voltage class
of 345 kV or higher shall be allocated on a sub-regional basis to all Transmission Customers in designated pricing zones. The designated pricing zones and the sub-regional allocation of the Project Cost shall be determined on a case-by-case basis in accordance with a Line Outage Distribution Factor Table (“LODF Table”) developed by the Transmission Provider similar in form to that attached hereto as Attachment FF-2. The LODF Table is based on Transmission System topology and Line-Outage Distribution Factors associated with the project under consideration and is used to determine the pricing zones to be included in the sub-regional allocation of the Project Cost. The percentage of the sub-regional allocation assigned to each designated pricing zone shall be determined based on the relative share between pricing zones of the sum of the absolute value of the product of the Line-Outage Distribution Factor on
each Branch Facility in a pricing zone and
the length in miles of the Branch Facility.

The remaining fifty percent (50%) of the
reimbursement will not be subject to any
regional or sub-regional cost allocation, but
will be recovered by that Transmission
Owner under its Attachment O transmission
rate formula under this Tariff.

e. Transmission Delivery Service Projects: Costs of Transmission Delivery
Service Projects shall be assigned and recovered in accordance with
Attachment N of this Tariff.

f. Market Efficiency Projects: Costs of Market Efficiency Projects shall be
allocated as follows:

   i) Twenty percent (20%) of the Project Cost of the Market
      Efficiency Project shall be allocated on a system-wide basis
to all Transmission Customers and recovered through a
system-wide rate.

   ii) Eighty percent (80%) of the costs of the Market Efficiency
Projects shall be allocated to all Transmission Customers in
each of the Cost Allocation Zones, as defined in Attachment
WW. The cost allocated to each Cost Allocation Zone shall
be based on the relative benefit determined for each Cost Allocation Zone that has a positive present value of annual benefits over the evaluation period using the methodology for project benefit determination of Section II.B.1.

iii) Excessive Funding or Requirements: The Transmission Provider shall seek to identify and manage the development of, as a part of the planning process for Market Efficiency Projects, portfolios of projects that tend to provide benefits throughout each Cost Allocation Zone, as defined in Attachment WW, over the planning horizon. The Transmission Provider shall analyze on an annual basis whether the project portfolios developed in accordance with this goal and the criteria in Section III. A.2.f unintentionally result in unjust or unreasonable annual capital funding requirements for any Transmission Owner or rate increases for Transmission Customers in designated pricing zones; or otherwise result in undue discrimination between the Transmission Customers, Transmission Owners, or any Market Participants; any such identified consequences shall be reported to the Planning Advisory Committee and to the Organization of MISO States. After discussing such assessments with the aforementioned stakeholder bodies, and
taking into consideration the cumulative experience in applying this Attachment FF, the Transmission Provider will make a determination as to whether Tariff modifications are required, and if so file such modifications.

g. Multi-Value Projects: Costs of Multi-Value Projects will be allocated as follows:

i) One-hundred percent (100%) of the annual revenue requirements of the Multi-Value Projects shall be allocated on a system-wide basis to Transmission Customers that withdraw energy, including External Transactions sinking outside the Transmission Provider's region, and recovered through an MVP Usage Charge pursuant to Attachment MM.

h. Targeted Market Efficiency Projects: The cost of a Targeted Market Efficiency Project shall be allocated as follows:

i) Targeted Market Efficiency Projects are interregionally cost allocated between the Transmission Provider and PJM per Section 9.4.4.2.5 of the Joint Operating Agreement between the Transmission Provider and PJM.

ii) One hundred percent (100%) of the Transmission Provider’s share of the cost of a Targeted Market Efficiency Project shall be allocated to all Transmission Pricing Zones that
receive a positive congestion contribution benefit from the Targeted Market Efficiency Project. The share of such cost allocated to each Transmission Pricing Zone shall be in proportion to the relative positive congestion contribution benefit accruing from the Targeted Market Efficiency Project to the Transmission Pricing Zone over the evaluation period of Section 9.4.4.1.5(iv)(d) of the Joint Operating Agreement between the Transmission Provider and PJM. To determine the relative positive contribution benefit accruing to each Transmission Pricing Zone, the Transmission Provider will use the data resulting from the Targeted Market Efficiency Project study conducted pursuant to Section 9.3.7.2(c) of the Joint Operating Agreement and apply a congestion contribution formula to each load node and generator node in the Commercial Model equal to the multiplication of the Shadow Price of the flowgate, shift factor of the load node or generator node to the flowgate, and the amount of load or generation at the node. This formula will be applied for all hours in the Day Ahead market where the Reciprocal Coordinated Flowgate experienced congestion. The congestion contribution of each load node or generator node on the Reciprocal Coordinated Flowgate will be calculated...
for each congested interval during the evaluation period of Section 9.4.4.1.5(iv)(d) of the Joint Operating Agreement between the Transmission Provider and PJM. Summing all of the congestion contributions will yield the relative benefits of the upgrade to each load node or generator node.

Aggregating the load node or generator node congestion contributions for each Transmission Pricing Zone gives the net benefits of the upgrade to each Transmission Pricing Zone, providing the basis for cost allocation of the Transmission Provider’s share of the cost of the Targeted Market Efficiency Project.

iii) Provided, however, that no cost for the Targeted Market Efficiency Project shall be allocated to a Transmission Pricing Zone if the positive congestion contribution benefit from the Targeted Market Efficiency Project to that Transmission Pricing Zone is calculated to be less than a threshold of either: (1) $5,000 total or (2) less than one percent (1%) of the Transmission Provider’s cost of the Targeted Market Efficiency Project. Any costs that are not allocated to a Transmission Pricing Zone because they fall within this threshold will be collected by a reallocation to the remaining Transmission Pricing Zones that receive positive...
congestion contribution benefits from the Targeted Market Efficiency Project in proportion to the share of positive congestion contribution benefits each Transmission Pricing Zone is calculated to receive from the Targeted Market Efficiency Project.

iv) Provided, further, that no cost for a Targeted Market Efficiency Project that is approved in any MTEP by the Transmission Provider Board during the Second Planning Area’s Transition Period shall be allocated to a Transmission Pricing Zone located in the Second Planning Area if the Targeted Market Efficiency Project terminates wholly outside of MISO or terminates exclusively in the First Planning Area. Any costs that are not allocated to a Transmission Pricing Zone in the Second Planning Area as a result of this subsection shall be collected by a reallocation to the remaining Transmission Pricing Zones that receive positive congestion contribution benefits from the Targeted Market Efficiency Project in proportion to the share of positive congestion contribution benefits each Transmission Pricing Zone is calculated to receive from the Targeted Market Efficiency Project.
i. Market Participant Funded Projects (MPFPs): Costs of MPFPs will be allocated as follows: One-hundred percent (100%) of the cost of a Market Participant Funded Project (MPFP) shall be assigned to the Market Participant that proposed the project, subject to the provisions of this Attachment FF Section II.D.3, unless other cost sharing arrangement is agreed to between the Market Participant and the incumbent Transmission Owner.

j. Treatment of Projects that meet both Baseline Reliability Project Criteria and/or New Transmission Access Project Criteria, and the Market Efficiency Project Criteria: If the Transmission Provider determines that a project designated as a Market Efficiency Project also meets the criteria to be designated as a Baseline Reliability Project and/or a New Transmission Access Project, the cost of such project shall be allocated in accordance with the Market Efficiency Project allocation procedures.

k. Other Projects: Unless otherwise agreed upon pursuant to Section III.A.2.a. of this Attachment FF, the costs of Network Upgrades that are included in the MTEP, but do not qualify as Baseline Reliability Projects, New Transmission Access Projects, Targeted Market Efficiency Projects, Market Efficiency Projects, or Multi-Value Projects shall be eligible for recovery pursuant to Attachment O of this Tariff by the Transmission Owner(s) and/or
ITC(s) paying the costs of such project, subject to the requirements of the ISO Agreement.

1. Withdrawal from MISO: A Transmission Owner that withdraws from the MISO as a Transmission Owner shall remain responsible for all financial obligations incurred pursuant to this Attachment FF while a Member of the MISO and payments applicable to time periods prior to the effective date of such withdrawal shall be honored by the MISO and the withdrawing Member.

m. New Transmission Owners: A new Transmission Owner joining the MISO will be responsible for the following financial obligations:

a. New Transmission Owners will not be responsible for any portion of Baseline Reliability Projects, Generation Interconnection Projects, Transmission Delivery Service Projects, Targeted Market Efficiency Projects, or Market Efficiency Projects that were approved prior to their entry date.

b. For Multi-Value Projects approved prior to the new Transmission Owner’s entry date, the load interconnected to the Transmission Owner’s Transmission System will be responsible for one-hundred percent (100%) of the MVP usage charge described in Attachment MM for the years
following the Transmission Owner’s entry date applied to the Monthly Net Actual Energy Withdrawals for Load interconnected to the Transmission Owner’s Transmission System.

n. Only a Transmission Owner shall be authorized to construct and/or own transmission facilities associated with a Baseline Reliability Project. For projects jointly developed between Transmission Owners and other parties the portion constructed and owned by a Transmission Owner may qualify as a Baseline Reliability Project, Market Efficiency Project, and/or Multi Value Project.

IV. Merchant Transmission Project Data Requirements: A proposed merchant transmission developer assumes all financial risk and funding requirements for developing its transmission project(s) and constructing the proposed transmission facility(ies). In order for a proposed merchant transmission developer’s facility to be interconnected to the Transmission System, it is first necessary for the impacted Transmission Owner and the Transmission Provider to analyze the reliability and operational impact of the proposed new merchant transmission facility(ies) on the Transmission System to determine if the new merchant transmission facilities can be reliably supported by the Transmission System, and if not, what Network Upgrades funded by the merchant transmission developer would be required to reliably support the proposed merchant transmission facility(ies). In order to perform the required reliability and
operational analyses, the merchant transmission developer must provide the following data to the Transmission Provider:

1. Each transmission circuit and substation, including new facilities, associated with the merchant transmission proposal;

2. Nominal operating voltage level in kV and voltage characteristics (i.e., AC or DC) for each transmission circuit associated with the merchant transmission proposal;

3. Typical and maximum MW power flow schedules, in each direction, for all proposed DC transmission circuits associated with the merchant transmission proposal;

4. Normal and emergency summer and winter load ratings for each transmission circuit associated with the merchant transmission proposal;

5. Maximum allowable positive sequence impedance for each AC transmission circuit associated with the merchant transmission proposal, when applicable;

6. List of all transmission buses associated with the merchant transmission proposal, including nominal operating voltage level in kV, voltage characteristics, and terminating transmission branches and shunts;

7. Proposed substation one-line diagrams for all new substations associated with the merchant transmission proposal, including circuit breaker and bus configuration details;

8. Load ratings, winding connections, impedances, tap data, and any other relevant information for load carrying equipment and facilities associated with the merchant transmission proposal, as applicable;

9. Modeling files to model proposed facilities and relevant new contingencies in power flow, stability, short-circuit and other relevant study models; and
(10) Any other data determined pertinent to the study by the Transmission Provider and/or interconnecting Transmission Owners for the specific merchant transmission facility proposal.

V. **Designation of Entities to Construct, Implement, Own, Operate, Maintain, Repair, Restore, and/or Finance MTEP Projects:** With the exception of Competitive Transmission Projects, for each project included in the recommended MTEP Appendix A and prior to approval by the Transmission Provider Board, the plan shall designate one or more Transmission Owners to construct, own, operate, maintain, repair, restore, and finance the recommended project, based on the planning analysis performed by the Transmission Provider and based on other input from participants, including, but not limited to, any indications of a willingness to bear cost responsibility for the project; and applicable provisions of the ISO Agreement. Regarding Competitive Transmission Projects, upon the determination of the Selected Developer(s) for such projects, as set forth in Section VIII of this Attachment FF, the Transmission Provider shall update the approved MTEP Appendix A by identifying the Selected Developer(s) for each Competitive Transmission Project. Should the facilities from such Competitive Transmission Projects not be approved by state regulatory authorities as Competitive Transmission Facilities, but instead as upgrades to existing transmission facilities, as defined in Section VIII.A.2 of this Attachment FF, the Transmission Provider shall update MTEP Appendix A by designating the appropriate Transmission Owner(s) to construct, own, operate, maintain, repair, restore, and finance such facilities in accordance with the ISO Agreement.
VI. Implementation of the MTEP:

A. If the Transmission Provider and any Transmission Owner’s planning representatives, or other designated entity(ies), cannot reach agreement on any element of the MTEP, the dispute may be resolved through the dispute resolution procedures provided in the Tariff, or in any applicable joint operating agreement, or by the Commission or state regulatory authorities, where appropriate. The MTEP shall have as one of its goals the satisfaction of all regulatory requirements as specified in Appendix B or Article IV, Section I, Paragraph C of the ISO Agreement.

B. The Transmission Provider shall present the MTEP, along with a summary of relevant alternative projects that were not selected, to the Transmission Provider Board for approval on a biennial basis, or more frequently if needed. The proposed MTEP shall include specific projects already approved as a result of the Transmission Provider entering into Service Agreements with Transmission Customers where such agreements provide for identification of needed transmission construction, timetable, cost, and Transmission Owner or other parties’ construction responsibilities.

C. Approval of the MTEP by the Transmission Provider Board certifies it as the Transmission Provider plan for meeting the transmission needs of all stakeholders subject to any required approvals by federal or state regulatory authorities. The Transmission Provider shall provide a copy of the MTEP to all applicable federal and state regulatory authorities. The affected Transmission Owner(s), Selected Developer(s), or other designated entity(ies), shall make a good faith effort to design, certify, and build the designated facilities to fulfill the approved MTEP. However, in the event that an MTEP Appendix A project approved by the

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Transmission Provider Board is being challenged through the dispute resolution procedures under this Tariff or in court proceedings, the obligation of the Transmission Owners, or other designated entity(ies), to build that specific project (subject to required approvals) is waived until the approved project emerges from the dispute resolution procedures. In the event that selection of the Selected Developer(s) to construct a project is being challenged through the Dispute Resolution Process under Attachment HH of the Tariff, the obligation of the Selected Developer(s) to construct the project pursuant to the Selected Developer Agreement is not waived. The Transmission Provider Board shall allow the Transmission Owners, or other designated entity(ies), to optimize the final design of specific facilities and their in-service dates if necessary to accommodate changing conditions, provided that such changes comport with the approved MTEP and provided that any such changes are accepted by the Transmission Provider through the Variance Analysis process described in Section IX of this Attachment FF, as necessary. Any disagreements concerning such matters shall be subject to the dispute resolution procedures of this Tariff.

D. The Transmission Provider shall assist the affected Owner(s), Selected Developer(s), or other designated entity(ies), in justifying the need for, and obtaining certification of, any facilities required by the approved MTEP by preparing and presenting testimony in any proceedings before state or federal courts, regulatory authorities, or other agencies as may be required. The Transmission Provider shall publish annually, and distribute to all Members and all appropriate state regulatory authorities, a five-to-ten-year planning report of forecasted transmission requirements. Annual reports and planning reports shall be available to the general public upon request.
VII. Multi-Value Project Costs and Benefits Review and Reporting

A. Frequency and Reporting of Multi-Value Project Review: Every three (3) years, as provided below and in the Business Practices Manual for Transmission Planning, the Transmission Provider shall conduct a review of the cumulative costs and benefits associated with MVPs, and shall disseminate the results of such reviews to its stakeholders. The Transmission Provider shall use the review process and results to identify potential modifications to the MVP methodology and its implementation for projects to be approved at a future date.

1. Triennial Full MVP Review: Beginning with the MTEP for 2014 (“MTEP 14”), and every third year thereafter, the Transmission Provider shall conduct a full MVP review, as provided in Section VII.B of this Attachment FF.

2. Annual Limited MVP Review: Beginning with the MTEP for 2015 (“MTEP 15”), and each year thereafter when there is no full MVP review, the Transmission Provider shall conduct a limited MVP review, as provided in Section VII.C of this Attachment FF.

3. Calculation of Costs and Benefits: The Triennial Full MVP Reviews and the Annual Limited MVP Reviews shall calculate costs and benefits on a forward-looking basis over both twenty (20)-year and forty (40)-year periods. The costs calculation shall use updated project costs and in-service dates provided in the latest MTEP quarterly status report, and the benefits calculation shall use updated future scenarios from the latest MTEP planning cycle. The results of the costs
and benefits calculation shall be provided for each Local Resource Zone as defined in RAR. If the Local Resource Zones as defined in accordance with RAR are modified, the Transmission Provider, working with stakeholders, may define different Local Resource Zones for purposes of reporting the results of the review. The definition of different Local Resource Zones in connection with reporting the results of the review will be detailed in the Business Practices Manual for Transmission Planning.

4. Dissemination of the Results of the Full and Limited MVP Reviews: Within a reasonable time after completion of each MVP review, the Transmission Provider shall disseminate the results of and supporting analysis for the MVP review through: (a) publication in the MTEP; (b) posting on the appropriate section of the Transmission Provider’s public website; and (c) presentation to the appropriate stakeholder committees.

B. Scope of Full Multi-Value Project Review: Each full MVP review shall at a minimum include the following:

1. Quantitative Benefits: Analysis of the quantifiable economic benefits resulting from the addition of MVPs, including, but not limited to:
   a. Congestion and Fuel Savings: Savings from increased access to lower cost Resources;
   b. Decreased Operating Reserves: Savings associated with lower Operating Reserve requirements;
   c. Decreased System Planning Reserve Margin: Savings associated with
deferred generation investment due to a reduction in the system-wide Planning Reserve Margin; and
d. Decreased Transmission Line Losses: Savings associated with deferred generation investment due to a reduction in the Capacity required to serve transmission losses during peak hours, to the extent that MVPs reduce such losses.

2. Public Policy and Other Qualitative Benefits: Analysis of the public policy and other qualitative benefits accruing from MVPs, such as newly interconnected wind units; and an increase in the percentage of the Transmission Provider’s Energy needs being supplied by wind and/or other renewable resources, and wind curtailments.

3. Historical Data: Provision, beginning with the MTEP for 2017 (“MTEP 17”), and based on the historical data available to the Transmission Provider for the five (5) prior years, of information on certain additional market trend metrics including, but not limited to:
   a. Congestion costs;
   b. Energy prices;
   c. Fuel costs;
   d. Planning Reserve Margin requirements;
   e. Number of newly interconnected Resources, by Resource type; and
   f. The share of the Transmission Provider’s Energy supplied, by Resource type.
C. **Scope of Limited Multi-Value Project Review:** Each limited MVP review shall at a minimum include the items described in Sections VII.B.1 and VII.B.3 of this Attachment FF, as well as project costs and in-service dates, based on the latest available data for the current year, in preparation for the next full MVP review.

VIII. **COMPETITIVE TRANSMISSION PROCESS**

This section of Attachment FF of the Tariff describes the processes and requirements associated with identifying Competitive Transmission Facilities contained within a Market Efficiency Project or Multi-Value Project approved by the Transmission Provider Board in MTEP Appendix A; certifying entities as Qualified Transmission Developers, whether they are existing Transmission Owners or non-incumbent transmission developers; solicitation of Proposals from Qualified Transmission Developers to construct, implement, own, operate, maintain, repair, and restore the Competitive Transmission Facilities; evaluation of Proposals; and designation of a Selected Proposal and Selected Developer(s) pursuant to Section VIII of Attachment FF of the Tariff.
VIII.A. **APPLICABILITY**

Except as otherwise provided in Sections VIII.A.1 and VIII.A.2 of this Attachment FF, the Competitive Developer Selection Process shall be applicable to all transmission facilities and substation facilities included in an Eligible Project.

VIII.A.1. **State or Local Rights of First Refusal:**

The Transmission Provider shall comply with any Applicable Laws and Regulations granting a right of first refusal to a Transmission Owner. The Transmission Owner will be assigned any transmission project within the scope, and in accordance with the terms, of any Applicable Laws and Regulations granting such a right of first refusal. These Applicable Laws and Regulations include, but are not limited to, those granting a right of first refusal to the incumbent Transmission Owner(s) or governing the use of existing developed and undeveloped right of way held by an incumbent utility.

VIII.A.2. **Upgrades to Existing Transmission Facilities:**

A Transmission Owner shall have the right to develop, own, and operate any upgrade to a transmission facility owned by the Transmission Owner, in accordance with this Tariff and the ISO Agreement.

VIII.A.2.1. **Upgrades to Existing Transmission Lines:** Upgrades to existing transmission line facilities include any expansion, replacement, or modification, for any purpose, made to existing transmission line facilities that are classified as transmission plant and owned by one or more Transmission Owners,
for reasons including, but not limited to:

(a) Increasing the load capability of the transmission line or an associated circuit;

(b) Increasing the nominal operating voltage of the transmission line or an associated circuit;

(c) Installing additional plant on an existing overhead or underground transmission line facility, such as, but not limited to:
   i. plant associated with an additional circuit installed on spare structure positions;
   ii. additional structures to increase a sag limit or for other purposes;
   iii. a sectionalizing switch installed on an existing transmission line circuit regardless of whether or not it is installed on an existing structure; and
   iv. any other plant additions to existing transmission line facilities.

(d) Any requirement or request to relocate transmission line facilities owned by an incumbent Transmission Owner where the purpose of the relocation is not part of the core scope of a Competitive Transmission Project, including, but not limited to, relocations driven by aesthetics, highway expansion projects, other infrastructure expansion projects, projects to improve the reliability or performance of the Transmission
System, projects to reduce the cost to operate and maintain the Transmission System, projects to interconnect new generation and load, and projects to accommodate the relocation of an existing substation;

(e) Any requirement or request to relocate existing transmission line facilities owned by an incumbent Transmission Owner to accommodate Competitive Transmission Line Facilities associated with a Competitive Transmission Project, where such construction of the Competitive Transmission Line Facilities requires or requests use of the incumbent Transmission Owner’s right-of-way and, as a result, also requires or requests transfer of the existing transmission facilities to alternative right-of-way or an alternative position on the same right-of-way based on either mutual consent of the incumbent Transmission Owner and Selected Developer(s) and/or the outcome of a state regulatory proceeding or court action;

(f) Functionally equivalent capital replacement of any portion of an existing transmission line facility due to aging, deterioration, damage, poor performance, aesthetics, high operating and maintenance costs, or other similar reasons;

(g) Replacing one or more existing components of any existing transmission line facility, such as, but not limited to:

i. replacing existing conductors with higher capacity conductors or better performing conductors;
ii. replacing existing structures;

iii. replacing insulators rated at a specific voltage with insulators rated at a higher voltage;

iv. replacing aging or defective components associated with the existing transmission line;

(h) Improving the performance or characteristics of the existing transmission line for any reason;

(i) Converting an existing overhead transmission line to an underground transmission line on the same right-of-way and/or converting an existing underground transmission line to an overhead transmission on the same right-of-way;

(j) Improving land and land rights booked under the Commission’s Uniform System of Accounts, Account Nos. 105, 350, and/or 380; or

(k) Any other modifications to existing transmission facilities.

VII.A.2.1.1. Installation of additional transmission circuits on existing transmission lines:

If a Competitive Transmission Project includes developing a new transmission circuit and either the project scope or subsequent state or local regulatory proceedings determine that all or a portion of the circuit must be installed on an existing transmission line that is part of the Transmission System (i.e., co-located with existing transmission circuits on the same structures), the following rules will be used to determine what
constitutes an upgrade:

(a) If the structures associated with the existing transmission line are multi circuit structures and have spare positions to accommodate installation of one or more additional transmission circuit(s), installation of the new transmission circuit(s) on these spare structure positions will be considered an upgrade.

(b) If the structures associated with the existing transmission line can be expanded to accommodate installation of one or more additional transmission circuit(s), expansion of the structure and installation of the new transmission circuit(s) will be considered an upgrade.

(c) If the structures associated with the existing transmission line are not multi circuit structures and cannot be expanded to accept additional circuits, do not have sufficient spare structure positions available to accommodate the new transmission circuit(s), or have spare structure positions that are reserved for future use by the incumbent Transmission Owner and not available for the new transmission circuit(s) in question, it will be necessary to rebuild the existing transmission line to accommodate one or more additional transmission circuits. Under this scenario, acquisition of additional right-of-way (if necessary), removal of the existing transmission line plant, construction of new transmission line structures, and transfer or replacement of the existing transmission...
line conductors, insulators, and shield wires will be considered an upgrade. Installation of new conductors and insulators associated with the new transmission circuit(s) will not be considered an upgrade. Therefore, the incumbent Transmission Owner will have the right of first refusal to engineer, construct, own, operate, restore, maintain, and collect revenue on all transmission plant associated with rebuilding the existing transmission line that is booked to Account Nos. 350, 352, 353, 354, 355, 357, 359, and 359.1 of the Commission’s Uniform System of Accounts in accordance with such Uniform System of Accounts. Furthermore, the incumbent Transmission Owner will have the right of first refusal to engineer, construct, own, operate, restore, maintain, and collect revenue on all plant associated with existing transmission circuits that is booked to Account Nos. 356 and 358 of the Commission’s Uniform System of Accounts in accordance with such Uniform System of Accounts. In addition, the incumbent Transmission Owner will have the right of first refusal to engineer, construct, own, operate, maintain, and collect revenue on all shield wires associated with the existing transmission line that is booked to Account No. 356 of the Commission’s Uniform System of Accounts in accordance with such Uniform System of Accounts, except for any shield wire that consists of fiber optic cable and is
intended to facilitate communications to support protection of the new transmission circuit(s) where the associated protective relay schemes at all terminals associated with the new transmission circuit(s) will be owned by the Selected Developer(s) in accordance with the provisions of Attachment FF that govern whether or not substation improvements are considered an upgrade. The Selected Developer(s) will have the right to engineer, design, own, operate, restore, maintain, and collect revenue on all plant associated with the new transmission circuit(s) that is booked to Account Nos. 356 and 358 of the Commission’s Uniform System of Accounts in accordance with such Uniform System of Accounts and any shield wire that consists of fiber optic cable and is intended to facilitate communications to support protection of the new transmission circuit(s) where the associated protective relay schemes at all terminals associated with the new transmission circuit(s) will be owned by the Selected Developer(s) in accordance with the provisions of Attachment FF that govern whether or not substation improvements are considered an upgrade. In such cases where an incumbent Transmission Owner and a Selected Developer(s) both own plant associated with a rebuilt existing transmission line, each party will have the right to allocate their respective costs (i.e., revenue requirements for its
portion of the investment) in accordance with the cost allocation provisions of this Tariff for Multi-Value Projects or Market Efficiency Projects as appropriate. Furthermore, such parties shall, in good faith, develop, negotiate, and execute a joint-use agreement for these facilities that governs responsibilities (including who incurs associated costs) for permitting, engineering, construction, operations, maintenance, restoration, and facility access and file such executed agreement with the Commission, and submit a copy to the Transmission Provider. However, there is no obligation on the incumbent Transmission Owner to provide project implementation and/or operations and maintenance services to the Selected Developer(s) for the Selected Developer’s portion of the facility, nor is there any obligation on the Selected Developer(s) to provide project implementation and/or operation and maintenance services to the incumbent Transmission Owners for the incumbent Transmission Owner’s portion of the facility, other than the mutual coordination of activities.

VIII.A.2.2. Upgrades to Existing Substations:

Upgrades to existing substations include any expansions, replacements or modifications made, in part or in whole, to any existing
substation or portion thereof that is owned by one or more Transmission Owners, and where some or all of the plant within the existing substation is classified as transmission plant. These upgrades include, but are not limited to:

(a) Replacing facilities and/or equipment within an existing substation footprint;

(b) Installing additional plant within an existing substation footprint;

(c) Modifying facilities and/or equipment within an existing substation footprint;

(d) Expanding an existing substation footprint within the existing substation site boundaries and installing additional plant within the expanded area;

(e) Acquiring additional land adjacent to the existing substation in conjunction with installation of additional plant within the boundaries of this additional land, including facilities to interconnect such plant to the existing substation plant; and

(f) Developing an additional footprint near the existing substation to facilitate effective expansion of the existing substation as further described below in Section VIII.A.2.2.1.

VIII.A.2.2.1. Expansion of an existing substation by developing an additional footprint near the existing substation:

Construction of a new substation footprint near an existing substation to
facilitate expansion of the existing substation is considered an upgrade and is necessary when the transmission project calls for expansion of the existing substation and there is not sufficient space for such expansion.

Upgrades through development of a second substation footprint can be accomplished in one of two ways. First, a second substation footprint can be developed near the existing substation footprint, and the two substation footprints will function electrically as a single substation and will be interconnected by bus extensions or connectors. An example would be expanding an existing substation that is landlocked by public roadways by developing a second substation footprint on the other side of one of the roads and then installing an overhead single span connector which would function as a substation bus to interconnect the two substation footprints.

Second, an existing substation could be retired for many reasons such as but not limited to: lack of room for future expansions, physical conditions such as soil subsidence, earthquake reinforcement requirements, to prevent flood damage, regulatory/public necessity/economic reasons, and other similar factors. A new substation could be developed nearby on a different site and all transmission circuits into the existing substation could be rerouted to the new site, which is essentially the relocation of an existing substation. These scenarios represent upgrades to an existing substation when the intent of the transmission project produced by the transmission planning process is to expand the existing substation rather
than develop a new substation or to relocate an existing substation for reasons not related to implementation of a regionally cost shared transmission project.

VIII.B. COMPETITIVE DEVELOPER QUALIFICATION PROCESS

This section of Attachment FF of the Tariff describes the processes and requirements associated with certifying entities as Qualified Transmission Developers, whether they are existing Members or non-incumbent transmission developers.

VIII.B.1. Qualified Transmission Developers:

Only Qualified Transmission Developers may submit Proposals in response to a Request for Proposals posted by the Transmission Provider for a Competitive Transmission Project. The Transmission Provider will maintain a list of Qualified Transmission Developers on its website that will be updated within thirty (30) Calendar Days of the conclusion of the annual Competitive Developer Qualification Process.

VIII.B.2. Annual Prequalification Process:

In January of each year, the Transmission Provider will open a prequalification window for entities that are not currently listed as Qualified Transmission Developers, including existing Members, Non-incumbent Developers, and Non-owner Members, by posting on its website a Transmission Developer Application template and invitation to submit a Transmission Developer Application. To become a Qualified Transmission
Developer, each Transmission Developer Applicant must submit a Transmission
Developer Application using the template(s) posted with the invitation and further
described in the applicable Business Practices Manuals, by the deadline specified in the
invitation, but no less than thirty (30) Calendar Days from the date the invitation was
posted. The Transmission Developer Applicant shall submit its completed Transmission
Developer Application by the day specified as the deadline in accordance with the
requirements in the applicable Business Practices Manual. The Transmission Developer
 Applicant shall also submit a non-refundable transmission developer application fee, as
further described in the applicable Business Practices Manuals, in the amount of
$20,000.00 by 5:00 PM EPT on the day specified as the Transmission Developer
Application deadline to cover the cost of processing, reviewing, and determining whether
the Transmission Developer Applicant does or does not satisfy all the qualification
requirements required by Sections VIII.B.4(a) – (g) and VIII.B.4.1 – VIII.B4.4 of this
Attachment FF to be certified as a Qualified Transmission Developer. A Transmission
Developer Applicant may rely on the resources, capabilities, or competencies of an
Affiliate to satisfy the qualification requirements contained in Sections VIII.B.4.1 –
VIII.B.4.4 provided that the Transmission Developer Applicant: (a) clearly identifies in
the Transmission Developer Application which prequalification requirements the
Transmission Developer Applicant will rely on its Affiliate to satisfy; (b) clearly
identifies the resources, capabilities, and/or competencies of the Affiliate the
Transmission Developer Applicant intends to rely on to satisfy each prequalification
requirement; and (c) includes with its Transmission Developer Application submission a
Statement of Support executed by the Affiliate on which the Transmission Developer Applicant will rely for such support.

VIII.B.2.1. Completed Transmission Developer Applications:

To the extent the Transmission Provider finds the Transmission Developer Application deficient of information or data required by the Transmission Developer Application template(s), the Transmission Provider will notify the Transmission Developer Applicant of the deficiencies by e-mail within thirty (30) Calendar Days of the Transmission Provider’s receipt of the respective Transmission Developer Application. The Transmission Developer Applicant shall have thirty (30) Calendar Days from the date the Transmission Provider’s deficiency notification was sent to submit the additional data required to the Transmission Provider. No additional Transmission Developer Application cure period will be allowed for the purposes of gaining Qualified Transmission Developer status.

VIII.B.2.2. Transmission Developer Application Review:

The Transmission Provider will review each Transmission Developer Application that has been cured of any identified deficiencies and will notify each Transmission Developer Applicant of the Transmission Provider’s decision to certify or not certify the
Transmission Developer Applicant as a Qualified Transmission Developer within one-hundred eighty (180) Calendar Days of the Transmission Provider’s receipt of the respective Transmission Developer Application.

The Transmission Provider will certify those Transmission Developer Applicants that meet the qualification requirements specified in Sections VIII.B.2 and VIII.B.4 of this Attachment FF and the applicable Business Practices Manuals. If the Transmission Provider does not certify a Transmission Developer Applicant, it will provide the Transmission Developer Applicant with a written explanation detailing its determination within thirty (30) Calendar Days after notification.

The Competitive Transmission Executive Committee shall have the exclusive and final authority to approve or reject Transmission Developer Applications and certify Transmission Developer Applicants as Qualified Transmission Developers.

VIII.B.3. Biennial Recertification Process:

Each Qualified Transmission Developer that intends to remain qualified must recertify its Qualified Transmission Developer status during the prequalification window in every second calendar year after the year in which such Qualified Transmission Developer was last certified or recertified as a Qualified Transmission Developer by the Transmission Provider. In January of each year, on the date the Transmission Provider
opens the Annual Prequalification Process as specified in Section VIII.B.2 of this Attachment FF, the Transmission Provider will send a notification to each Qualified Transmission Developer that is required to recertify its status during that year.

VIII.B.3.1. Recertification Submission Requirements:

Each Qualified Transmission Developer that is sent a recertification notification shall submit, within thirty (30) Calendar Days after the recertification notification is sent, an affidavit in a form to be provided by the Transmission Provider, executed by an authorized representative of the Qualified Transmission Developer. The affidavit shall contain: (1) a statement confirming, to the best of the Qualified Transmission Developer’s knowledge, that it continues to meet the requirements for initial qualification as set forth in Sections VIII.B.4, VIII.B.4.1, VIII.B.4.2, VIII.B.4.3, and VIII.B.4.4 of this Attachment FF; and (2) a completed checklist indicating whether the Qualified Transmission Developer, or any parent or affiliate whose resources are relied upon for recertification, have experienced certain changes since the date that the Qualified Transmission Developer last submitted a Transmission Developer Application or recertification affidavit. The specific changes shall be identified in the recertification notice and may include, but are not limited to: (1) merger, reorganization, or a change in the identity of any parent or affiliate providing support; (2) changes to the Qualified Transmission Developer’s legal name, state of domicile, or MISO membership status; (3) bankruptcies, liquidations, receiverships or general assignments; (4) any new legal or regulatory violations that would be required to be reported in a Transmission Developer
Application pursuant to Section VIII.B.4.3 of this Attachment FF; and (5) any specific changes that the Transmission Provider identifies as necessary to evaluate a Qualified Transmission Developer’s continued qualifications.

A properly completed and executed affidavit stating that the Qualified Transmission Developer and, if applicable, its supporting parent or affiliate, has not experienced any of the changes listed by the Transmission Provider in the recertification affidavit form shall be deemed a completed recertification application.

If a Qualified Transmission Developer identifies in its affidavit that any of the changes specified in the recertification affidavit form accompanying the recertification notice have occurred, initial disclosure shall not create any presumption of disqualification. Upon receipt of an executed affidavit indicating that a listed change has occurred, the Transmission Provider shall provide the Qualified Transmission Developer with further instructions for submitting information and explanations to enable the Transmission Provider to evaluate the effect of the identified changes on the Qualified Transmission Developer’s continued qualifications. Such further instructions shall be tailored to the disclosed change and shall be due no later than thirty (30) Calendar Days after the date that the additional information request was sent to the Qualified Transmission Developer.

Should a Qualified Transmission Developer fail to submit a properly completed recertification affidavit or any information in response to the Transmission Provider’s request for further information within the applicable submission periods specified in this Section VIII.B.3.1 of this Attachment FF, the
Transmission Provider shall notify the Qualified Transmission Developer by e-mail within five (5) Business Days of the deadline specified in the renewal notification or request for further information of any deficiencies that the Transmission Provider has identified. The Qualified Transmission Developer will have five (5) Business Days from the date of notification of deficiency to cure the identified deficiencies by submitting the required information. Should a Qualified Transmission Developer fail to cure the identified deficiency during this five (5) Business Day period, the Transmission Provider will deem that the Qualified Transmission Developer has requested to voluntarily terminate its certification as a Qualified Transmission Developer in accordance with Section VIII.B.5 of this Attachment FF.

VIII.B.3.2. Review of Recertification Submissions.

The Transmission Provider shall review each Qualified Transmission Developer’s recertification submission, any supporting information and explanations, and the annual financial information submitted pursuant to Section VIII.B.8 of this Attachment FF. The Transmission Provider shall determine whether the information included in the submission warrants recertification or termination of a Qualified Transmission Developer’s status under the standards established in Section VIII.B.1 through VIII.B.4.4 of this Attachment FF. The Transmission Provider will notify each Qualified Transmission Developer...
as to whether or not such entity has been recertified, within one-hundred eighty (180) Calendar Days of the date the Transmission Provider sent the recertification notification.

In the event that the Competitive Transmission Executive Committee terminates or determines not to recertify a Qualified Transmission Developer, the Transmission Provider shall provide that entity with a written explanation detailing its determination within thirty (30) Calendar Days of such notification. If the Transmission Provider either terminates or does not recertify a Qualified Transmission Developer, such entity may seek re-qualification during any subsequent annual qualification process as described in Section VIII.B.2. of this Attachment FF. The Competitive Transmission Executive Committee shall have the exclusive and final authority to recertify or terminate a Qualified Transmission Developer’s Qualified Transmission Developer status.

VIII.B.4. Requirements for Qualified Transmission Developer Status:

To be certified as a Qualified Transmission Developer, the requirements set forth in Sections VIII.B.4, VIII.B.4.1, VIII.B.4.2, VIII.B.4.3, and VIII.B.4.4 of this Attachment FF must be satisfied. A Transmission Developer Applicant may elect to satisfy one or more of these requirements by referencing and/or utilizing the qualifications, capabilities, and/or competencies of one or more Affiliates instead of, or in addition to, those of the
Transmission Developer Applicant. Should a Transmission Developer Applicant elect to reference and/or utilize the qualifications, capabilities, and/or competencies of one or more Affiliates, the Transmission Developer Applicant must: (a) clearly identify in the Transmission Developer Application each Tariff requirement that the Transmission Developer Applicant intends to rely on an Affiliate to satisfy; and (b) include in the Transmission Developer Application an executed Statement of Support for each such Affiliate that acknowledges that the Transmission Developer Applicant is relying on the specified qualifications, capabilities, and/or competencies of the Affiliate. A Transmission Developer Applicant may elect to satisfy one or more of the requirements of VIII.B.4.3(a) and VIII.B.4.3(b) of this Attachment FF by submitting documentation pertaining to an Affiliate provided that the Transmission Developer Applicant also submits such documentation pertaining to itself, included an executed Statement of Support in the Transmission Developer Application for each such Affiliate, and has clearly identified which information and documentation pertains to the Affiliate and which information and documentation pertains to itself.

The general requirements applicable to Qualified Transmission Developers include the following:

(a) The Transmission Developer Applicant shall be a Transmission Owner or a Non-owner Member in good standing at the time the Transmission Developer Application is acted on by the Transmission Provider and shall maintain such status.
(b) The Transmission Developer Applicant shall either: (i) submit a written commitment, signed by an authorized representative of the Transmission Developer Applicant, to execute the ISO Agreement should it be designated as a Selected Developer and to list any Competitive Transmission Facilities for which it is designated a Selected Developer, pursuant to the Selected Proposal, in Appendix H of the ISO Agreement (i.e. the list of transmission facilities transferred to MISO’s functional control for the purposes of planning and operation); or (ii) state that it is already a signatory to the ISO Agreement and submit a written commitment, signed by an authorized representative of the Transmission Developer Applicant, that it will list any Competitive Transmission Facilities for which it is designated as a Selected Developer for, pursuant to the Selected Proposal, in Appendix H of the ISO Agreement. The execution of the ISO Agreement must take place after the Competitive Transmission Facilities have been constructed but prior to their energization and the addition of the Competitive Transmission Facilities to Appendix H of the ISO Agreement must take place after the Competitive Transmission Facilities have been energized;

(c) The Transmission Developer Applicant shall submit a written commitment, signed by an authorized representative of the Transmission Developer Applicant, to comply with all Applicable Laws and Regulations, codes, and standards governing the engineering, design,
construction, operation, and maintenance of transmission facilities including, but not limited to, federal laws; applicable state and local laws; applicable state and local building codes; federal regulatory requirements; applicable state and local regulatory requirements; applicable state and local licensing authorities; the National Electric Safety Code; the National Electric Code; Applicable Reliability Standards; and Good Utility Practice should the Transmission Developer Applicant be designated as a Selected Developer for one or more Competitive Transmission Facilities;

(d) The Transmission Developer Applicant shall either: (i) submit a written commitment, signed by an authorized representative of the Transmission Developer Applicant, to register with NERC in accordance with NERC’s registration guidelines as the transmission owner (TO), transmission operator (TOP), and transmission planner (TP), as those terms are defined by NERC, for all Competitive Transmission Facilities that the Transmission Developer Applicant, if designated as the Selected Developer, will own; or (ii) demonstrate that the Transmission Developer Applicant is already registered with NERC, in accordance with NERC’s registration guidelines, as the transmission owner (TO), transmission operator (TOP), and transmission planner (TP), as those terms are defined by NERC;

(e) The Transmission Developer Applicant shall submit a written commitment, signed by an authorized representative of the Transmission
Developer Applicant, that if designated as the Selected Developer, the Transmission Developer Applicant shall either: (i) contract with the interconnecting Local Balancing Authority(s) to include the Competitive Transmission Facilities within the boundaries of the interconnecting LBA and demonstrate to the satisfaction of the Transmission Provider and per agreement by the interconnecting LBA that applicable LBA-related tasks associated with the proposed Competitive Transmission Facilities that may be delegated to an LBA by the Balancing Authority Agreement will be carried out either by the LBA or the Transmission Developer Applicant if designated as a Selected Developer; or ii) execute the Balancing Authority Agreement, register with NERC as a Balancing Authority (BA), and be designated as the Local Balancing Authority for any proposed Competitive Transmission Facilities, unless the Transmission Developer Applicant is already registered with NERC as a BA and designated as an LBA for one or more of the existing transmission facilities that may interconnect directly with any Competitive Transmission Facilities associated with the Competitive Transmission Project(s) that the Transmission Developer may be awarded;

(f) The Transmission Developer Applicant shall make a written commitment, signed by an authorized representative of the Transmission Developer Applicant, that, if designated as a Selected Developer, it shall comply with the FERC Form 715 Part 4 TRPC, Transmission Planning Criteria and
Guidelines on file with FERC and established by each incumbent Transmission Owner whose existing transmission facilities will interconnect directly with the Competitive Transmission Facilities; and

(g) The Transmission Developer Applicant must make a written commitment, signed by an authorized representative of the Transmission Developer Applicant, that, if it is designated as a Selected Developer, it shall comply with current requirements and standards regarding the interconnection of transmission facilities published by each Transmission Owner or non-Member to which Competitive Transmission Facilities will interconnect including, but not limited to, those standards and requirements required for compliance with the applicable NERC Facilities Design, Connections, and Maintenance ("FAC") Reliability Standards.

VIII.B.4.1. Project Implementation Requirements:

Each Transmission Developer Applicant shall submit documentation to demonstrate to the Transmission Provider that the Transmission Developer Applicant has or can obtain sufficient capabilities and competencies to satisfy the following project implementation requirements for Competitive Transmission Projects:

(a) Project management;

(b) Routing and siting studies including public outreach;

(c) Preliminary and detailed engineering and surveying;
(d) Material and equipment procurement;

(e) Construction; and

(f) Commissioning.

There are two general methods that a Transmission Developer Applicant may use to demonstrate it will have sufficient capabilities and competencies to perform project implementation tasks if chosen as the Selected Developer for a Competitive Transmission Project. First, the Transmission Developer Applicant may provide evidence that it currently develops transmission projects by listing data, pursuant to templates developed by the Transmission Provider, regarding the transmission facilities it owns and the infrastructure and resources it has in place to perform the project implementation activities to develop such transmission facilities, where infrastructure and resources may include, but not necessarily be limited to, employees, contractors, tools, equipment, buildings, vehicles, policies, processes, and procedures. Second, a Transmission Developer Applicant can provide a detailed business implementation plan describing how it would acquire the capabilities and competencies to perform the specific project implementation tasks listed above, including plans for: (i) retaining personnel or contractors; (ii) utilizing infrastructure and resources owned and operated by an affiliate company; (iii) qualifying personnel and contractors utilized; (iv) acquiring required tools, equipment, and vehicles; (v) development of project management, engineering, material, and construction standards and practices to be followed for specific
types of facilities; (vi) route and site studies (including public outreach); and (vii) procuring adequate capital to develop transmission projects.

In the event that a Transmission Developer intends to demonstrate its project implementation qualifications by obtaining the requisite capabilities and competencies by contracting with third parties, the Transmission Developer Applicant shall submit either as part of its business implementation plan or in separate documentation an explanation of the capabilities and competencies that the Transmission Developer Applicant possesses at the time of application and those capabilities and competencies for which the Transmission Developer Applicant intends to contract in order to demonstrate its ability to satisfy the foregoing project implementation requirements for Competitive Transmission Projects. For each capability or competency that the Transmission Developer Applicant does not possess but intends to procure through contracting with third parties, the Transmission Developer Applicant shall provide a detailed contracting plan that contains a detailed description of the steps the Transmission Developer Applicant intends to take to procure needed capabilities or competencies if it is chosen as the Selected Developer for a Competitive Transmission Project.

The Transmission Developer Applicant shall not be required to have executed contracts with third parties to obtain all required capabilities or competencies at the time of application in order to prequalify as a Transmission Developer. However, the Transmission Developer Applicant bears the burden of identifying the capabilities or competencies it possesses and those for which it
must contract with third parties and that the Transmission Developer Applicant has a realistic contracting plan for obtaining those capabilities.

The Transmission Developer Applicant shall include a written certification signed by an authorized representative of the Transmission Developer Applicant stating that the information in the submission is true and accurate.

VIII.B.4.2 Operations, maintenance, repair, and replacement requirements:

Each Transmission Developer Applicant shall submit documentation that demonstrates to the Transmission Provider that the Transmission Developer Applicant possesses or can obtain sufficient capabilities and competencies to adequately perform the following operations, maintenance, testing, inspection, repair, and replacement tasks for any Competitive Transmission Facilities associated with a Competitive Transmission Project once such facilities are in service and part of the Transmission System:

(a) Forced outage response for transmission line circuits;
(b) Forced outage response for substations;
(c) Switching for transmission line circuits;
(d) Switching for substations;
(e) Transmission line emergency repair;
(f) Substation emergency repair and testing;
(g) Transmission line preventative and/or predictive maintenance, including vegetation management;
(h) Substation preventative and/or predictive maintenance including equipment testing;

(i) Maintenance and management of spare parts, spare structures, and/or spare equipment inventories for substations and/or transmission lines, as applicable, including description of any agreements to share spare equipment, spare parts, and/or spare structures with other transmission entities;

(j) Real-time operations monitoring and control capabilities;

(k) Major facility replacements or rebuilds required as a result of catastrophic destruction or natural aging through normal wear and tear, including financial strategy to facilitate timely replacements and/or rebuilds; and

(l) Once a Transmission Developer, the Transmission Provider may require additional demonstration of qualifications to operate, maintain, restore, test, inspect, and replace specific Competitive Transmission Facilities associated with specific Competitive Transmission Projects for a specific Request for Proposals.

There are two general methods that a Transmission Developer Applicant may use to demonstrate it will have sufficient capabilities and competencies to perform operations and maintenance services if chosen as the Selected Developer for a Competitive Transmission Project. First, Transmission Developer Applicant may provide evidence that it currently owns and/or operates and maintains
electric transmission facilities by listing data, pursuant to templates developed by
the Transmission Provider, regarding the transmission facilities it owns and/or
operates and maintains and the infrastructure and resources it has in place to
perform the operations and maintenance activities for such transmission facilities,
where infrastructure and resources may include, but not necessarily be limited to,
employees, contractors, tools, equipment, buildings, spare materials and
equipment, vehicles, policies, processes, and procedures. Second, a Transmission
Developer Applicant can provide a detailed business implementation plan
describing how it would acquire the capabilities and competencies to perform the
specific operations and maintenance tasks listed above, including plans for: (i)
retaining personnel or contractors; (ii) utilizing infrastructure and resources
owned and operated by an affiliate company; (iii) qualifying personnel and
contractors utilized; (iv) acquiring required tools, equipment, and vehicles; (v)
development of maintenance standards and practices to be followed for specific
types of facilities; (vi) developing standards governing where personnel,
equipment, and spare parts/equipment will be maintained with respect to potential
future facilities (e.g., maximum distance between facility and local office, etc.);
(vii) emergency response times; and (viii) maintaining adequate capital
procurement capabilities to rebuild facilities following major catastrophic outages
(including property insurance and risk mitigation strategies).

In the event that a Transmission Developer Applicant intends to
demonstrate its operations and maintenance, repair and replacement qualifications
by obtaining the requisite capabilities and competencies by contracting with third parties, the Transmission Developer Applicant shall submit, either as part of its business implementation plan or in separate documentation, an explanation of the capabilities and competencies that the Transmission Developer Applicant possesses at the time of application and those capabilities and competencies for which the Transmission Developer Applicant intends to contract in order to demonstrate its ability to implement the foregoing project operation, maintenance, repair, and replacement requirements for Competitive Transmission Projects. For each capability or competency that the Transmission Developer Applicant does not possess but intends to procure through contracting with third parties, the Transmission Developer Applicant shall provide a detailed contracting plan that contains a detailed description of the steps the Transmission Developer Applicant intends to take to procure needed capabilities or competencies if it is chosen as the Selected Developer for a Competitive Transmission Project.

The Transmission Developer Applicant shall not be required to have executed contracts with third parties to obtain all required capabilities or competencies at the time of application in order to prequalify as a Qualified Transmission Developer. However, the Transmission Developer Applicant bears the burden of identifying the capabilities or competencies it possesses and those for which it must contract with third parties and that the Transmission Developer Applicant has a realistic contracting plan for obtaining those capabilities.
The Transmission Developer Applicant shall include a written certification signed by an authorized representative of the Transmission Developer Applicant stating that the information in the submission is true and accurate.

VIII.B.4.3. Legal Requirements:

Each Transmission Developer Applicant shall submit the following information and demonstrate to the Transmission Provider that the information submitted represents an acceptable level of risk to rely on the Transmission Developer Applicant, if designated a Selected Developer, to successfully implement a Competitive Transmission Project and own and operate the associated transmission facilities once in service. The information submitted must include written certification signed by an authorized representative of the Transmission Developer Applicant stating that the submitted information is accurate:

(a) A summary of legal and/or regulatory violations during the past five (5) years or, if the Transmission Developer Applicant has been in business for less than five years, the number of years for which the Transmission Developer Applicant has been in business, by the Transmission Developer Applicant found by federal or state courts, federal regulatory agencies, state public utility commissions, other regulatory agencies, or attorneys general. This includes, but is not limited to, the Federal Energy Regulatory Commission, North

(b) A summary of any and all instances in which the Transmission Developer Applicant is currently under investigation or is a defendant in a proceeding involving an attorney general or any state or federal regulatory agency, for violation of any laws, including regulatory requirements, during the past five years or, if the Transmission Developer Applicant has been in business for less than five years, the number of years for which the Transmission Developer Applicant has been in business. The Transmission Developer Applicant shall include an affidavit signed by an authorized officer of the Transmission Developer Applicant’s company stating that the information in the submission is true and accurate and that the Transmission Developer Applicant will comply with all applicable requirements in this Tariff, the Business Practices Manuals, or other applicable Transmission Provider documents or agreements.

VIII.B.4.4 Financial Requirements:
Each Transmission Developer Applicant shall submit the following information and demonstrate to the Transmission Provider that the information submitted represents an acceptable level of risk to rely on the Transmission Developer Applicant to successfully implement a Competitive Transmission Project and own and operate the associated transmission facilities once in service. The information submitted must include written certification signed by an authorized representative of the Transmission Developer Applicant stating that the submitted information is accurate:

(a) A proposed financial plan demonstrating adequate capital resources (e.g., current assets, revolving lines, commercial paper, letter of credit, stock or bond issuance or other sources of liquidity) are available to the Transmission Developer Applicant to allow for Competitive Transmission Projects to be implemented on schedule and associated Competitive Transmission Facilities to be operated and maintained appropriately after the facilities are in service.

(b) The credit rating(s) for the Transmission Developer Applicant from Moody’s Investor Services, Inc., Standard and Poor’s Rating Group and/or other Nationally Recognized Statistical Rating Organization (“NRSRO”) as recognized by the Securities and Exchange Commission (“SEC”). In the event the Transmission Developer Applicant is rated by more than one NRSRO, then the lowest rating will be the benchmark for consideration of demonstrating and maintaining an investment grade credit rating. For
example, an investment grade rating is considered to be a rating of Baa3 or above from Moody’s Investor Services, Inc. or BBB- or above from Standard and Poor’s Rating Group (equivalent ratings will be used for other rating agencies). The focus of the review will be on the entity’s unsecured, senior long-term debt ratings (not supported by third-party enhancements). If unsecured, senior long-term debt ratings are not available, the Transmission Provider may consider Issuer Ratings.

In the event the Transmission Developer Applicant does not have an investment grade rating, the Transmission Provider will consider the other information the Transmission Developer Applicant has submitted to evaluate its financial capability to construct the transmission facility in a timely manner, and to maintain and operate it reliably for the long term.

(c) General financial information, including two (2) years of audited financial statements with notes to the financials and a signed commitment by an authorized representative of the Transmission Developer Applicant that it is not aware of any material events or circumstances that would likely result in a material adverse weakness in financial strength throughout project implementation of future Competitive Transmission Projects that it might be awarded after it is certified as a Transmission Developer. In the event the Transmission Developer Applicant does not have two (2) years of audited financial statements and has not submitted two (2) years of audited financial statements from an Affiliate providing an executed
Statement of Support, the Transmission Developer Applicant must submit an audited balance sheet dated within the last ninety (90) days. It must also submit pro forma financials for the next fiscal year which include an income statement, balance sheet, and statement of cash flows.

(d) A summary of any history of bankruptcy, dissolution, merger, or acquisition of the Transmission Developer Applicant, or any predecessors in interest for the current calendar year and the five (5) calendar years immediately preceding its submission of the Transmission Developer Application. This information must also be submitted for any Affiliate providing a Statement of Support to satisfy any of the requirements in Section VIII.B.4.4 of this Attachment FF.

VIII.B.5. **Voluntary Termination of Qualified Transmission Developer Status:**

A Qualified Transmission Developer that desires to voluntarily terminate its’ status as a Qualified Transmission Developer, may do so at any time by notifying the Transmission Provider. Upon such notification, the Transmission Provider will update the Qualified Transmission Developer list within thirty (30) Calendar Days of the notification. Failure of a Qualified Transmission Developer to timely submit a recertification affidavit pursuant to Section VIII.B.3.1 of this Attachment FF of the Tariff shall be deemed a voluntary termination under this Section VIII.B.5 of this Attachment FF. A terminated Qualified Transmission Developer may become a Qualified Transmission Developer again by following the process outlined in Section VIII.B.2 of this Attachment.
FF of the Tariff for Transmission Developer Applicants seeking Qualified Transmission Developer status in subsequent annual qualification processes.

VIII.B.6. **Confidential Treatment of Competitive Developer Qualification Information:**

All information submitted with Transmission Developer Applications and recertification submittals will be considered Confidential Information, except for the name of the organization to be posted on the Qualified Transmission Developer list, and will not be publicly posted or shared with any individual except for employees of the Transmission Provider and/or contractors of the Transmission Provider that have executed appropriate non-disclosure agreement(s).

VIII.B.7. **Alternative Dispute Resolution:**

Any Transmission Developer Applicant who is not approved as a Qualified Transmission Developer by the Transmission Provider may request alternative dispute resolution under Attachment HH of the Tariff within thirty (30) Calendar Days of receiving the Transmission Provider’s written explanation detailing its determination to deny the Transmission Developer Application. Any entity that is not recertified as a Qualified Transmission Developer by MISO, or a Qualified Transmission Developer whose Qualified Transmission Developer status is terminated, may request alternative dispute resolution under Attachment HH of the Tariff within thirty (30) Calendar Days.
of receiving the MISO’s written explanation detailing its determination to not recertify or to terminate the entity’s Qualified Transmission Developer status.

**VIII.B.8. Ongoing Responsibilities of Qualified Transmission Developers:**

Each Qualified Transmission Developer has an ongoing duty to provide the Transmission Provider with notification as soon as reasonably practical should any of the changes specified in Section VIII.B.3.1 of this Attachment FF occur and a copy or link to their audited financial statements annually, within thirty (30) Calendar Days of such statements being prepared. The Competitive Transmission Executive Committee shall have the exclusive and final authority to make determinations regarding the continued qualifications of Qualified Transmission Developers based upon the information received in accordance with this Section VIII.B.8.

**VIII.C. REQUEST FOR PROPOSALS**

Should Appendix A of a Transmission Provider Board approved MTEP contain Eligible Projects, the Transmission Provider will review each such Eligible Project to determine whether or not it contains any Competitive Transmission Facilities. The Transmission Provider will release a Request for Proposals (RFP) for each Competitive Transmission Project pursuant to Section VIII.C of this Attachment FF and the applicable Business Practices Manuals. If Appendix A of a Transmission Provider Board approved MTEP contains only one (1) Competitive Transmission Project, the Transmission Provider will release an RFP within sixty (60) Calendar Days of the date the Transmission Provider Board approved the Competitive Transmission Facilities for inclusion in Appendix A of the MTEP. If Appendix A of a
Transmission Provider Board approved MTEP contains multiple Competitive Transmission Projects, the Transmission Provider shall have the option to stagger the release of each RFP associated with the multiple Competitive Transmission Projects.

If the Transmission Provider elects to stagger the release of RFPs, the Transmission Provider shall take the following actions following the date that the Transmission Provider Board approved the Competitive Transmission Facilities for inclusion in Appendix A of the MTEP: (1) Within ten (10) Business Days publicly post on its website a statement indicating that the Transmission Provider will stagger the RFP release dates; (2) Within thirty (30) Calendar Days post a schedule listing the planned release dates for each RFP, with the first RFP being released within sixty (60) Calendar Days of the date the respective MTEP was approved by the Transmission Provider Board. In determining the schedule of RFP releases when staggering is used, the Transmission Provider will consider the timing impacts of the Competitive Developer Selection Process with respect to the in-service dates of the Competitive Transmission Projects. In all events, the schedule of RFP releases developed by the Transmission Provider shall provide that all RFPs are released not later than three hundred and sixty five (365) Calendar Days after the date the Transmission Provider Board approved the Competitive Transmission Facilities for inclusion in Appendix A of the MTEP. If the Transmission Provider elects not to stagger the release of RFPs, the Transmission Provider shall release each RFP within sixty (60) Calendar Days of the date the respective MTEP was approved by the Transmission Provider Board.

**VIII.C.1. Minimum Contents of a RFP:**

Each RFP shall include, at a minimum, a listing of each Competitive Transmission
Facility contained within the Competitive Transmission Project, the Proposal Submission Deadline, the applicable items specified in Sections VIII.C.1 and VIII.C.2 of this Attachment FF to the Tariff, any applicable items specified in the Transmission Provider’s Business Practices Manuals, and a list of the current transmission facility interconnection standards and requirements, established by the Transmission Owner(s) and established by any transmission owner(s) that are not a Member who have chosen to provide interconnection standards and requirements to the Transmission Provider, to which the Competitive Transmission Project will interconnect. The Transmission Provider reserves the right to specify any additional information in a RFP including, but not limited to, any additional information for specific Competitive Transmission Line Facilities and/or Competitive Substation Facilities. The Transmission Provider shall include in each RFP a list of any aspects, or elements of the Competitive Transmission Project that the Transmission Provider anticipates at the time of posting to be particularly important for the success of the Competitive Transmission Project. This information shall be provided for informational purposes only and shall not alter the criteria and/or weightings applicable to evaluation of the Proposals pursuant to Sections VIII.E through VIII.E.3 of this Attachment FF.

If and to the extent a RFP contains any Critical Energy Infrastructure Information (CEII), the Transmission Provider will redact such CEII for public posting and create a non-public RFP containing the CEII which will be available to entities and individuals that have executed the appropriate CEII and non-disclosure agreements required by the Transmission Provider. Information on how to request the non-public RFP will be provided in the publicly posted RFP. Pursuant to Section VIII.A.1 of this Attachment FF, only Competitive Transmission Facilities
eligible under state law will be included in the Competitive Transmission Project where (i) all other Competitive Transmission Facilities and (ii) upgrades as described in Section VIII.A.2 of this Attachment FF will be assigned to the applicable incumbent Transmission Owner in accordance with the ISO Agreement.

VIII.C.1.1 Requirements for Competitive Transmission Line Facilities:

Each RFP that includes one or more Competitive Transmission Line Facilities will specify, at a minimum, the following items for each Competitive Transmission Line Facility:

(a) Expected in-service date;

(b) Nominal operating voltage level in kV and voltage characteristics (i.e., three-phase AC, bipolar DC, etc.) for each transmission circuit;

(c) Terminating substations and buses for each transmission circuit;

(d) Minimum required normal and emergency load ratings for both summer and winter seasons for each transmission circuit; and

(e) Maximum allowable positive sequence impedance for each transmission circuit when determined applicable by planning studies performed by the Transmission Provider.

VIII.C.1.2 RFP Requirements for Competitive Substation Facilities:

Each RFP that includes one or more Competitive Substation Facilities will
specify, at a minimum, the following information for each Competitive Substation Facility:

(a) Expected in-service date;

(b) List of all transmission buses within the Competitive Substation Facility, including nominal operating voltage level in kV and voltage characteristics;

(c) List of all major equipment and facilities within the Competitive Substation Facility and associated terminating buses including power transformers, voltage regulators, phase angle regulators, series reactors, series capacitors, shunt reactors, shunt capacitors, static VAR compensators, DC converters, transmission line circuit terminals, generator terminals, and loads;

(d) Limitations on and/or requirements for bus configurations when determined applicable by planning studies performed by the Transmission Provider including required load ratings of circuit breakers, disconnects, bus sections and other load carrying equipment under alternative bus configurations;

(e) Required load ratings for all load carrying equipment and facilities identified in item (f) above;

(f) Winding connection and tap requirements for power transformers, voltage regulators, phase angle regulators and load tap changers when determined necessary by planning studies performed by the
Transmission Provider;

(g) Impedance requirements for power transformers, phase angle regulators, series reactors and series capacitors when determined necessary by planning studies performed by the Transmission Provider; and

(h) Limitations on and/or requirements for protection systems when determined applicable by a planning driver or Applicable Reliability Standard or in order to ensure a compatible interconnection with existing protection systems associated with existing transmission facilities to which the Competitive Transmission Facilities will interconnect.

VIII.D. PROPOSALS

Proposals may be submitted only in response to an RFP issued by the Transmission Provider and only by entities that are certified as a Qualified Transmission Developer at the time such Proposal is submitted. Once submitted and unless withdrawn pursuant to Section VIII.D.8 of this Attachment FF, Proposals shall be held open as offers capable of acceptance by the Transmission Provider until such time as the Transmission Provider announces the identity of the Selected Developer and designates an Alternate Selected Developer pursuant to Sections VIII.E.2 and VIII.H of this Attachment FF.

VIII.D.1. Proposal Submission Deadline:
Proposals shall be submitted to the Transmission Provider no later than 5:00 PM EPT on the Proposal Submission Deadline. The Proposal Submission Deadline will be the date specified in the RFP which shall not exceed one hundred and sixty-five (165) Calendar Days from the date the RFP was issued by the Transmission Provider, unless such date falls on a Saturday, Sunday, or holiday in which case the Proposal Submission Deadline shall be the next Business Day that is not a holiday.

VIII.D.2. Proposal Deposit:

An initial deposit of $100,000.00 shall be submitted to the Transmission Provider, as further described in the RFP, in conjunction with the submission of each Proposal prior to the Proposal Submission Deadline. Only one (1) proposal deposit is required for each Proposal, regardless of the number of RFP Respondents and Proposal Participants involved with the Proposal.

Each deposit submitted to the Transmission Provider will be held in an interest-bearing account.

VIII.D.3. RFP Administration and Proposal Evaluation Expenses:

RFP Respondents shall, on a pro rata basis, be responsible for paying the actual costs incurred by the Transmission Provider, including the costs of the expert consultant(s) engaged to assist the Transmission Provider, in administering the Competitive Developer Selection Process for the specific RFP that the RFP Respondent(s) responded to through its Proposal submission. The Transmission Provider
will track all costs, including the Transmission Provider’s time and the costs of the expert consultant(s), in administering the Competitive Developer Selection Process for each specific RFP.

The Transmission Provider shall evaluate all Proposals submitted in response to a specific RFP together and apply each of their respective proposal deposits equally to the cost of administering the Competitive Developer Selection Process for that specific RFP, except for Proposals that were found to be deficient by the Transmission Provider and were refunded 90% of the proposal deposit under Section VIII.D.10 of Attachment FF of the Tariff. Any shortfall will be billed by the Transmission Provider on a pro rata basis to each Proposal submitted in response to the RFP. Each respective RFP Respondent(s) is responsible for paying the pro rata share allocated to its Proposal(s) within thirty (30) Calendar Days of receiving notice of such shortfall. If a RFP Respondent fails to pay the expenses allocated to any of the Proposals it submitted within sixty (60) Calendar Days of the monthly invoice remittance date, those Proposals shall be disqualified from further consideration and evaluation by the Transmission Provider. Furthermore, the RFP Respondent may lose its Qualified Transmission Developer designation at the sole discretion of the Transmission Provider as they are no longer in good standing with the Transmission Provider pursuant to Section VIII.B.4.a of Attachment FF of the Tariff.

Any funds remaining after the Transmission Provider has completed the Competitive Developer Selection Process, including the issuance of refunds to Proposals that were withdrawn pursuant to Section VIII.D.8 of Attachment FF of the Tariff or deemed deficient pursuant to Section VIII.D.10 of Attachment FF of the Tariff, will be
refunded by the Transmission Provider on a *pro rata* basis to each Proposal within
seventy-five (75) Calendar Days following the designation of the Selected Proposal,
including any interest actually earned on such deposits.

**VIII.D.4. Proposal Submission Format:**

Proposals shall be submitted to the Transmission Provider prior to the Proposal Submission Deadline. Proposals shall be submitted to the Transmission Provider in accordance with the requirements specified in the RFP and Business Practices Manuals (e.g. the location, format, number of copies, use of submission templates, etc.). Proposals may be submitted in one of two different forms: (i) a Single-Developer Proposal; or (ii) a Joint-Developer Proposal. The Transmission Provider may provide template(s) for Proposal submissions and, if provided, RFP Respondents shall utilize the template(s) in submitting their Proposals. Any questions or inquiries regarding an issued RFP from the date the RFP was issued through the date that the selection report for the Competitive Transmission Project is publically posted shall be solely directed to the Transmission Provider through the contacts listed in the RFP and not to the interconnecting incumbent Member(s).

**VIII.D.4.1. Single-Developer Proposal:**

A Single-Developer Proposal is a Proposal submitted by a single RFP Respondent that would become the sole Selected Developer for the Competitive Transmission Project, should its Single-Developer Proposal be designated as the Selected Proposal by the Transmission Provider.
VIII.D.4.2. Joint-Developer Proposal:

A Joint-Developer Proposal is a Proposal submitted jointly by two or more RFP Respondents that would each be designated as Selected Developers for the Competitive Transmission Project, should the Joint-Developer Proposal be designated as the Selected Proposal by the Transmission Provider. The Joint-Developer Proposal shall only be submitted once to the Transmission Provider by one of the RFP Respondents. Each RFP Respondent of a Joint-Developer Proposal shall commit to execute the Joint Functional Control Agreement if their Proposal is selected and either: (i) acknowledge and agree to be jointly and severally liable for all aspects of the submitted Joint-Developer Proposal; or (ii) clearly specify the aspects of the Competitive Transmission Project that each RFP Respondent will be solely liable, such that all aspects of the submitted Joint-Developer Proposal are accounted for. If at least one of the RFP Respondents does not commit to being jointly and severally liable for all aspects of the submitted Joint-Developer Proposal, the existence of any grounds that would trigger Variance Analysis, including default and termination of the Selected Developer Agreement, with respect to any one RFP Respondent shall trigger Variance Analysis of the entire Joint-Developer Proposal, pursuant to Attachment FF Section IX of the Tariff.

VIII.D.4.3. Proposal Participants:
RFP Respondents may convey an interest of the Competitive Transmission Project to one or more Proposal Participant(s) at any time, provided however that (i) the RFP Respondent(s) identified and disclosed in its Proposal the Proposal Participants to which an interest will be conveyed; (ii) RFP Respondent(s) convey such an interest on substantially the same terms as disclosed in the Proposal; (iii) the Aggregate ATRR for the Competitive Transmission Project shall not exceed the Aggregate ATRR contained in the Proposal; (iv) each RFP Respondent and each Proposal Participant to which an interest will be conveyed has each executed the Joint Functional Control Agreement and provided a written agreement committing to any applicable cost-containment measures contained in the Proposal; (v) each RFP Respondent and each identified Proposal Participant has each executed the ISO Agreement, to the extent that the entity is not already a Member, but no later than the date the Competitive Transmission Facilities are energized; and (vi) each RFP Respondent and each identified Proposal Participant has listed the Competitive Transmission Facilities for which it owns or has been conveyed an ownership interest in Appendix H of the ISO Agreement (i.e. the list of transmission facilities transferred to MISO’s functional control for the purposes of planning and operation). If a Proposal identifies one or more Proposal Participants, the RFP Respondent(s) that convey such an interest shall acknowledge and agree to be responsible for all aspects of the Competitive Transmission Project, notwithstanding any default of any Proposal Participant’s obligations, whether
identified in the Proposal or under any contractual agreement(s) between the Proposal Participant and the respective RFP Respondent(s). Except as provided in Section VIII.D.5 of Attachment FF of the Tariff, the Transmission Provider shall only evaluate the capabilities and resources of the RFP Respondent(s) when evaluating a Proposal.

VIII.D.5. Proposal Content Requirements:

Each Proposal shall include all data and information required by the RFP, applicable Business Practices Manuals, and Tariff including, but not limited to, the items specified below in Section VIII.D.5 of Attachment FF of the Tariff. RFP Respondents may include additional data and information in the Proposal if they believe it is relevant and useful to the evaluation of their Proposal. If and to the extent RFP Respondents are utilizing any resources, capabilities, or competencies from an Affiliate, those resources, capabilities, or competencies shall be clearly identified in the Proposal and the RFP Respondent shall submit an “Acknowledgement of Support” signed by an authorized agent of the Affiliate expected to provide such support and the RFP Respondent. An “Acknowledgement of Support” may also be provided, but is not required, from any other entity on which RFP Respondent(s) intends to rely for such support.

VIII.D.5.1. General Proposal Information:

VIII.D.5.1.1. Identification of RFP Respondents:
Each Proposal shall clearly identify each RFP Respondent involved in the Proposal and identify a primary and secondary point of contact for the Proposal that will represent the RFP Respondent(s) in any communications and actions with the Transmission Provider.

Each Joint-Developer Proposal shall clearly and specifically identify each RFP Respondent’s respective roles and responsibilities (including the respective percentage of responsibility) to finance, construct, implement, own, operate, maintain, repair, and restore the Competitive Transmission Project in such a manner that one hundred percent (100%) of the responsibilities are identified and disclosed in the Proposal. Any agreements between or among the RFP Respondents governing the division of roles and responsibilities shall also be submitted with the Proposal.

Furthermore, each RFP Respondent involved in a Joint-Developer Proposal shall commit to executing the Joint Functional Control Agreement if their Proposal is selected and include either: (i) an agreement to be jointly and severally liable for all aspects of the Joint-Developer Proposal; or (ii) clearly specify the aspects of the Competitive Transmission Project that each RFP Respondent will be solely liable, such that all aspects of the submitted Joint-Developer Proposal are accounted for. If at least one of the RFP Respondents does not commit to being jointly and severally liable for all aspects of the Joint-Developer Proposal, the existence of any grounds that would trigger Variance Analysis, including default and termination of the Selected Developer Agreement,
with respect to any one RFP Respondent shall trigger Variance Analysis of the entire Joint-Developer Proposal, pursuant to Attachment FF Section IX of the Tariff.

VIII.D.5.1.2. Identification of Proposal Participants:

Each Proposal shall clearly identify whether the RFP Respondent(s) plan to convey an interest of the Competitive Transmission Project to one or more Proposal Participant(s). If a RFP Respondent contemplates any conveyance of interest of the Competitive Transmission Project to one or more Proposal Participant(s), it shall clearly and specifically (i) identify each Proposal Participant in the Proposal; (ii) identify the type and amount of any conveyed interest in the Proposal; (iii) provide any agreements between or among the RFP Respondent and the Proposal Participants regarding the conveyed interest in the Competitive Transmission Project; (iv) provide a written commitment from the RFP Respondent and each Proposal Participant to execute the Joint Functional Control Agreement; (v) disclose the expected timing of any such transfer of ownership or interest; (vi) provide a written agreement from the RFP Respondent and each Proposal Participant to execute the ISO Agreement, to the extent that the entity is not already a Member, but no later than the date the Competitive Transmission Facilities are energized, should the Transmission Provider designate the proposal as the Selected Proposal; and (vii) the RFP Respondent’s written agreement to be responsible for all aspects of the Competitive Transmission
Project notwithstanding, any default of any Proposal Participant’s obligations, whether identified in the Proposal or under any contractual agreement(s) between the Proposal Participant and the respective RFP Respondent(s).

VIII.D.5.2. **Project Implementation Schedule:**

Each Proposal shall contain a detailed project implementation schedule, driven by the required in-service date, for each Competitive Transmission Facility contained in the Competitive Transmission Project which shall include proposed schedules for route and site evaluation, regulatory permitting, land acquisition, engineering and design, land surveying, material procurement, construction, and commissioning/energization for all Competitive Transmission Facilities.

VIII.D.5.3. **Project Cost Estimate:**

Each Proposal shall contain a detailed project cost-estimate, based upon the reasonably descriptive facility design submitted in the Proposal, for each Competitive Transmission Facility in the Competitive Transmission Project. The cost-estimates developed by the Transmission Provider during the transmission planning process and utilized for project approval should be considered by RFP Respondents for informational purposes only and are not guaranteed to be accurate or complete in all respects. RFP Respondents shall create and rely on their own cost calculations when submitting Proposals.
VIII.D.5.4. **Estimated Annual Transmission Revenue Requirements:**

Each Proposal shall contain separate estimated annual transmission revenue requirements for each RFP Respondent and Proposal Participant involved with the Proposal beginning in the year costs would first be recovered under Attachment O and either Attachment MM or Attachment GG (including any incentives, such as to collect Construction Work In Progress (“CWIP”) in ratebase or pass-through pre-commercial expenses on a current basis), through the first forty (40) years that the Competitive Transmission Facilities included in the Competitive Transmission Project will be in service, in accordance with Attachment MM of the Tariff for Multi-Value Projects and Attachment GG of the Tariff for Market Efficiency Projects, including the supporting detail on the annual allocation factors for operations and maintenance, general and common depreciation expense, taxes other than income taxes, income taxes, and return used to estimate the annual revenue requirements.

If the Proposal involves more than one RFP Respondent or any Proposal Participants, the Proposal shall also include an estimated Aggregate ATRR beginning in the year costs would first be recovered under Attachment O and either Attachment MM or Attachment GG (including any incentives, such as to collect CWIP in ratebase or pass-through pre-commercial expenses on a current basis), through for the first forty (40) years the Competitive Transmission Facilities included in the Competitive Transmission Project will be in service representing the combined effect of each RFP Respondents’ and Proposal Participants’ individual annual transmission revenue requirements.

Effective On: March 11, 2020
VIII.D.5.5. Binding Cost Caps:

Each Proposal shall contain information and details regarding any binding cost-caps that may be offered as part of the Proposal. If any binding cost caps are submitted as part of the Proposal, each RFP Respondent and Proposal Participant offering such binding cost cap shall also provide a draft term sheet or agreement that clearly describes in detail the nature of the cost cap being proposed, including all exclusions, exceptions, conditions, enforcement mechanisms, interaction with change orders, and such other information as is specified in the applicable Business Practices Manuals, as part of the Proposal submittal.

VIII.D.5.6. Binding Cost-Containment:

Each Proposal shall contain information and details regarding any binding cost-containment measures that may be offered as part of the Proposal. If any binding cost-containment measures are submitted as part of the Proposal, each RFP Respondent and Proposal Participant submitting such binding cost-containment measures shall also provide a draft term sheet or agreement that clearly describes in detail the nature of the cost-containment measures being proposed, including all exclusions, exceptions, conditions, enforcement mechanisms, interaction with change orders, and such other information as is specified in the applicable Business Practices Manuals, as part of the Proposal submittal.

VIII.D.5.7. Financial Information:
Each Proposal shall include a detailed financing plan for the Competitive Transmission Project. The financing plan shall conform to the format(s) specified in an RFP and must contain information pertaining to the following elements, if applicable, as further explained in the applicable Business Practices Manuals:

1) A description of capital resources available to fund Competitive Transmission Project implementation costs, which demonstrate that the RFP Respondent(s) can procure capital to fund at least one hundred percent (100%) of expected project implementation costs, including any contingencies projected by the RFP Respondent(s) to show an ability to cover risks associated with foreseeable cost overruns.

For each funding source the RFP Respondent(s) shall provide a description of how much capital is available, when the funds will be obtained, and what conditions must to be met to secure the funds. At a minimum, the RFP Respondent(s) shall identify each funding source by type with a brief description and state the costs for each funding sources. If the cost of funds information is not known at the time the RFP Response is submitted, the RFP Respondent(s) may submit a range or estimate and describe the limitations that prevent this information from being provided.

2) An exhibit or a high-level narrative description of the expected cash flows between the RFP Respondent(s) and the funding sources sufficient to explain the timing, form and volume of cash flows expected between each RFP Respondent and the identified funding sources.
3) An overview schedule of significant expenditures for project implementation sufficient to demonstrate that funds will be available when needed for significant expenditures.

4) A description of immediately available funds, that the RFP Respondent(s) shall have access to in order to address unforeseen contingencies that arise during project implementation.

5) Information describing the RFP Respondent’s plan to obtain Project Financial Security within the timeframe required by the Selected Developer Agreement in sufficient detail to demonstrate that the RFP Respondent(s) reasonably expect(s) to be able to satisfy this requirement if selected as the Selected Developer.

6) In the event that an RFP Respondent intends to rely on personnel, material, technical, financial, and/or other resources from an Affiliate in its Proposal, the RFP Respondent shall provide an Acknowledgment of Support executed by such Affiliate, which lists the personnel, material, technical, financial, and/or other resources that the RFP Respondent(s) desire(s) the Transmission Provider to consider in evaluating the Proposal to demonstrate that such Affiliate is aware of the RFP Respondent’s reliance on such Affiliate’s resources and will make such resources available if the RFP Respondent’s Proposal is selected.

7) The credit ratings, if applicable, of the RFP Respondent and any Affiliate providing an Acknowledgment of Support and general financial information including audited financial statements and notes for the RFP Respondent and any parent or Affiliate providing an Acknowledgment of Support, as well as pro
forma financial statements for each calendar year until the RFP Respondent(s) expect(s) to place all project facilities into service.

8) The RFP Respondent’s financial strategy to facilitate timely replacements and rebuilds for the life of the project to demonstrate that it reasonably can be relied upon to address catastrophic destruction and normal wear and tear.

VIII.D.5.8. Reasonably Descriptive Design:

Each Proposal shall contain a reasonably descriptive facility design for each Competitive Transmission Facility included in the Competitive Transmission Project. Reasonably descriptive facility designs represent descriptions of the core attributes and features of a design, not the detailed engineering and design calculations and documents.

VIII.D.5.8.1. Design for Competitive Transmission Line Facilities:

For each Competitive Transmission Line Facility, reasonably descriptive facility design proposals must include, if applicable, and as further described by the applicable RFP, the following:

(a) The estimated length of the Competitive Transmission Line Facility in miles and the basis for the estimate;

(b) The proposed conductor type, size, and, if applicable, bundling configuration;

(c) The proposed default or typical structure design attribute(s) (e.g., steel vs. wood vs. aluminum vs. concrete, monopole vs. H-frame
vs. lattice, single circuit vs. double circuit, self-supporting vs. guyed, structural calculation assumptions, etc.) to be used for tangent, running angle, in-line dead-end, and angle dead-end structures when feasible and/or for the majority of the Competitive Transmission Line Facilities;

(d) The estimated positive sequence line impedance and pi-equivalent shunt susceptance;

(e) The calculated normal and emergency seasonal thermal loading ratings, including the basis for such calculations;

(f) The proposed type of lightning protection system to be used when feasible and/or for the majority of the Competitive Transmission Line Facilities (e.g., shield wires vs. surge arresters, etc.) and key attributes (e.g., shielding angle, arrester location and type, etc.);

(g) The proposed grounding method to be used when feasible and/or for the majority of the Competitive Transmission Line Facilities (e.g., ground rods only, counterpoise, etc.) and key attributes (e.g., targeted structure footing grounding resistance, etc.);

(h) The proposed method to address or mitigate adverse impacts of galloping conductors and/or Aeolian vibration, if any (e.g., Stockbridge dampers, special conductors, etc.);

(i) The continuous rating of any load carrying switchgear installed on the Competitive Transmission Line Facilities; and
(j) The assumed communications systems to be used for the
Competitive Transmission Line Facilities to facilitate protective
relaying (e.g., fiber optic, power line carrier, microwave, etc.).

VIII.D.5.8.2. Design for Competitive Substation Facilities:

For each Competitive Substation Facility, reasonably descriptive facility
design proposals shall include, if applicable, and as further described, by the
applicable RFP, the following:

(a) A detailed one-line diagram;

(b) The proposed protection systems including protection schemes,
any anticipated interaction with existing/other facilities and
conceptual protection system design (including backup protection
systems, if applicable). Remote system monitoring capability shall
be described with major features listed (redundancy, monitored
parameters, etc.);

(c) The detailed specifications for proposed power transformers;

(d) A description of other substation equipment items, including load
ratings, voltage ratings, fault interrupting ratings, tap data, and
impedances as applicable, where other substation equipment
includes, but is not limited to, bus sections, circuit breakers, circuit
switchers, switches, disconnects, regulating transformers, station
service transformers, series and shunt capacitors, series and shunt
reactors, static VAR compensators, DC conversion equipment, instrument transformers (metering and relaying), wave traps, and surge arresters;

(e) The proposed line terminal ratings and basis for calculation, including limiting element;

(f) The basis for load rating calculations on any equipment where nameplate continuous ratings are not used; and

(g) A description of the communication system for remote monitoring, control and data acquisition facilities, including monitoring and control points.

VIII.D.5.8.3. **Additional reasonably descriptive facility design data:**

A RFP may require submission of additional facility design data when deemed necessary by the Transmission Provider. Proposals may also include additional facility data when deemed necessary by RFP Respondents, including but not limited to, optional facility design data listed in the Business Practices Manuals, which may be considered by the Transmission Provider in the evaluation and selection of Proposals.

VIII.D.5.9. **Project Implementation:**

Each Proposal shall contain a description of existing and/or planned project implementation capabilities, relative to the applicable locations and jurisdictions where
the Competitive Transmission Facilities will be located, to be used by the RFP Respondent(s) to perform the following tasks, as applicable and as further described in the applicable RFP:

(a) Project management;
(b) Routing/siting evaluation studies for Competitive Transmission Facilities;
(c) Regulatory permitting;
(d) Right-of-way and land acquisition for Competitive Transmission Facilities;
(e) Engineering and surveying required for Competitive Transmission Facilities;
(f) Material procurement for Competitive Transmission Facilities;
(g) Construction of Competitive Transmission Facilities;
(h) Commissioning/energization of Competitive Transmission Facilities; and
(i) Safety during construction of the Competitive Transmission Facilities.

VIII.D.5.9.1. Additional Project Implementation Capabilities Data:

A RFP may require the submission of additional data, when deemed necessary by the Transmission Provider, related to the policies, processes, methods, capabilities, experience, and past performance the RFP Respondent(s) Proposals may also include additional information regarding project implementation capabilities when deemed necessary by RFP Respondents, including but not limited to, existing capabilities and past experience regarding
project implementation, which may be considered by the Transmission Provider in the evaluation and selection of Proposals.

VIII.D.5.10. Operations and Maintenance:

Each Proposal shall contain a description of existing and/or planned operations, maintenance, repair, and replacement capabilities, relative to the locations and applicable jurisdictions where the Competitive Transmission Facilities will be located, to be used by the RFP Respondent(s) to perform the following tasks, as applicable and as further described in the RFP:

(a) Forced outage response for transmission line circuits and substations;
(b) Switching for transmission line circuits and substations;
(c) Emergency repair and testing for transmission line circuits and substations;
(d) Preventative and/or predictive maintenance for transmission line circuits and substations, including vegetation management and equipment testing;
(e) Maintenance and management of spare parts, spare structures, and/or spare equipment inventories for substations and/or transmission lines, including description of any agreements to share spare equipment, spare parts, and/or spare structures with other transmission entities;
(f) Real-time operations monitoring and control capabilities, if the Competitive Transmission Project contains one or more Competitive Substation Facilities;
(g) Major facility replacements or rebuilds required as a result of catastrophic destruction or natural aging through normal wear and tear, including financial strategy to facilitate timely replacements and/or rebuilds; and

(h) Safety during operations and maintenance of the Competitive Transmission Facilities.

VIII.D.5.10.1. Local Balancing Authority:

Each Proposal shall contain a description regarding the RFP Respondent’s plan for incorporating the Competitive Transmission Facilities into a Local Balancing Authority Area.

VIII.D.5.10.2. Other Operations and Maintenance Capabilities Data:

A RFP may require the submission of additional data related to the policies, processes, methods, capabilities, experience, and past performance of the RFP Respondents regarding operations, maintenance, repair, and replacement when deemed necessary by the Transmission Provider.

Proposals may also include additional information regarding operations, maintenance, repair, and replacement capabilities when deemed necessary by RFP Respondents, including but not limited to, existing capabilities and past experience regarding operations, maintenance, repair and replacement, which may be considered by the Transmission Provider in the evaluation and selection of Proposals.
VIII.D.5.11. Participation in the Transmission Planning Process:

While not required, RFP Respondents and Proposal Participants who desire to have such participation considered in the evaluation of their Proposal shall state whether any RFP Respondent or Proposal Participant, or Affiliate of either, was identified by the Transmission Provider eligible to receive planning participation credit for such Competitive Transmission Project for which the Proposal is submitted. Any Proposal stating that an Affiliate of a RFP Respondent or Proposal Participant earned the planning participation credit shall also identify and describe the relationship between the RFP Respondent or Proposal Participant to the Affiliate.

VIII.D.5.12. Disclosure of Assignments or Potential Assignments:

Proposals shall include a declaration stating whether or not the RFP Respondent(s) will seek to assign the Competitive Transmission Facilities, Competitive Transmission Project, or Selected Developer Agreement pursuant to Article 14 of the pro forma Selected Developer Agreement. For all proposed assignments except assignments to Project Finance Entities pursuant to Article 14.4 of the Selected Developer Agreement, such declaration shall include the identity of the proposed assignee(s) and the material terms, including timing, of such proposed assignment.

VIII.D.5.13. Proposal Attestation:
Each RFP Respondent shall include an affidavit as part of the Proposal submission, signed by an officer of its organization, attesting that: (i) it understands that the Transmission Provider’s evaluation of Proposals and designation of a Selected Proposal is governed by the Tariff and the Business Practices Manuals; (ii) it agrees to be bound by the Tariff and to follow the applicable Business Practices Manuals; (iii) it has submitted the Proposal in good faith; (iv) the information submitted by the organization in the Proposal is true to the best of the RFP Respondent’s knowledge and belief; (v) it has complied with all Applicable Laws, and Regulations and Good Utility Practice in preparing the Proposal; and (vi) if selected, the Respondent agrees to be bound by its Proposal. Furthermore, each Proposal Participant shall include an affidavit as part of the Proposal signed by an officer of its organization attesting that: (i) the Aggregate ATRR for the Competitive Transmission Project and any required financial information about the Proposal Participant and its inputs into the Aggregate ATRR that has been submitted by the organization is true to the best of the Proposal Participant’s knowledge and belief; and (ii) either (a) that it agrees to execute the ISO Agreement and identify the Competitive Transmission Facilities associated with the Competitive Transmission Project in Appendix H of the ISO Agreement prior to closing on its conveyed interest should the Transmission Provider designate the Proposal as the Selected Proposal; or (b) prior to such closing it will demonstrate that it has already executed the ISO Agreement and it agrees to identify the Competitive Transmission Facilities associated with the Competitive Transmission Project in Appendix H of the ISO Agreement.
VIII.D.6. Additional Data Requests:

If, during the evaluation of Proposals, the Transmission Provider determines that additional information is required to evaluate the Proposals, the Transmission Provider will request, in writing, the additional data from all RFP Respondents, along with the timeframe that this data must be submitted. If the additional data is not submitted within the specified timeframe, the Proposal be deemed invalid and will not be evaluated or considered further by the Transmission Provider. This timeframe shall not be less than ten (10) Business Days from when the Transmission Provider issues the additional data request. This data request will not extend the evaluation timeframe defined in Section VIII.E.2 of Attachment FF of the Tariff.

VIII.D.7. Proposal Clarifications:

The Transmission Provider will have the right, but not the obligation, during the Competitive Developer Selection Process described in Section VIII of Attachment FF of the Tariff, to request a RFP Respondent(s) to provide clarifications to its submitted Proposal(s). The RFP Respondent(s) shall be responsible for any clarifications the Transmission Provider requires that relates to the Proposal Participants. In the event the RFP Respondent agrees to provide said clarification(s), the RFP Respondent shall provide said clarification(s) within five (5) Business Days of the Transmission Provider’s request. If the Transmission Provider accepts the RFP Respondent’s clarification(s), said clarification(s) shall immediately become a part of the submitted Proposal; or upon the Transmission Provider’s request, the RFP Respondent shall immediately update its
Proposal to reflect the accepted clarification(s). In the event that the RFP Respondent declines to provide the requested clarification(s), the Transmission Provider shall evaluate the Proposal without clarification.

**VIII.D.8. Withdrawing Submitted Proposals:**

Prior to the Proposal Submission Deadline, a RFP Respondent may withdraw a Proposal that was submitted to the Transmission Provider by informing the Transmission Provider as soon as practical in writing. Any deposits submitted to the Transmission Providers associated with the withdrawn Proposal will be returned in full and the withdrawn Proposal will not be considered or evaluated by the Transmission Provider.

A RFP Respondent may withdraw its submitted Proposal after the Proposal Submission Deadline by informing the Transmission Provider in writing, as soon as practical, but no later than such time that the Transmission Provider publicly announces the Selected Proposal for the RFP. Upon receiving a withdrawal notification, the Transmission Provider will stop its evaluation and consideration of the Proposal. A withdrawn Proposal will not relieve the RFP Respondent from its obligations for the *pro rata* costs associated with the full evaluation period nor will the RFP Respondent be afforded any refund other than those funds remaining once the Competitive Developer Selection Process has been completed for the RFP.

**VIII.D.9. Confidential Treatment of Proposals:**

The Transmission Provider will treat information and documents, or portions of
documents, received from RFP Respondents and/or Proposal Participants, whether received as Part of a Proposal, a response to a request for clarification or additional information pursuant to Sections VIII.D.6 and VIII.D.7 of this Attachment FF, or otherwise, as either Project confidential information pursuant to Section VIII.D.9.a, or non-confidential information pursuant to Section VIII.D.9.b, as set forth below.

**VIII.D.9.a  Confidential Information:**

Except as provided in Section VIII.D.9.d, the Transmission Provider will not, without the prior written consent of the respective RFP Respondent and/or the Proposal Participant, publicly disclose or share any of the following confidential information with any individual except for employees of the Transmission Provider or an independent contractor of the Transmission Provider who require access to such information to perform their duties and have executed the Transmission Provider’s non-disclosure and/or CEII agreement:

(i) All detailed breakdowns of costs, including but not limited to, the itemized costs for labor and materials;

(ii) All details of an RFP Respondent and/or Proposal Participant’s financing arrangements;

(iii) All detailed design, routing, siting, or specialty construction techniques; and

(iv) Any other information or portions of documents that are clearly labeled and specifically designated as "CONFIDENTIAL,” except for: (1) the items specified in Section VIII.D.9.b of this Attachment FF; and (2) information and/or items
which the Transmission Provider is otherwise required to make publically available.

**VIII.D.9.b Non-Confidential Information:**

The following categories of information shall not be considered confidential or maintained as Confidential Information:

(i) The identity of RFP Respondents and Proposal Participants;

(ii) The high-level design for Competitive Transmission Facilities;

(iii) The total estimated cost of the Competitive Transmission Project;

(iv) The estimated forty (40) year Annual Transmission Revenue Requirement (“ATRR”);

(v) Information relating to any cost-containment measures, cost caps, and rate-incentives;

(vi) Information regarding the proposed in-service dates of the Competitive Transmission Facilities;

(vii) The final evaluation score assigned to each Proposal, with the names of the RFP Respondents and Proposal Participants redacted or masked;

(viii) All timetables and milestones agreed to between a Selected Developer(s) and the Transmission Provider in the Selected Developer Agreement;

(ix) All publically available information;

Effective On: March 11, 2020
(x) Any information for which a RFP Respondent or Proposal Participant has provided consent to release; and

(xi) Any information the Transmission Provider is required to make publicly available pursuant to Section VIII.D.9.d of this Attachment FF.

VIII.D.9.c Use of Non-Confidential Information—Post-Evaluation Report:

The Transmission Provider may use the non-confidential information of RFP Respondents and Proposal Participants to prepare the public post-evaluation selection report for a Competitive Transmission Project required by Section VIII.E.2 of this Attachment FF as is reasonably necessary to explain the basis for the Transmission Provider’s selection of a Selected Developer. In all cases, the Confidential Information and non-confidential information that was not disclosed in the post-evaluation selection report shall not otherwise be disclosed by the Transmission Provider except as required by Section VIII.D.9.d of this Attachment FF.

i. Use of Selected Developer Non-Confidential Information

The Transmission Provider may use the non-confidential information of the RFP Respondent(s) and Proposal Participants whose Proposal is selected to prepare a post-evaluation selection report that explains the basis for the Transmission Provider’s selection of the Selected Proposal pursuant to the comparative analysis required by Sections VIII.E, VIII.E.1, VIII.E.1.1, VIII.E.1.2, VIII.E.1.3, and VIII.E.1.4 of this Attachment FF to the Tariff. The Transmission Provider may use such information to the extent reasonably necessary to explain why the selection of the Selected Proposal is
proper based on the comparative analysis required by the Tariff, including discussions of features of the Selected Proposal that the Transmission Provider determined to be important in selecting the Selected Proposal.

ii. **Use of Non-Confidential Information of RFP Respondents and Proposal Participants whose Proposals are Not Selected**

The Transmission Provider may disclose the non-confidential information of RFP Respondents and Proposal Participants whose Proposals were not selected as the Selected Proposal only to the extent reasonably necessary to explain why the selection of the Selected Proposal is proper based on the comparative analysis required by Sections VIII.E, VIII.E.1, VIII.E.1.1, VIII.E.1.2, VIII.E.1.3, and VIII.E.1.4 of this Attachment FF to the Tariff. The Transmission Provider may disclose the non-confidential information contained in Section VIII.D.9.b(i) and VIII.D.9.b(ix)-(xi) without masking the identity(ies) of the entity(ies) to whom such non-confidential information pertains. The Transmission Provider may disclose the non-confidential information contained in Section VIII.D.9.b(ii)-(viii) for RFP Respondents and Proposal Participants whose Proposals were not selected as the Selected Proposal but must mask the identities of such parties, either through aggregation or the redacting of names, as appropriate for comparative purposes.

**VIII.D.9.d Other Disclosures of Proposal Information:**
The Transmission Provider will disclose any information submitted in Proposals or in response to a request for clarifications and or additional information, whether confidential or non-confidential, that it is otherwise required by or subject to another Tariff provision, Commission rule or order, or court order, or as ordered by state or federal agencies.

VIII.D.10. Proposal Validation – Review for Completeness:

The Transmission Provider will review each submitted Proposal for completeness and validate whether the RFP Respondent(s) is/are listed as a Qualified Transmission Developer. Within thirty (30) Calendar Days of the Proposal Submission Deadline, the Transmission Provider will notify each RFP Respondent if the Transmission Provider identifies that their Proposal is incomplete. Except when any of the RFP Respondents involved in a Proposal were not listed as a Qualified Transmission Developer on the date the Proposal was submitted, the RFP Respondent(s) will have a single Proposal Cure Period of ten (10) Business Days from the date of such notification to submit the requested information to cure any deficiencies in their Proposal. Proposals that are not complete at the end of the Proposal Cure Period will be deemed invalid and will not be evaluated or considered further by the Transmission Provider. Such Proposals will be refunded ninety percent (90%) of the initial proposal deposit specified in Section V.III.D.2 of Attachment FF of the Tariff, if such initial proposal deposit was submitted to the Transmission Provider. Proposals that include a RFP Respondent that was not listed as a Qualified Transmission Developer on the date the Proposal was submitted will also be deemed invalid and will not be evaluated or considered further by the Transmission Provider. The
Transmission Provider will provide a written explanation to RFP Respondents identifying why the Proposal has been disqualified.

VIII.D.11. Posting List of Completed Proposals:

The Transmission Provider will post a list of the completed Proposals submitted in response to an issued RFP on its website at the end of the Proposal Cure Period.

VIII.D.12. RFP Respondent’s Qualified Transmission Developer status:

RFP Respondents are required to maintain their status as a Qualified Transmission Developer throughout the duration of the Competitive Developer Selection Process. In the event that the Transmission Provider determines that an RFP Respondent has ceased to be a Qualified Transmission Developer, the Transmission Provider shall send a written notice of such fact to the RFP Respondent, which notice shall state the reason(s) for loss of Qualified Transmission Developer status. The RFP Respondent shall have thirty (30) Calendar Days from the Transmission Provider’s notification of loss of Qualified Transmission Developer status to remove the grounds for such loss of status. Any Proposal involving a RFP Respondent that ceases to be a Qualified Transmission Developer will be deemed invalid and will not be evaluated or considered further by the Transmission Provider if such failure remains uncured more than thirty (30) Calendar Days from the date of the notice to the RFP Respondent. A Proposal shall not be deemed invalid if the RFP Respondent cures the loss of Qualified Transmission Developer status within the thirty (30) Calendar Day period. If one or more RFP Respondents who have submitted a Joint-Developer Proposal pursuant to Section VIII.D.4.2 is
disqualified after the cure period, the Joint-Developer Proposal shall be disqualified unless all of the RFP Respondents have acknowledged and agreed to be jointly and severally liable for all aspects of the submitted Joint-Developer Proposal. If all RFP Respondents submitting a Joint Developer Proposal have acknowledged and agreed to be jointly and severally liable for all aspects of the submitted Joint-Developer Proposal, then the remaining RFP Respondents shall assume the obligations of the RFP Respondent that has failed to cure a loss of Qualified Transmission Developer status and the Joint-Developer Proposal shall not be disqualified. The Transmission Provider will provide a written explanation to RFP Respondents identifying why the Proposal has been disqualified or, in the event that all RFP Respondents involved in a Joint-Developer Proposal have acknowledged and agreed to be jointly and severally liable for all aspects of the submitted Joint-Developer Proposal, stating that the remaining RFP Respondents must assume the obligations of the RFP Respondent that has lost its Qualified Transmission Developer status.

VIII.E. EVALUATION OF PROPOSALS

The Transmission Provider will have one hundred and sixty-five (165) Calendar Days from the Proposal Submission Deadline to evaluate all completed Proposals. Only those Proposals that were submitted prior to the Proposal Submission Deadline and cured of any deficiencies pursuant to Section VIII.D.10 of Attachment FF of the Tariff and otherwise have not been withdrawn or deemed invalid will be evaluated by the Transmission Provider based on a comparative analysis using the evaluation criteria below and as further described in the Business Practices Manuals and applicable RFP. Specific methods used to evaluate various aspects of a Proposal shall be described in the Business Practices Manuals. This comparative analysis
evaluation will be conducted by Transmission Provider and/or independent consultants competent in the areas of finance, transmission facility design, transmission project implementation, and transmission operations, maintenance, repair, and replacement. In conducting the comparative analysis evaluation of Proposals, the Transmission Provider and any independent expert consultants will be overseen by the Competitive Transmission Executive Committee, which will have the exclusive and final authority to determine Selected Proposal. The Transmission Provider may decline to accept any or all Proposals that do not meet the Tariff’s requirements for the project classification in question or will not sufficiently address the Transmission Issue(s) the RFP was intended to address. If no Proposals are received from Qualified Transmission Developers or selected by the Transmission Provider, the Competitive Transmission Project will be assigned to the applicable Member(s), as defined below:

(a) Ownership and the responsibility to construct facilities which are connected to a single Member’s system belong to that Member;

(b) Ownership and the responsibilities to construct facilities which are connected between two (2) or more Members’ facilities belong equally to each Member, unless such Members otherwise agree; and

(c) Ownership and the responsibility to construct facilities which are connected between a Member(s)’ system and a system or systems that are not part of the Transmission Provider belong to such Members(s) unless the Member(s) and the non-Transmission Provider party or parties otherwise agree.

VIII.E.1. Proposal Evaluation Criteria:
In evaluating Proposals, the Transmission Provider will consider the following general aspects and weighting for each Competitive Transmission Project evaluated:

(a) **Competitive Transmission Line Projects:**

The following weights will be applied to Competitive Transmission Projects containing only Competitive Transmission Line Facilities:

(i) Cost and reasonably descriptive facility design quality: 30%

(ii) Project implementation capabilities: 35%

(iii) Operations, maintenance, repair, and replacement capabilities: 30%

(iv) Transmission Provider planning process participations: 5%

(b) **Competitive Substation Projects:**

The following weights will be applied to Competitive Transmission Projects containing only Competitive Substation Facilities:

(i) Cost and reasonably descriptive facility design quality: 30%

(ii) Project implementation capabilities: 30%

(iii) Operations, maintenance, repair, and replacement capabilities: 35%

(iv) Transmission Provider planning process participations: 5%

(c) **Mixed Competitive Transmission Facility Projects:**

The following weights will be applied to Competitive Transmission
Projects containing both Competitive Transmission Line Facilities and Competitive Substation Facilities:

(i) Cost and reasonably descriptive facility design quality: 35%

(ii) Project implementation capabilities: 30%

(iii) Operations, maintenance, repair, and replacement capabilities: 30%

(iv) Transmission Provider planning process participations: 5%

VIII.E.1.1. Cost and Reasonably Descriptive Facility Design:

When considering cost and reasonably descriptive facility design quality, the Transmission Provider shall evaluate, at a minimum and to the extent applicable, the following:

(a) Estimated project cost;

(i) Estimated project cost(s), as set forth in Section VIII.D.5.3 of this Attachment FF;

(ii) Cost estimate rigor, which shall include financial assumptions and supporting information to clearly demonstrate a thorough analysis in support of the cost estimate;

(iii) Binding cost cap and/or cost-containment measures as described in Sections VIII.D.5.5 and VIII.D.5.6 of this Attachment FF if a Proposal contains any such measures.
relating to the estimated project cost.

(b) Estimated annual transmission revenue requirement:

(i) The estimated annual transmission revenue requirement(s), as described in Section VIII.D.5.4 of this Attachment FF;

(ii) Estimated annual transmission revenue requirement rigor, which shall include financial assumptions and supporting information to clearly demonstrate a thorough analysis in support of the estimated annual transmission revenue requirement; and

(iii) Binding cost cap and/or cost-containment measures as described in Sections VIII.D.5.5 and VIII.D.5.6 of this Attachment FF if a Proposal contains any such measures relating to the estimated annual transmission revenue requirement(s).

(c) Electrical design:

(i) Reasonably descriptive facility electrical design quality; and

(ii) Reasonably descriptive facility electrical design rigor, which shall include facility studies performed and other specific supporting data that clearly documents and supports consideration and attention given to the proposed reasonably descriptive facility electrical designs. For
reasonably descriptive facility electrical design, the
Transmission Provider shall consider the items set forth in
Sections VIII.D.5.8.1 through VII.D.5.8.3 of this
Attachment FF, as each is applicable to the electrical design
of Competitive Transmission Facilities discussed in the
Proposal.

(d) Structural design:

(i) Reasonably descriptive facility structural design quality;

and

(ii) Reasonably descriptive facility structural design rigor,

which shall include facility studies performed and other
specific supporting data that clearly documents and
supports consideration and attention given to the proposed
reasonably descriptive facility structural designs. For
reasonably descriptive facility structural design, the
Transmission Provider shall consider the items set forth in
Sections VIII.D.5.8.1 through VII.D.5.8.3 of this
Attachment FF, as each is applicable to the structural
design of Competitive Transmission Facilities discussed in
the Proposal.

VIII.E.1.2. Project Implementation Capabilities:
When considering project implementation capabilities, the Transmission Provider shall evaluate, at a minimum and to the extent applicable, the existing and/or planned capabilities, competencies, and processes regarding the following project implementation categories relative to the locations and jurisdictions where the Competitive Transmission Facilities associated with the Competitive Transmission Project are to be located, including:

(a) Project schedule and management:
   (i) Project implementation schedule, as required by Section VIII.D.5.2 of this Attachment FF; and
   (ii) Project management;

(b) Regulatory permitting and route/site evaluation:
   (i) Regulatory permitting; and
   (ii) Route and site evaluation;

(c) Right of way and land acquisition;

(d) Construction;
   (i) Engineering and surveying;
   (ii) Material procurement;
   (iii) Facility construction; and
   (iv) Final facility commissioning;

(e) Previous applicable experience and demonstrated ability;

(f) Financing and capital resource plan;
(g) The information and documentation from the detailed financing plan required by Sections VIII.D.5.7(1)-(7) of this Attachment FF; and

(h) Safety, as described in Section VIII.D.5.10(h) of this Attachment FF.

VIII.E.1.3. Operations, Maintenance, Repair, and Replacement Capabilities:

When considering operations, maintenance, repair and replacement capabilities, the Transmission Provider shall evaluate, at a minimum and to the extent applicable, the existing and/or planned capabilities, competencies, and processes regarding the following operations and maintenance categories relative to the locations and jurisdictions where the Competitive Transmission Facilities associated with the Competitive Transmission Project are to be located:

(a) Normal operations:

   (i) Real-time operations monitoring and control;

   (ii) Switching; and

   (iii) Plan for incorporating the Competitive Transmission Facilities into a Local Balancing Authority Area as required by Section VIII.D.5.10.1 of this Attachment FF.

(b) Non-normal operations:

   (i) Forced outage response;

   (ii) Emergency repair;
(iii) Capabilities to perform major facility replacements or rebuilds required to restore the Competitive Transmission Facilities as a result of catastrophic destruction, as required by Section VIII.D.5.10(g) of this Attachment FF; and

(iv) Financial capabilities and strategy to facilitate major facility replacements or rebuilds required to restore the Competitive Transmission Facilities as a result of catastrophic destruction, as required by Section VIII.D.5.7(8) of this Attachment FF.

(c) Maintenance activities:

(i) Spare parts;

(ii) Preventative and/or predictive maintenance and testing;

(iii) Capabilities to perform major facility replacements or rebuilds required as a result of natural aging through normal wear and tear, as required by Section VIII.D.5.10(g) of this Attachment FF; and

(iv). Financial capabilities and strategy to facilitate major facility replacements or rebuilds required as a result of normal wear and tear, as required by Section VIII.D.5.7(8) of this Attachment FF; and

(d) Safety, as described in Sections VIII.D.5.10(h) of this Attachment.

VIII.E.1.4. Transmission Provider Planning Process Participation:

Effective On: March 11, 2020
Within thirty (30) Calendar Days after the date, the Transmission Provider Board approves an MTEP containing a Competitive Transmission Project, MISO will publicly post a list on its website identifying the entities that have meet the requirements to earn planning participation for such Competitive Transmission Project. Such determination shall be based on relevant planning studies performed by such entities and the results supplied to the Transmission Provider during the planning process, as well as documentation of transmission project ideas submitted by such entities to the Transmission Provider to address the same Transmission Issues being addressed by the Competitive Transmission Project for which an RFP will be issued. In evaluating Proposals, the Transmission Provider shall determine whether any RFP Respondent or Proposal Participant (including Affiliates) qualified to receive such credit. Credit shall be awarded for a Proposal where any RFP Respondent or Proposal Participant named in such Proposal, or an affiliate of either, qualifies to receive such credit.

VIII.E.2. **Proposal Selection and Posting Selection Report:**

The Transmission Provider will post the name of the Selected Developer(s) on its website within one hundred and sixty-five (165) Calendar Days of the Proposal Submission Deadline. Upon posting of the name of the Selected Developer(s), the obligation of RFP Respondents not named as the Selected Developer or notified that they have been designated as the Alternate Selected Developer(s) pursuant to Section VIII.H of this Attachment FF to hold their Proposals open shall cease. Within thirty (30)
Calendar Days after the designation of a Selected Proposal and the Selected Developer(s) for a Competitive Transmission Project, the Transmission Provider will post on its website a report in which it explains the basis for designating the Selected Proposal and Selected Developer(s) for each Competitive Transmission Project. The report will set forth the results of the comparative analysis undertaken by the Transmission Provider, the basis for Transmission Provider’s decision(s), and the date(s) by which state approval(s) to construct must be achieved based upon when construction must begin to timely meet the Transmission Issue(s) to be addressed by the Competitive Transmission Project and taking into account the project implementation schedule(s) provided by the Selected Developer(s) in its Selected Proposal.

VIII.E.3. Proposal Selection Dispute Resolution:

Any disputes regarding the developer selection will be referred to the Dispute Resolution Process under Attachment HH of this Tariff.

VIII.F. SELECTED DEVELOPER AGREEMENT

RFP Respondents identified in a Selected Proposal shall execute the pro forma Selected Developer Agreement, or request the submission of an unexecuted Selected Developer Agreement with the Commission, no later than sixty (60) Calendar Days after the Transmission Provider posted the name of the Selected Developer(s) on its website. The Selected Developer Agreement establishes the terms and conditions under which the Selected Developer will construct and implement the Competitive Transmission Facilities specified in its Selected
Proposal. The Selected Developer Agreement shall be executed by the Selected Developer and the Transmission Provider, by an authorized officer or equivalent official with the authority to bind their respective organizations. The Selected Developer(s) for each Competitive Transmission Project, including where the Selected Developer is a Member, will be required to sign the Selected Developer Agreement or request it be submitted unexecuted with the Commission. All executed Selected Developer Agreements that conform to the pro forma template in Appendix 1 of Attachment FF of the Tariff, will be reported to the Commission in the Transmission Provider’s next Electric Quarterly Report after the executed Selected Developer Agreement becomes effective on a non-provisional basis. Any request to file the Selected Developer Agreement unexecuted shall be filed with the Commission, together with an explanation of any matters as to which the Selected Developer and the Transmission Provider disagree, as soon as practicable, but no later than fifteen (15) Calendar Days after receiving the request to file the Selected Developer Agreement unexecuted. An unexecuted Selected Developer Agreement should contain terms and conditions deemed appropriate by the Transmission Provider for the Competitive Transmission Project. If the Selected Developer and the Transmission Provider agree to proceed with design, procurement, and construction of the Competitive Transmission Project under the agreed-upon terms of the unexecuted Selected Developer Agreement, they may proceed pending Commission action.

If the Selected Developer Agreement contains information determined to be confidential pursuant to Section VIII.D.9 of Attachment FF of the Tariff, the Transmission Provider will post and/or file publicly only a redacted version of the Selected Developer Agreement.
VIII.G. OBLIGATION TO CONSTRUCT COMPETITIVE TRANSMISSION PROJECT

The Selected Developer(s) will assume the responsibility and obligation to construct the Competitive Transmission Facilities it is selected to construct. If the Selected Developer(s) is/are financially incapable of carrying out its construction responsibilities, alternate construction arrangements shall be identified. Depending on the specific circumstances, such alternate arrangements shall include solicitation of Transmission Owners to take on financial and/or construction responsibilities. If the delay in construction adversely affects the Transmission System reliability, the Transmission Provider shall coordinate with and support the affected Transmission Owner(s) regarding any mitigation measures that may be required by the Applicable Reliability Standards.

However, in the event that a MTEP Appendix A Competitive Transmission Project approved by the Transmission Provider Board is being challenged through the Dispute Resolution process under Attachment HH of the Tariff or a court proceeding, the obligation of the Selected Developer(s) to build the specific Competitive Transmission Project (subject to required approvals) is waived until the Competitive Transmission Project emerges from the Dispute Resolution process or court proceedings as an approved Competitive Transmission Project. In the event that selection of the Selected Developer to construct a project is being challenged through the Dispute Resolution Process under Attachment HH of the Tariff, the obligation of the Selected Developer to construct the project pursuant to the Selected Developer Agreement is not waived.
VIII.H. ALTERNATE SELECTED DEVELOPER(S)

At the same time that the Transmission Provider posts the name of the Selected Developer(s) on its website, as specified in Attachment FF Section VIII.E.2, the Transmission Provider shall also notify the Alternate Selected Developer(s) that it has been selected as the Alternate Selected Developer. Upon this notification, each Alternate Selected Developer shall be required to hold their Proposal open for acceptance by the Transmission Provider for a period of one hundred (100) Calendar Days thereafter, unless released earlier by the Transmission Provider. The Transmission Provider shall release the Alternate Selected Developer from its obligation to hold its Proposal open promptly upon the Selected Developer(s) satisfying all conditions necessary for the Selected Developer Agreement to become effective.

If the Selected Developer does not execute the Selected Developer Agreement or request that the Selected Developer Agreement be filed unexecuted, and provide the required Project Financial Security within ninety (90) Calendar Days after the Transmission Provider posted the name of the Selected Developer(s) on its website, the Transmission Provider shall proceed to designate the Alternate Selected Developer(s) as the Selected Developer(s) for the Competitive Transmission Project. Should this be required, the Transmission Provider shall notify the Alternate Selected Developer(s) and publicly announce the Alternate Selected Developer(s) as the Selected Developer(s). The Alternate Selected Developer(s) shall then be required to assume the obligations of the Selected Developer for the Competitive Transmission Project and shall have the same period of time to execute or request the unexecuted filing of the Selected Developer Agreement and provide the required Project Financial Security as the originally designated Selected Developer(s).
VIII.I OBLIGATION TO NEGOTIATE INTERCONNECTION AGREEMENTS

The Selected Developer(s) and any Transmission Owner(s) whose facilities will interconnect to the Competitive Transmission Facilities that the Selected Developer is obligated to construct shall each take commercially reasonable efforts to finalize and execute any required Transmission-to-Transmission Interconnection Agreements at least one hundred and twenty (120) calendar days before the scheduled in service date of the Competitive Transmission Project.

IX. VARIANCE ANALYSIS

After the Transmission Provider Board approves an Eligible Project for inclusion in Appendix A of the MTEP, certain circumstances or events may significantly affect the cost, schedule, and or the ability of Selected Developers and Transmission Owners to complete and place into service the facilities comprising an Eligible Project for which they are responsible as specified in the MTEP. Under these circumstances or events, the Transmission Provider may need to perform a Variance Analysis in order to further understand the reasons for such circumstances or events and to evaluate any potential impacts that they may have on the successful completion of the Project or on the Transmission System.

IX.A. Applicability and Scope of Variance Analysis
The provisions set forth in this Section IX of Attachment FF are only applicable to Eligible Projects (and the facilities that comprise these projects) approved by the Transmission Provider Board for inclusion in Appendix A of the MTEP after December 1, 2015. These provisions become applicable upon: (i) the date the Transmission Provider Board approves the respective Eligible Project for facilities that are not Competitive Transmission Facilities; or (ii) the date the Selected Developer Agreement has been executed or filed unexecuted with the Commission for Competitive Transmission Facilities. Facilities comprising Eligible Projects shall remain subject to the provisions of Attachment FF Section IX until such facilities have been placed into service and placed under the Transmission Provider’s functional control.

IX.B. Variance Analysis Governance

The Competitive Transmission Executive Committee shall have the exclusive and final authority to oversee and implement Variance Analysis, including the decision to implement any of the appropriate Variance Analysis Outcomes pursuant to Section IX.E of this Attachment FF. Such exclusive and final authority shall: (1) be subject to the Dispute Resolution provisions of Section IX.G of this Attachment FF and to Attachment HH; and (2) shall not prejudice any rights or obligations the Transmission Provider, Selected Developer(s), and incumbent Transmission Owner(s) have to make filings before the Commission.

IX.C. Grounds for Variance Analysis

The following circumstances or events shall trigger the Transmission Provider’s Variance Analysis for facilities included in an Eligible Project.

Effective On: March 11, 2020
IX.C.1. Cost Increase

If the Transmission Provider determines that the estimated cost to complete an entity’s portion of an approved Eligible Project (e.g. the competitively bid facilities of the Competitive Transmission Project or the facilities assigned to an incumbent Transmission Owner included in an Eligible Project(s) either has exceeded or is projected to exceed the Baseline Cost Estimate as set forth in Section IX.C.1.1 by twenty-five percent (25%) or more, the Transmission Provider shall initiate a Variance Analysis.

The Transmission Provider will not consider any portion of cost increases under this section to the extent that the Selected Developer has agreed to internalize such costs through an accepted binding cost cap and/or cost-containment mechanism(s). However in the event that the accepted binding cost caps and/or binding cost-containment mechanism(s) are applied and the remaining estimated cost increase still has exceeded or is projected to exceed the threshold, the Transmission Provider shall initiate a Variance Analysis.

IX.C.1.1. Baseline Cost Estimate

The Baseline Cost Estimate for an entity’s portion of an Eligible Project shall be set as follows: (i) for Competitive Transmission Facilities the Baseline Cost Estimate shall be the project cost estimate provided in the Selected Proposal as agreed to in the Selected Developer Agreement;

Effective On: March 11, 2020
and (ii) for the facilities assigned to an incumbent Transmission Owner
included in the Eligible Project not eligible for the Competitive
Transmission Process, as described in Attachment FF Section VIII.A of
the Tariff, the Baseline Cost Estimate shall be the project cost estimate
provided by the respective Transmission Owner through their status
update provided upon achieving Milestone #2A pursuant to the Business
Practices Manuals. The Baseline Cost Estimate for Competitive
Transmission Facilities shall be adjusted appropriately based upon any
approved change orders.

IX.C.2. Schedule Delays

If the Transmission Provider determines that the in-service date of
facilities included in an approved Eligible Project has been or is projected to be
delayed beyond the in-service date as established in MTEP Appendix A, the
Transmission Provider shall meet with the Selected Developer(s), incumbent
Transmission Owner(s), if applicable, interconnecting Transmission Owner(s),
and any entities responsible for facilities to which the delayed facilities
interconnect to discuss whether such delay creates a significant risk of one or
more NERC reliability standards violations as well as any other material issues,
including service obligations, economic or public policy needs that may be
jeopardized as a result of the delay. If any such issues are identified, the
Transmission Provider shall, in consultation with these entities, develop a plan, as
necessary, to address potential NERC reliability standards violations as well as any other issues that may be of material concern arising from the delay of the transmission facilities.

If the potential NERC reliability standards violations, or other issues of material concern, cannot be adequately addressed by the entity responsible for constructing the delayed facilities, the Transmission Provider will take appropriate action; including but not limited to, determining that Reassignment is necessary to complete the transmission solution as set forth in Section IX.E.3 of this Attachment FF.

IX.C.3. Default under the Selected Developer Agreement

If the Transmission Provider determines that a Selected Developer is in Default under a Selected Developer Agreement for an Eligible Project pursuant to the terms thereof.

IX.C.4 Inability to Complete Facilities

If the Transmission Provider makes a determination that a Selected Developer or an incumbent Transmission Owner will be unable to complete facilities for which it has been designated to construct; where such determination may be based on, but is not limited to the following:

a. A Selected Developer’s or an incumbent Transmission Owner’s inability to secure necessary approvals, permits, certificates, financing, resources,
needed expertise and/or third party support identified in the Selected Proposal, property rights, rights of way, or is otherwise unable or unlikely to construct the facilities;

b. A Selected Developer’s or an incumbent Transmission Owner’s notification to the Transmission Provider that it is unable or unwilling to proceed with construction of its facilities for which it has been designated to construct;

c. A Selected Developer or an incumbent Transmission Owner’s abandonment of the facilities it has been designated to construct;

d. A determination by the Transmission Provider that a Selected Developer is no longer a Qualified Transmission Developer; and

e. A determination by the Transmission Provider that reassignment is necessary pursuant to Section IX.E.3 of this Attachment FF.

In selecting the appropriate Variance Analysis Outcome to apply where the Transmission Provider has determined that a Selected Developer or an incumbent Transmission Owner will be unable to complete the facilities for which it has been designated to construct, the Transmission Provider will consider, but is not limited to considering the following, in addition to the general factors set forth in Section IX.D.2.1:

(i) The reasons that the Selected Developer or the Transmission Owner was unable or was unlikely to construct the facilities;
(ii) Whether the facilities are still needed;

(iii) Whether a Mitigation Plan, as further described in Section IX.E.2 of this Attachment FF, is available that could remedy the ground(s) for Variance Analysis, including consideration of the extent to which it will cost; and

(iv) Whether reassignment, as further described in Section IX.E.3 of this Attachment FF, is available, including the impacts of reassigning the facilities to another entity.

IX.C.5 Undisclosed Assignments

If the Transmission Provider determines that the Selected Developer has assigned the Competitive Transmission Facilities, Competitive Transmission Project, or Selected Developer Agreement to an entity not disclosed in its Proposal as required by Section VIII.D.5.13 or on terms materially different than those disclosed in the Proposal, except for assignments to a Project Finance Entity pursuant to Article 14.4 of the Selected Developer Agreement.

IX.D. Variance Analysis Procedure

Variance Analysis shall commence when the Transmission Provider makes an initial determination that one or more of the grounds for Variance Analysis as described in Section IX.C of this Attachment FF exists. The Transmission Provider will adhere to the following steps, as further detailed in the applicable Business Practices Manuals, in performing a Variance Analysis:
IX.D.1. Initial Inquiry and Confirmation of Grounds for Variance Analysis

Upon making an initial determination that one or more of the grounds for Variance Analysis as described in Section IX.C of this Attachment FF exists, the Transmission Provider shall notify the applicable Selected Developer or Transmission Owner in writing that Variance Analysis has commenced, including the ground(s) for commencing Variance Analysis, and a brief description of the Transmission Provider’s concerns. The applicable Selected Developer or incumbent Transmission Owner shall be provided an opportunity to be heard by the Transmission Provider and present to the Transmission Provider its position on whether the identified ground(s) for Variance Analysis exist and what outcome it believes is appropriate along with supporting facts and documentation. If the Transmission Provider determines that the ground(s) for Variance Analysis do not exist after considering the Selected Developer or Transmission Owner’s response and any other relevant information, the Transmission Provider shall terminate the Variance Analysis. If the Transmission Provider continues to believe that reasonable grounds for Variance Analysis exist after considering the Selected Developer or Transmission Owner’s response and any other relevant information, the Transmission Provider shall continue to commence Variance Analysis and so notify the Selected Developer or Transmissions Owner.

IX.D.2. Determination of Variance Analysis Outcome
If the Transmission Provider continues to believe that reasonable ground(s) for Variance Analysis exists pursuant to the process described in Section IX.D.1 of this Attachment FF, the Transmission Provider shall further investigate the circumstances or events and the relevant facts surrounding the facilities identified in Section IX.D.1 above. Upon completing its investigation, the Transmission Provider shall make a determination of which Variance Analysis Outcome to apply, as described in Section IX.E of this Attachment FF. In determining which Variance Analysis Outcome to apply, the Transmission Provider shall consider the general factors set forth in Section IX.D.2.1 and the appropriate factors of Sections IX.E of this Attachment FF.

IX.D.2.1. General Factors in Variance Analysis Outcome Determination

Before deciding to impose any Variance Analysis Outcome authorized by the Tariff in Sections IX.E of this Attachment FF, the Transmission provider shall consider the following factors:

A. The causes of, or reasons for, the circumstances or events triggering Variance Analysis, including the degree of fault of the applicable Selected Developer or incumbent Transmission Owner;

B. The potential impacts to the Transmission System and the MTEP, including potential reliability, economic, or public policy impacts;

C. The degree of completion of the Eligible Projects or facilities;

D. A comparison of the estimated costs of each outcome;
E. A comparison of the degree to which each outcome will likely result in the successful completion of or increase the ability to complete the facilities and/or Eligible Projects; and

F. A comparison of the degree to which each outcome will alleviate the ground(s) for Variance Analysis.

IX.D.3. Implementation of Variance Analysis Outcome

Upon completing the procedures detailed in Section IX.D.2 of this Attachment FF, the Transmission Provider shall perform the following as further detailed in the Business Practices Manuals:

A. Inform the applicable Selected Developer(s) or incumbent Transmission Owner and any other affected parties of the Variance Analysis Outcome in writing;

B. Post a description of the Variance Analysis Outcome and the reason(s) it was selected on the Transmission Provider’s website, redacting any confidential information and or Critical Energy Infrastructure Information (CEII) as necessary. The Transmission Provider shall be authorized to publically disclose confidential information, limited in scope to the specific information needed to explain the reason(s) Variance Analysis was triggered and why the Transmission Provider selected the Variance Analysis Outcome for implementation;
C. Implement the Variance Analysis Outcome in coordination with the applicable Selected Developer(s), incumbent Transmission Owner(s), and any other affected parties;

D. If implementation of the Variance Analysis Outcome results in a mitigation plan to be placed into effect that alters the schedule, cost, design, or scope of a Competitive Transmission Facility, the Transmission Provider and Selected Developer shall amend the Selected Developer Agreement to include the requirements of the mitigation plan or the Transmission Provider shall file such plan with the Commission unexecuted; and

E. If implementation of the Variance Analysis Outcome results in Reassignment or Cancellation of Competitive Transmission Facilities, the Transmission Provider shall file a Notice of Termination with the Commission to terminate the Selected Developer Agreement pursuant to the provisions of the Selected Developer Agreement. In the event that the Transmission Provider files a Notice of Termination pursuant to Section IX.E of this Attachment FF or otherwise discusses confidential information in the course of administrative or judicial proceedings, the Transmission Provider may request that the information be treated as confidential and non-public pursuant to 18 C.F.R. §1b.20 and 388.112.
IX.E. Variance Analysis Outcomes

In determining which Variance Analysis outcome to apply, the Transmission Provider shall apply the procedures specified in Section IX.D of this Attachment FF.

IX.E.1. No Action

The Transmission Provider may determine to take no action when Variance Analysis is triggered. In determining whether to take no action in Variance Analysis, the Transmission Provider will consider, but is not limited to, the following:

A. The causes of, or reasons for, the circumstances or events triggering Variance Analysis, including the degree of fault of the applicable Selected Developer or incumbent Transmission Owner;

B. The potential impacts to the Transmission System and the MTEP, including any potential reliability, economic, or public policy impacts;

C. The degree of completion of the Eligible Projects or facilities; and

D. The cost and impacts of implementing another Variance Analysis Outcome pursuant to Sections IX.E.2 through IX.E.4 of this Attachment FF as compared to taking no action.
IX.E.2. Mitigation Plan(s)

The Transmission Provider may allow a Selected Developer or incumbent Transmission Owner to alleviate the ground(s) for the Variance Analysis through a mitigation plan. If the Transmission Provider determines that a delay in the applicable facilities and/or Eligible Project’s in-service date may cause the Transmission Provider or one or more Transmission Owners, Selected Developers, or non-Members to violate any Applicable Reliability Standards, the Transmission Provider shall identify the potential violation(s) and direct the impacted entities to develop a mitigation plan in coordination with the Transmission Provider. The Transmission Provider, the impacted Transmission Owners(s) and/or Selected Developers, as applicable, shall take any and all reasonable actions necessary to meet the requirements of the mitigation plan and Applicable Reliability Standards.

Mitigation plans may also be utilized to address ground(s) for Variance Analysis arising under Sections IX.C.1 through IX.C.5 that do not involve a delay of the in-service date that potentially causes violations of Applicable Reliability Standards, should the Transmission Provider determine it is appropriate. In determining whether to require a mitigation plan, the Transmission Provider will consider the factors set forth in Sections IX.D.2.1 and IX.E.1 of this Attachment FF as well as, but not limited to:

A. The extent to which the ground(s) for Variance Analysis can be remedied through a mitigation plan, if successfully implemented,
including the extent to which cost can be restored to baseline and the required in-service date realized;

B. The willingness of the Selected Developer(s) or incumbent Transmission Owner(s) to implement the mitigation plan, including their willingness to bear the costs thereof;

C. The resources and ability of the Selected Developer(s) or incumbent Transmission Owner(s) to successfully implement the mitigation plan; and

D. Whether the Transmission Owner(s) that would receive the reassigned facilities would be better able to alleviate the ground(s) for Variance Analysis than the Selected Developer.

The mitigation measures may include, without limitation, any one or combination of the following components: (i) an updated implementation plan; (ii) an operating procedure; or (iii) alternative facilities and or projects to mitigate reliability violations. If a mitigation plan is used, the Transmission Provider and Selected Developer shall work together to amend the Selected Developer Agreement to reflect the mitigation plan. In the event that the Selected Developer or incumbent Transmission Owner refuses to execute the Transmission Provider’s proposed mitigation plan or offer a substitute plan reasonably acceptable to the Transmission Provider, the Transmission Provider may elect either to file its proposed mitigation plan with the Commission unexecuted, select an alternate

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Variance Analysis Outcome or, in if the Selected Developer is a signatory to the ISO Agreement, proceed thereunder.

**IX.E.3. Reassignment**

The Transmission Provider may determine to reassign Competitive Transmission Facilities in accordance with Section IX.E.3.1 of this Attachment FF. Reassignment shall also be proper if a Selected Developer fails to maintain its Qualified Transmission Developer status after the expiration of any applicable cure period. If a Selected Developer is the incumbent Transmission Owner whose service area is the service area for which the facilities triggering Variance Analysis are located, the Transmission Provider shall seek recourse through the ISO Agreement or FERC, as appropriate. In all other cases, the Transmission Provider will consider the factors set forth in Sections IX.D.2.1, IX.E.1, and IX.E.2 of this Attachment FF as well as the following, in determining whether Reassignment is applied including but not limited to:

A. Whether a mitigation plan would be sufficient to alleviate the ground(s) for Variance Analysis;

B. The actions that the incumbent Transmission Owner(s), to whom the facilities would be reassigned to if the Transmission Provider selects the Reassignment Variance Analysis Outcome, would reasonably be required to take to successfully complete the facilities;

C. The incremental costs of the Reassignment Variance Analysis Outcome; and
D. The extent of any potential delay that the Reassignment Variance Analysis Outcome may cause and any potential impacts on reliability.

If the Transmission Provider selects the Reassignment Variance Analysis Outcome, the Selected Developer(s) shall be obligated to work cooperatively and in good faith with the Transmission Provider, the incumbent Transmission Owner(s), and the affected Transmission Owner(s) and/or non-MISO transmission owners, to implement the transition.

IX.E.3.1. Procedure for Reassignment

Reassigned facilities and or projects will be offered to the applicable Transmission Owner(s), as defined below:

A. Ownership and the responsibility to construct facilities which are connected to a single Transmission Owner’s system belong to that Transmission Owner;

B. Ownership and the responsibilities to construct facilities which are connected between two (2) or more Owners’ facilities belong equally to each Transmission Owner, unless such Transmission Owners otherwise agree; and

C. Ownership and the responsibility to construct facilities which are connected between a Transmission Owner(s)’ system and a system or systems that are not part of the Transmission Provider belong to such
Transmission Owner(s) unless the Transmission Owner(s) and the non-
Transmission Provider party or parties otherwise agree.

If the applicable Transmission Owner(s) decline to construct the
reassigned facilities and or Eligible Project, the Transmission Provider
will reassign, as applicable, the facilities and/or Eligible Projects through
the Competitive Transmission Developer Selection Process, as described
in Section VIII of Attachment FF of the Tariff.

**IX.E.4. Cancellation of Facilities and or Projects**

The Transmission Provider may determine to cancel Eligible Projects
and/or facilities comprising such projects. In determining whether to cancel
Eligible Projects or facilities, the Transmission Provider will consider the factors
set forth in Sections IX.D.2.1, IX.E.1, IX.E.2, and X.E.3 of this Attachment FF.

**IX.F. Variance Analysis Confidentiality**

The Transmission Provider shall not disclose to the public that a Variance
Analysis has commenced until such time as it has confirmed its initial determination that
a ground for Variance Analysis exists pursuant with Section IX.D.1 of this Attachment
FF. Notwithstanding the preceding sentence, the Transmission Provider shall be allowed
to disclose that it is commencing a Variance Analysis to third parties, including
interconnecting Transmission Owners, Selected Developers, or non-Members from
whom the Transmission Provider requires information to determine whether the
ground(s) for Variance Analysis exist. However, no confidential information will be disclosed when the Transmission Provider solicits information from third parties unless and to the extent such disclosure is needed to obtain information necessary to determine any potential NERC reliability standards violations, service obligation issues, and economic or public policy needs that may be jeopardized.

In the event that the Transmission Provider determines pursuant to Section IX.D.1 of this Attachment FF that ground(s) for Variance Analysis do not exist, the Transmission provider shall treat any information collected pursuant to Section IX.D.1 as Project Confidential Information. In the event that the Transmission Provider determines pursuant to IX.D.1 of this Attachment FF that ground(s) for Variance Analysis do exist, the Transmission provider shall be authorized to share Project Confidential Information with such third parties as the Transmission Provider determines are reasonably necessary in order to enable the Transmission Provider to obtain needed input and information to identify any potential system reliability impacts of Variance Analysis Outcomes, including impacts from any potential NERC reliability standards violations, service obligation issues, and economic or public policy needs that may be jeopardized. The Transmission Provider shall consult with the Selected Developer and or the incumbent Transmission Owner prior to sharing any such confidential information for the purposes of discussing reasonable confidentiality safeguards.

IX.G. Variance Analysis Dispute Resolution

All disputes by the affected Selected Developer or Transmission Owner shall be
addressed in accordance with the provisions of Attachment HH, except that disputes involving the termination of a Selected Developer Agreement shall be addressed in accordance with the Dispute Resolution provisions of the Selected Developer Agreement.

IX.H  Project Financial Security

The Transmission Provider may utilize Project Financial Security to cover the costs of Variance Analysis resulting from Default under the Selected Developer Agreement. In such event, the Transmission Provider may draw upon such funds after confirming that a Default exists pursuant to Section IX.D.1 of this Attachment FF. The Transmission Provider shall utilize such funds to offset any costs reasonably incurred by the Transmission Provider in performing a Variance Analysis, transitioning the Competitive Transmission Project to a new Selected Developer and/or incumbent Transmission Owner(s), and otherwise distribute such funds as determined by the Commission to cover Variance Analysis and transition costs. Costs for which Project Financial Security funds may be used include reasonable consultant fees, attorneys’ fees, costs of litigation and or regulatory proceedings, and staffing costs directly attributable to taking actions under the Variance Analysis provisions of the Tariff. The Transmission Provider shall track its use of Project Financial Security and provide an informational filing to the Commission within six (6) months after the Transmission Provider concludes implementation of the selected outcome.
X. Interregional Coordination and Cost Allocation with the Southeastern Regional Transmission Planning Region

The public utility transmission providers in the Southeastern Regional Transmission Planning region (“SERTP”) and the Midcontinent Independent System Operator region (“MISO”) shall undertake the interregional transmission coordination and cost allocation procedures under Section X of this Attachment FF.

Where the regional transmission planning process is referenced as part of this interregional transmission coordination process the applicable regional transmission planning process for the Transmission Provider is described in Attachment FF; and is described for the SERTP in attachment K of the applicable SERTP transmission provider.

A. Interregional Transmission Coordination

1. Annual Meeting: Representatives of the SERTP and staff of the Transmission Provider will meet no less than once per year to facilitate the interregional coordination procedures described below (as applicable). Representatives of the SERTP and staff of the Transmission Provider may meet more frequently during the evaluation of interregional transmission project(s) proposed for purposes of interregional cost allocation between the SERTP and the Transmission Provider transmission planning regions.

2. Website Posting of Information on Interregional Coordination: The Transmission Provider shall utilize the regional planning website for communication of information related to these coordinated interregional transmission planning procedures. The Transmission Provider shall coordinate
with the SERTP with respect to the posting of materials to the regional planning website related to the interregional coordination procedures between the SERTP and the Transmission Provider transmission planning regions. The Transmission Provider shall, at a minimum, provide the following on the regional planning website:

a. Interregional coordination and cost allocation procedures between the SERTP and Transmission Provider;

b. Links to where stakeholders can register (if applicable/available) for the stakeholder committees or distribution lists of the SERTP;

c. Documents related to joint evaluation of interregional transmission projects;

and

d. Status report on interregional transmission projects selected for purposes of interregional cost allocation between the SERTP and the Transmission Provider.

B. Model and Data Exchange

At least annually, the Transmission Provider and the SERTP shall exchange their then-current regional transmission plans including power-flow models and associated data used in the regional transmission planning processes to develop such transmission plan(s). This exchange will occur when such data is available in each of the regional transmission planning processes, typically during the first calendar quarter of each year. Additional transmission-based models and data may be exchanged between the SERTP and the Transmission Provider as necessary and if requested. For purposes of their
interregional coordination activities, the Transmission Provider and SERTP will exchange only data and models used in the development of their then-current regional transmission process and plans. This data will be posted on the pertinent regional transmission planning process’ websites, consistent with the posting requirements of the respective regional transmission planning processes, and subject to the applicable treatment of confidential data and Critical Energy Infrastructure Information (CEII). The Transmission Provider shall notify SERTP of such posting.

C. Identification and Joint Evaluation of Proposed Interregional Transmission Projects

1. Identification of Interregional Transmission Projects: At least biennially, the Transmission Provider and the SERTP shall meet to review the respective regional transmission plans. Such plans include each region’s transmission needs as prescribed by each region’s planning process. This review shall occur on a mutually agreeable timetable, taking into account each region’s regional transmission planning process timeline. If through this review, the Transmission Provider and the SERTP identify a potential interregional transmission project that may be more efficient or cost-effective than regional transmission projects, the Transmission Provider and the SERTP shall jointly evaluate the potential interregional transmission project pursuant to Section X.C.4.

2. Identification of Interregional Transmission Projects by Stakeholders: Stakeholders and transmission developers (pursuant to Section X.D.1) may also propose
interregional transmission projects that may be more efficient or cost-effective than regional transmission projects pursuant to the procedures in each region’s regional transmission planning processes.

3. **Identification of Interregional Transmission Projects by Developers:**

Interregional transmission projects proposed for interregional cost allocation purposes (“Interregional CAP”) must be submitted in both the Transmission Provider and the SERTP regional transmission planning processes. The project submittal must satisfy the requirements of Section X.D.1 except for the benefit-to-cost ratio requirements of Section X.D.1.a.ii. The submittal must identify the potential transmission project as interregional in scope and identify the Transmission Provider and the SERTP as regions in which the project is proposed to interconnect. The Transmission Provider will verify whether the submittal for the potential interregional transmission project satisfies all applicable requirements. Upon finding that the proposed interregional transmission project satisfies all such applicable requirements, the Transmission Provider will notify the SERTP. Once the potential project has been proposed through the regional transmission planning processes in both regions, and upon both regions so notifying one another that the project is eligible for consideration pursuant to their respective regional transmission planning processes, the Transmission Provider

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3 A transmission developer is not responsible for determining the benefit-to-cost ratio referenced in Section X.D.1.a.ii in a project submittal. However, an interregional transmission project proposed for Interregional CAP must ultimately satisfy the benefit-to-cost ratio requirements in accordance with the provisions of Section X.D.1.a.ii and X.D.3.
and the SERTP will jointly evaluate the proposed interregional projects pursuant to Sections X.C and X.D.

4. **Evaluation of Interregional Transmission Projects:** The Transmission Provider and the SERTP shall act through their respective regional transmission planning processes in the joint evaluation of potential interregional transmission projects identified pursuant to Sections X.C.1 and X.C.2 to determine whether the inclusion of any potential interregional transmission projects in each region’s regional transmission plan would be more efficient or cost-effective than regional projects. Such analysis shall be consistent with accepted transmission planning practices of the respective regions and the methods utilized to produce each region’s respective regional transmission plan(s). The Transmission Provider will evaluate potential interregional transmission projects consistent with Section I.C.6 and Section II of Attachment FF.

5. **Review of Proposed Interregional Transmission Projects:** Initial coordination activities regarding potential interregional transmission projects will typically begin during the third quarter of each calendar year. The Transmission Provider and the SERTP will exchange status updates regarding interregional transmission projects that are newly proposed or that are currently under consideration as needed. These status updates will generally include, if applicable: (i) an update of the region’s evaluation of the proposal(s); (ii) the latest calculation of benefits (as identified pursuant to Section X.D.2); and (iii) the anticipated timeline for future assessments.
6. **Coordination of Assumptions Used in Joint Evaluation:** The Transmission Provider and the SERTP will coordinate assumptions and data used in joint evaluations, as necessary, including items such as:

   a. Expected timelines and milestones associated with the joint evaluation;
   b. Study assumptions;
   c. Models; and
   d. Benefit calculations (as identified pursuant to Section X.D.2).

D. **Interregional Cost Allocation:** If an interregional transmission project is proposed for Interregional CAP in the SERTP and the Transmission Provider transmission planning regions, then the following cost allocation and benefits calculations, as identified pursuant to Section X.D.2, shall apply to the project:

   1. **Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes:**
      
      a. For a transmission project to be eligible for Interregional CAP within the SERTP and the Transmission Provider, the project must:
         
         i. Interconnect to transmission facilities in both the SERTP and Transmission Provider regions. The facilities to which the project is proposed to interconnect may be either existing facilities or
transmission projects included in the regional transmission plan
that are currently under development.

ii. Have a combined benefit-to-cost ratio of 1.25 or higher to the
SERTP and Transmission Provider regions, as calculated in
Section X.D.3; and

iii. Meet the threshold and qualification criteria for transmission
projects potentially eligible to be included in the respective
regional transmission plans for purposes of cost allocation in the
Transmission Provider and the SERTP, pursuant to their respective
regional transmission planning processes.

b. On a case-by-case basis, the Transmission Provider and the SERTP
may consider an interregional transmission project that does not satisfy all
of the criteria specified in this Section X.D.1, but that: (i) meets the
threshold criteria for a project proposed to be included in the regional
transmission plan for purposes of cost allocation in only one of the two
regions; and (ii) would be interconnected to transmission facilities in both
the SERTP and Transmission Provider regions. The facilities to which the
project is proposed to interconnect may be either existing facilities or
transmission projects included in the regional transmission plan that are
currently under development.

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4 For the MISO region, “under development” refers to Appendix A projects under development approved by the
MISO Board of Directors.
c. The transmission project must be proposed for purposes of cost allocation in both the SERTP and the Transmission Provider. The project submittal must satisfy all criteria specified in the respective regional transmission processes, including the respective timeframes for submittals proposed for cost allocation purposes. If a project is proposed by a transmission developer, the transmission developer must also satisfy the qualification criteria specified by each region.

2. Calculation of Benefits for Interregional Transmission Projects Proposed for Interregional Cost Allocation Purposes: The benefits used to establish the allocation of costs of a transmission project proposed for Interregional CAP between the SERTP and the Transmission Provider shall be determined as follows:

a. Each transmission planning region, acting through its regional transmission planning process, will evaluate proposals to determine whether the proposed project(s) addresses transmission needs that are currently being addressed with projects in its regional transmission plan and, if so, which projects in the regional transmission plan could be displaced by the proposed project(s).

b. Based upon its evaluation, each region will quantify its benefits based upon the transmission costs that each region is projected to avoid due to its transmission projects being displaced by the proposed interregional transmission project as follows:
i. for the SERTP, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included; and

ii. for the Transmission Provider, the total avoided costs of projects included in the then-current regional transmission plan that would be displaced if the proposed interregional transmission project was included.

The benefits calculated pursuant to this Section X.D.2 are not necessarily the same as the benefits used for purposes of regional cost allocation.

3. Calculation of Benefit-to-Cost Ratio for an Interregional Transmission Project Proposed for Interregional CAP:

Prior to any regional benefit-to-cost ratio calculation pursuant to either regional transmission planning process, the combined interregional benefit-to-cost ratio, referenced in Section X.D.1.a, shall be calculated for an interregional transmission project proposed for Interregional CAP. Such calculation shall be performed by dividing the sum of the present value of the avoided project cost determined in accordance with Section X.D.2.b.i for the SERTP region and the present value of avoided project cost determined in accordance with Section X.D.2.b.ii for the Transmission Provider region by the present value of the proposed interregional transmission project’s total
project cost. The present values used in the cost calculation shall be based on a common date, comparable cost components, and the latest cost estimates used in the evaluation of the interregional transmission project. The combined interregional benefit-to-cost ratio will be assessed in addition to, not in the place of, the SERTP’s and the Transmission Provider’s respective regional benefit-to-cost ratio assessment(s) (if applicable) as specified in the respective regional processes.

4. **Inclusion in Regional Transmission Plans:** An interregional transmission project proposed for Interregional CAP in the transmission planning regions of the SERTP and the Transmission Provider will be included in the respective regional transmission plans for purposes of cost allocation after:

   a. Each region has performed all evaluations, as prescribed in its regional transmission planning process, necessary for a project to be included in its regional transmission plan for purposes of cost allocation including any regional benefit-to-cost ratio calculations. Each region shall utilize the benefit calculation(s) as defined in such region’s regional transmission planning process (for purposes of clarity, these benefits are not necessarily the same as the benefits determined pursuant to Section X.D.2). Each region shall utilize the cost calculation(s) as defined in such region’s regional transmission planning process. The anticipated percentage allocation of costs of the interregional transmission project to each region
shall be based upon the ratio of the region’s benefits to the sum of the benefits, both as determined pursuant to Section X.D.2, identified for both the SERTP and the Transmission Provider.

b. Each region has obtained all approvals, as prescribed in its regional process, necessary for a project to be included in the regional transmission plan for purposes of regional cost allocation.

5. Allocation of Costs Between the SERTP and the Transmission Provider

   Regions: The cost of an interregional transmission project, selected for purposes of cost allocation in the regional transmission plans of both the SERTP and the Transmission Provider, will be allocated as follows:

a. Each region will be allocated a portion of the interregional transmission project’s costs in proportion to such region’s benefit as calculated pursuant to Section X.D.2 to the sum of the benefits identified for both the SERTP and the Transmission Provider calculated pursuant to Section X.D.2.

   i. The benefits used for this determination shall be based upon the benefit calculation most recently performed – pursuant to the method described in Section X.D.2 – before each region included the project in its regional transmission plan for purposes of cost allocation and as approved by each region.

b. Costs allocated to each region shall be further allocated within each region pursuant to the cost allocation methodology contained in its regional transmission planning process.
6. **Milestones of Required Steps Necessary to Maintain Status as Being Selected for Interregional Cost Allocation Purposes:** Once selected in the respective regional transmission plans for purposes of cost allocation, the transmission owners in the SERTP planning region that will be allocated costs of the transmission project, the Transmission Provider, and the transmission developer(s) must mutually agree upon an acceptable development schedule including milestones by which the necessary steps to develop and construct the interregional transmission project must occur. These milestones may include (to the extent not already accomplished) obtaining all necessary rights-of-way and requisite environmental, state, and other governmental approvals and executing a mutually-agreed upon contract(s) between the applicable transmission owners in the SERTP planning region, the Transmission Provider and the transmission developer. If such critical steps are not met by the specified milestones and then afterwards maintained, then the Transmission Provider and the SERTP may remove the transmission project from the selected category in the regional transmission plans for purposes of cost allocation.

7. **Interregional Transmission Project Contractual Arrangements:** The contracts referenced in Section X.D.6 will address terms and conditions associated with the development of the proposed interregional transmission project included in the regional transmission plans for purposes of cost allocation, including but not limited to:
a. Engineering, procurement, construction, maintenance, and operation of the proposed transmission project, including coordination responsibilities of the parties;

b. Emergency restoration and repair;

c. The specific financial terms and specific total amounts to be charged by the transmission developer of the transmission project to each beneficiary, as agreed to by the parties;

d. Creditworthiness and project security requirements;

e. Milestone reporting, including schedule of projected expenditures;

f. Reevaluation of the transmission project; and

g. Non-performance or abandonment.

8. **Removal from Regional Transmission Plans:** An interregional transmission project may be removed from the SERTP’s or the Transmission Provider’s regional transmission plan(s) for Interregional CAP: (i) if the transmission developer fails to meet developmental milestones; (ii) pursuant to the reevaluation procedures specified in the respective regional transmission planning processes; or (iii) if the project is removed from one of the region’s regional transmission plans pursuant to the requirements of its regional transmission planning process.

a. The Transmission Provider shall notify the SERTP if an interregional transmission project or a portion thereof is likely to be, and/or is actually removed from its regional transmission plan.
E. **Transparency**

1. Stakeholders will have an opportunity to provide input and feedback within the respective regional transmission planning processes of the SERTP and the Transmission Provider related to interregional transmission projects identified, analysis performed, and any determination/results. Stakeholders may participate in either or both regions’ regional transmission planning processes to provide their input and feedback regarding the interregional coordination between the SERTP and the Transmission Provider.

2. The Transmission Provider shall use the existing planning stakeholder forums, such as the Planning Advisory Committee and Sub-regional Planning Meetings, to review with stakeholders the interregional activities associated with the SERTP.

3. The Transmission Provider will post a list, on the Regional Planning Website, of interregional transmission projects proposed for purposes of cost allocation in both the Transmission Provider and the SERTP regions that are not eligible for consideration because they do not satisfy the regional project threshold criteria of one or both of the regions as well as post an explanation of the thresholds the proposed interregional projects failed to satisfy.