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July 14, 2025

**VIA ELECTRONIC FILING**

The Honorable Debbie-Anne Reese  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**Re: Midcontinent Independent System Operator, Inc.  
Filing of Tariff Demand Reduction Capability Enhancements  
Docket No. ER25-\_\_\_\_-000**

Dear Secretary Reese:

The Midcontinent Independent System Operator, Inc. ("MISO"), through this filing,<sup>1</sup> submits proposed revisions to its Open Access Transmission, Energy and Operating Reserve Markets Tariff ("Tariff")<sup>2</sup> that modify real power test requirements beginning with the 2026 / 2027 Planning Year. These revisions will require Market Participants to demonstrate Demand reduction capability for each Resource registered in the Planning Resource Auction ("PRA") for each Planning Year, on an annual basis beginning with Planning Year 2026 / 2027. The revisions are necessary to address instances of fraudulent registration facilitated, in part, by use of the testing waiver currently in the Tariff to register resources from which no demand reduction is possible. The revisions will standardize testing requirements, resulting in MISO operators having greater confidence in the ability of registered resources to perform when called upon during Emergencies, which will lead to improved grid reliability. As noted by MISO's Independent Market Monitor ("IMM") in its supporting affidavit submitted, the reforms proposed herein will help ensure resource performance corresponds to the capability that MISO clears in the PRA and that is expected to be available when managing grid emergencies.<sup>3</sup>

To ensure that stakeholders have the option to perform real power tests pursuant to the new rule set established herein during the remaining portion of the Summer Season and the remainder of the 2025 calendar year prior to the start of the registration period for the 2026 / 2027 Planning

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<sup>1</sup> This filing is made pursuant to section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, and Part 35 of the regulations of the Federal Energy Regulatory Commission ("FERC" or "Commission"), 18 C.F.R. § 35.1, *et seq.*

<sup>2</sup> Unless otherwise indicated by the text or context of this transmittal letter, all terms used herein have the definitions set forth in Module A of the Tariff.

<sup>3</sup> Affidavit of David B. Patton, Ph.D. at 3 ("Patton Affidavit").

Year, MISO respectfully requests the Commission accept this filing and grant the effective date of July 15, 2025 for the proposed revisions. For purposes of the requested effective date MISO requests a waiver of the 60-day notice requirement contained in 18 C.F.R. § 35.3. As discussed further below good cause exists to grant this waiver as the requested effective date provides notice to Market Participants of the proposed testing requirements well in advance of the registration of Demand Resources for the 2026 / 2027 PRA and preserves the remaining portion of the Summer Season for Market Participants to carry out such real power tests to the extent that they desire to test during the summer Season. In addition, the proposed revisions to the Demand Resource testing requirements impact non-rate terms and conditions of service under the Tariff.

## **I. BACKGROUND**

### **A. RECENT REFORMS TO DEMAND SIDE RESOURCES**

MISO submitted a series of filings in the first and second quarter of 2025 to enhance the participation of Demand Response and Emergency Resources (“DR/ER”), including Load Modifying Resources (“LMRs”), Demand Response Resources (“DRRs”), Behind the Meter Generation (“BTMG”), Emergency Demand Response (“EDR”) resources, and Available Maximum Emergency (“AME”) resources in the energy and capacity markets. The first of these filings was submitted on March 21, 2025 in Docket No. ER25-1729-000 (the “DR Sanctions Filing”). The DR Sanctions Filing focuses on reforms to registration, testing, and penalty provisions associated with demand side resources to address issues identified in certain Commission orders related to gaming in MISO’s capacity and energy markets. If accepted, these reforms would be effective as of July 19, 2025 and would be in place in time for the registration of demand side resources planning to participate in the PRA for Planning Year 2026 / 2027.

The second of these filings was submitted on April 4, 2025 in Docket No. ER25-1886-000 (the “DR/ER Reforms Filing”) and focuses on several topics related to the participation of Demand Response and Emergency Resources in the MISO markets, including the accreditation of such resources. The DR/ER Reforms Filing introduced Schedule 53B into the MISO Tariff, which sets forth the rules for accrediting Demand Response and Emergency Resources. If accepted, the DR/ER reforms proposed for accreditation of Schedule 53B Resources is planned for implementation on the same timeline as implementation of the Direct Loss of Load (“DLOL”) based accreditation methodology for Schedule 53A Resources, which is slated to begin in Planning Year 2028 / 2029.

The most recent in the series of filings to address demand side resources was submitted on April 25, 2025 in Docket No. ER25-2050-000 and is focused on eliminating the option for LMRs and DRRs to dual-register as EDR resources (the “Dual Registration Filing”). The Dual Registration Filing also responds to gaming issues identified in certain Commission orders involving DRRs, LMRs, EDR resources, and Aggregators of Retail Customers (“ARCs”). If accepted, the reforms subject to the Dual Registration Filing would be effective contemporaneously with those of the DR Sanctions Filing (*i.e.*, July 19, 2025) and would prevent LMRs and DRRs from dual registering as EDR resources beginning with Planning Year 2026 / 2027.

The reforms that are the subject of this proposal are the next in the series of filings designed to properly register Demand Resources and to protect the market from manipulation. The instant filing and the Dual Registration Filing were initially part of the larger, more comprehensive DR/ER Reforms Filing submitted earlier this year; however, MISO decided, at different points in time, to separate these two issues from the DR/ER Reforms Filing into stand-alone filings in order to implement them sooner than Planning Year 2028 / 2029. The decision to separate the Dual Registration Filing was made first and, as described above, that filing was made earlier this year.

As MISO continued to contemplate additional LMR enhancements, it became clear that the rules around real power testing and the criteria to request a waiver of those rules needed to be enhanced as soon as possible. As a result, MISO is submitting the instant filing to address real power testing. As part of this effort, MISO identified a need to clarify the accreditation of Demand Resources and provide certainty to Market Participants regarding the relationship between the registered parameters of a Demand Resource and accreditation received.

It is important to note that, while the filings discussed in this section are all part of MISO's Resource Adequacy reforms, each filing is a stand-alone proposal that can be implemented independent of the others. See Figure 1 below for a summary of the various filings related to Demand Resources.

Topic/Effort	Key Objectives of FERC Filing	Anticipated Filing Date	Anticipated Effective Date
Demand Response Participation Rules Enhancements	<ul style="list-style-type: none"> <li>Address issues identified by FERC Office of Enforcement and IMM with respect to Demand Response Resources (DRRs) and Load Modifying Resources (LMRs) currently participating in MISO's Markets</li> </ul>	Filed March 21, 2025 ER25-1729	July 19, 2025
Dual Registration of EDRs	<ul style="list-style-type: none"> <li>Eliminate dual registration for EDRs as a LMR and/or DRR to align the incentive signals sent by the participation options</li> </ul>	Filed April 25, 2025 ER25-2050	July 19, 2025
Demand Response and Emergency Resources Reforms (formerly known as LMR Reforms)	<ul style="list-style-type: none"> <li>Improve availability, operational effectiveness, and accreditation of demand response and emergency only resources to allow earlier access during emergency conditions based on notification times</li> <li>Key elements: i) Participation Options, ii) Measurement &amp; Verification Baseline methodology, iii) Accreditation, iv) Real -time availability, v) MISO Initiated Testing</li> </ul>	Filed April 4, 2025 ER25-1886	September 1, 2027
LMR Testing Rules	<ul style="list-style-type: none"> <li>Provide a standard, clear testing requirement for Demand Resources participating in the PRA</li> <li>Resources without contracts overseen by regulatory authorities will be required to test 2026 / 2027 PY</li> <li>Resources without explicit testing waivers approved by regulatory authorities will be required to test in 2027 / 2028 PY</li> </ul>	July 14, 2025	July 15, 2025
LMR Participation Rules Enhancements	<ul style="list-style-type: none"> <li>Clarify when and how MPs can replace LMRs during a Planning Year after clearing in the PRA</li> <li>Test Deferral</li> <li>Update non -performance penalties*</li> </ul>	2025	Tentatively June 1, 2026 for PY2026-27

## B. THE REAL POWER TEST PROPOSAL

In the instant filing, MISO is proposing changes to the Tariff that will require a Demand Resource to demonstrate Demand reduction capability for each Planning Year, on an annual basis, through the performance of a real power test using the Attachment TT defined baselines for the Measurement and Verification ("M&V") of the test. MISO is proposing modifications to Section 69A.3.5, as discussed further below, to add provisions to the Demand Resource Eligibility section of the Tariff to effectuate the proposed changes. The new provisions set forth the testing requirements for Demand Resources, which are tied to the M&V baselines and, include criteria a

Demand Resource must meet based upon the M&V baseline the Resource elects. As explained by the IMM, “It is important that the testing requirements and the M&V requirements align and are based on the type of Demand being registered.”<sup>4</sup>

In addition, the new provisions include test parameters that require the Demand Resource to demonstrate that Demand reductions are achievable within the time-of-day periods corresponding to the time of expected Resource Adequacy Hours, as well as being within the registered notification time. The Independent Market Monitor (“IMM”) explains that:

MISO’s proposed reforms include specifying a variety of parameters for testing. For example, MISO will set parameters that establish when testing will take place, so that testing occurs at a time when MISO determines the resources are most likely to be deployed. The reforms also specify that tests must demonstrate 100 percent of the registered MW, unless there is weather impact, in which case the testing must demonstrate at least 80% of the registered capability. This addresses our concerns that participants have been doubling test results to inflate capacity values.<sup>5</sup>

Furthermore, MISO has proposed stricter eligibility requirements for Market Participants seeking waiver of the real power test provisions. To qualify for a waiver from the MISO real power test requirements, the criteria associated with one of the following three exemptions must be met:

- i. An applicable regulatory authority explicitly precludes or explicitly waives testing requirements under a retail program and the Demand Resource is participating in such retail program. The Market Participant registering such Demand Resource must provide documentation of such preclusion or waiver at the time the Demand Resource is registering to participate in the PRA.
- ii. For Planning Year 2026 / 2027, a Market Participant registers a Demand Resource that is participating in a retail program overseen by a regulatory authority and satisfies the credit requirements set forth in the Tariff. To receive the waiver in Planning Year 2026 / 2027 pursuant to this provision, the Market Participant must satisfy the documentation requirements described in the Business Practices Manual for Resource Adequacy.
- iii. A Demand Resource that meets the following criteria during the three-year period beginning on January 1<sup>st</sup> of the Year that is three years prior to the start of the applicable Planning Year: (a) the resource has responded to at least one Scheduling Instruction, has fully met the performance requirements of all Scheduling Instructions and has met the requirements of Section 69A.3.5.e; and (b) the resource has not experienced a significant change in its operation or any change in the composition of the underlying non-residential components of the aggregation from the Planning Year prior to the Planning Year for which the resource is being registered.

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<sup>4</sup> Patton Affidavit at 8.

<sup>5</sup> *Id.* at 10-11.

MISO will grant a waiver of the real power test requirements if any of the above three conditions are satisfied. If such a waiver is granted, MISO will require submission of relevant operational data and documentation. The IMM acknowledged that pursuant to the instant filing, "...MISO will require all Demand Resources that do not have a waiver to demonstrate demand reduction in order to register. This will ensure that the registered DR capability is reliable under expected emergency conditions."<sup>6</sup> Dr. Patton goes on to state, "Eliminating unreliable or phantom DR capability is also important because it will allow MISO to procure other capacity that is much more likely to be reliable and available when needed. It will also ensure that prices are set more efficiently to reflect that actual available supply in the PRA."<sup>7</sup>

As explained by Ms. Xie, MISO is proposing changes to the DR testing provisions in order to engender greater confidence in the efficacy of Demand Response resources to deliver the Capacity for which they register and are being compensated in the market.<sup>8</sup> With respect to the specific waiver provisions, Ms. Xie goes on to explain that MISO's previously generous waiver provisions have been used by Market Participants to register resources that do not exist or cannot reduce Demand in the amounts registered, noting the fact that the FERC Office of Enforcement has taken action against two Market Participants who used the testing waiver to register resources that do not exist, for which no contract to reduce Demand existed, or cannot reduce Demand in the amounts registered.<sup>9</sup>

MISO is also proposing to include a new sub-Section 69A.3.5(k), regarding data submission requirements. Specifically, the new provision will require Market Participants to submit hourly meter data for each Demand Resource being registered and indicates that details regarding the requirement will be set forth in the BPM for Resource Adequacy. Furthermore, the new provision confirms that Market Participants electing to use the Demand Response Deferral Notice must provide hourly meter data pursuant to the requirements established in the BPM for Resource Adequacy. The IMM supports the addition of this provision into the Tariff. In his Affidavit in support of the filing, Dr. Patton said, "By requiring resources to provide historical load profile data, MISO can be reassured that the amount of Demand Response MW registered by these resources will be limited to historical use patterns, which will mitigate concerns in the short run that the registered MW may be overstated."<sup>10</sup>

MISO also proposes to include revisions to Section 69A.3.5(j) and (m) and the Credit Policy included in Attachment L, respectively, to revise the Locational Marginal Price proxy for pricing under emergency conditions. As Ms. Xie explains, it is necessary to align these provisions

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<sup>6</sup> *Id.* at 10.

<sup>7</sup> *Id.*

<sup>8</sup> Xie Testimony at 18.

<sup>9</sup> *Id.*

<sup>10</sup> Patton Affidavit at 14.

with other Tariff provisions that have updated the LMP proxy value from \$200 to \$1,000, consistent with the Commission's order in Docket No. ER21-700-000.<sup>11</sup>

Finally, MISO is proposing modifications to Section 69A.4.2 to define in the Tariff the method used to determine Seasonal Accredited Capacity ("SAC") values for Demand Resources for Planning Years 2026 / 2027 and 2027 / 2028. Currently, the Tariff indicates that the SAC values for Demand Resources are established in the BPM for Resource Adequacy. Pursuant to the instant filing, if accepted, SAC values for Demand Resources will be determined according to the methodology described in the newly proposed Section 69A.4.2 for the next two planning years. According to the IMM, "This proposal simplifies the seasonal accreditation and allows MISO to perform better oversight of the accreditation process."<sup>12</sup>

Commencing with the 2028 / 2029 Planning Year, if the DR/ER Reforms Filing is accepted, SAC values for Demand Resources will be determined as set forth in Schedule 53B. Ms. Xie explains that the modification to Section 69A.4.2 in the instant filing is intended to be a stop-gap measure to better define the accreditation methodology for Demand Resources for the next two Planning Years, until Schedule 53B is applicable, or a new permanent methodology is proposed, if necessary.<sup>13</sup> One goal of both the DR/ER Reforms Filing and methodology proposed in the instant filing is to align the testing of Demand Resources, the accreditation of Demand Resources, and the measurement and verification methodology used to measure the performance of Demand Resources. Currently, there is a disconnect between how resources are tested, accredited, and ultimately how their actual performance is measured and verified. The DR/ER Reforms Filing is designed to address the disconnect in the long-term and the instant filing is designed to address it for the next two Planning Years.

MISO's proposal to require all Demand Resources to submit a real power test, except in limited circumstances, will result in greater confidence that all resources are capable of providing the Demand reduction they are being compensated to provide.<sup>14</sup>

## **II. DISCUSSION OF PROPOSED TARIFF PROVISIONS**

### **A. PROPOSED TARIFF CHANGES**

To implement the Demand Resource testing proposal set forth herein, MISO is requesting approval to modify Module E-1 and to make corresponding changes to the Credit Policy in Attachment L of the Tariff. Specifically, MISO is proposing to revise Section 69A.3.1.b, sub-Sections 69A.3.5(b), (e), and (j), and Section 69A.4.2, add sub-Section 69A.3.5(k), and renumber the existing sub-Sections 69A.3.5(k) to 69A.3.5(l) and 69A.3.5(l) to 69A.3.5(m), as shown below.

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<sup>11</sup> Xie Testimony at 19. *See* Order Accepting Tariff Filing, *Midcontinent Indep. Sys. Operator, Inc.*, 175 FERC ¶ 61,093 (April 30, 2021).

<sup>12</sup> Patton Affidavit at 15.

<sup>13</sup> Xie Testimony at 20.

<sup>14</sup> *See Id.* at 18.

The struck-through language shown below will be deleted from the Tariff and the words or phrases shown in *italics* will be added. MISO's proposed revisions to Module E-1 are as follows:

1. **Revisions To Section 69A.3.1.b.** MISO is proposing minor corresponding changes to this Section.
2. **Revisions to sub-Section 69A.3.5(b).** ~~The Demand Resource must be available to be scheduled for a Demand reduction at the targeted Demand reduction amount or by moving to a specified firm service level with notice based on their physical availability but with no more than 12 Hours advance notice required from the Transmission Provider. Limitations due to applicable regulatory restrictions that are more restrictive than the physical limitations of the Demand Resource will supersede the physical availability of the Demand Resource; however, in no event shall the Demand Resource's maximum notice requirement be greater than 12 hours. Further, limitations due to contractual obligations that are more restrictive than the physical limitations of the Demand Resource in place as of December 21, 2018 will supersede the physical availability of the Demand Resource for the 2019/2020 and 2020/2021 Planning Years; however, in no event shall the Demand Resource's maximum notice requirement be greater than 12 hours. A Demand Resource with a notification time requirement greater than 6 hours but less than or equal to 12 hours and a minimum of 10 interruptions allowed during the Planning Year will receive 50% credit as a Planning Resource for the 2022/2023 Planning Year. For the 2022/2023 Planning Year, Demand Resources with notification time requirements greater than 6 hours but less than or equal to 12 hours with less than 10 interruptions allowed will receive no credit. Beginning in the 2023/2024 Planning Year, a~~ *A Demand Resource must have a notification time requirement less than or equal to six (6) hours to receive credit as a Planning Resource in the applicable Seasons.*
3. **Revisions to sub-Section 69A.3.5(e).** ~~For the 2022/2023 Planning Year, the Demand Resource must be capable of being interrupted for at least the first five (5) times requested based on their physical availability (when called upon by the Transmission Provider for an Emergency) during any Planning Year for which the Demand Resource receives credit as a Planning Resource. This availability must include at least the entire Summer Season. In addition to notification time requirements, the amount of credit that a Demand Resource receives as a Planning Resource will be based on the number of interruptions allowed on the Demand Resource during the Planning Year. Demand Resources with a notification time requirement less than or equal to 6 hours will receive credit as a Planning Resource based on a multiplier of: (i) 80% if 5 to 9 interruptions per Planning Year are allowed on the Demand Resource; or, (ii) 100% if 10 or more interruptions per Planning Year are allowed on the Demand Resource. Beginning in the 2023/2024 Planning Year, the~~ *A Demand Resource must have a notification time equal to or less than six (6) hours and be capable of being interrupted for: (i) at least the first five (5) times requested in the Summer Season; (ii) at least the first five (5) times requested in the Winter Season; (iii) at least the first three (3) times requested in the Spring Season; and (iv) at least the first three (3) times requested in the Fall Season, based on their physical availability when called upon by the Transmission Provider for an Emergency during any*

applicable Season in the Planning Year for which the Demand Resource receives credit as a Planning Resource. These obligations only apply to Seasons in which a Demand Resource clears the Planning Resource Auction.

Limitations due to applicable regulatory restrictions that are more restrictive than the physical limitations of the Demand Resource will supersede the physical availability of the Demand Resource

**4. Revisions to sub-Section 69A.3.5(j).** A Market Participant must demonstrate ~~demand~~ Demand reduction capability for each Planning Year on an annual basis as established in the BPM for Resource Adequacy. ~~Beginning with the 2020 / 2021 Planning Year each Demand Resource must validate its performance by meeting the Transmission Provider's Scheduling Instructions when called upon during the prior Planning Year or conducting a real power test through the performance of a real-power test using the defined baselines for the Measurement and Verification of the test, as described below in this subsection.~~ A Demand Resource for which a real power test is conducted will receive credit as one (1) of the minimum deployments or interruptions required for such resource for the applicable Season of the Planning Year in which such a test occurs. *Alternatively, a Demand Resource may provide operational data and documentation, or develop an alternative mechanism, subject to the approval of the Transmission Provider, by which the demand reduction capability can be demonstrated without requiring an actual demand reduction if a real power test is precluded or waived due to one of the two conditions as specified below:*

*1) Such a real power test is either explicitly precluded or explicitly waived under a retail program approved by any applicable regulatory restriction authority, the Market Participant registering the Demand Resource is participating in such retail program with the same resource being registered with the Transmission Provider, and documentation of such a preclusion or waiver limitation is provided documented during DR registration for the Planning Resource Auction.*

*2) For the 2026/2027 Planning Year, A-a Market Participant registering a Demand Resource with the Transmission Provider for the Planning Resource Auction, where such resource is also participating in a retail program overseen by a regulatory authority, may waive the obligation to conduct a real power test by notifying the Transmission Provider during DR registration into the PRA and accepting a penalty equal to three (3) times the Hourly Real Time Ex Post LMP at the Load CPNode described in and distributed pursuant to Section 69A.3.9. A Demand Resource providing such notice must satisfy the documentation requirements described in the Business Practices Manual for Resource Adequacy and credit requirements by March 1 prior to the Planning Year totaling the ICAP value registered, but not tested, multiplied by \$12,000 2400/MW, where \$12,000 2400 is the product of 3 \* 4 \* \$1,000 200 to account for the three (3) times energy penalty assumed under the waiver, the four (4) hours of LMR requirements, and a \$1,000 200 LMP as a proxy for pricing under emergency Emergency conditions.*



*3) A Market Participant may request waive of the obligation to conduct a real power test of a Demand Resource provided the Demand Resource being registered meets the following conditions during the three-year period beginning on January 1<sup>st</sup> of the Year that is three years prior to the start of the applicable Planning Year:*

- a) The resource has responded to at least one Scheduling Instruction, has fully met the performance requirements of all Scheduling Instructions issued, and has met the requirements of Section 69A.3.5.e; and*
- b) The resource has not experienced a significant change in its operations or any change in the composition of the underlying non-residential components of the aggregation from the Planning Year prior to the Planning Year for which the resource is being registered. Aggregations comprised entirely of residential components satisfy this requirement unless they request a change in the total accredited amount of the program. The requirements of this subsection shall be further defined in the Business Practices Manual for Resources Adequacy.*

*Demand Resources not using a firm service level baseline.*

*For a resource that is not using the firm service level baseline Measurement and Verification procedure, the test must demonstrate 100% of the registered capacity value, subject to the requirements specified in the Business Practices Manual for Resource Adequacy. A weather adjustment may be applied to all such resources that have a temperature dependency. In no case will the weather adjustment increase the registered capacity value of the Demand Resource by more than 25% of the tested value. Each component of an aggregation of assets using the calculated baseline technique must provide the results of separate tests for each component of the aggregation and these tests must be performed simultaneously. The baseline used for the performance of a real power test is the actual hourly use in the Hour the test begins.*

*Demand Resources using a firm service level baseline.*

*An asset using the firm service level baseline must provide a real power test under one of the following two conditions:*

- 1. A test demonstrating the ability to reduce Demand when starting from a point at the beginning of the test that is at least 80% of the maximum Hourly metered Demand and ending at a point at or below the firm service level. When determining the maximum hourly Demand consumed to verify the real power test data submitted by a Market Participant, the Transmission Provider will exclude Hours with Demand that is at least two (2) standard deviations above the mean Demand consumed in a Season.; or*
- 2. A test demonstrating the ability to reduce Demand when starting from a point at least as great as the maximum Demand consumed during expected Resource Adequacy*

*Hours, as set forth in the Resource Adequacy Business Practices Manual, and ending at a point at or below the firm service level.*  
*A test must be performed to satisfy the requirements for each Season for the most recent period spanning September 1 through August 31. A single annual test that satisfies the criteria for each Season shall satisfy this requirement.*

*Demand Resource using a custom baseline.*  
*A resource using a custom baseline will be subject to the appropriate testing criteria determined by the Transmission Provider using the most appropriate baseline methodology set forth above.*

All existing accredited Demand Resources that neither conduct a real power test nor meet Scheduling Instructions issued by the Transmission Provider during the prior Planning Year must participate in training provided by the Transmission Provider on the deployment of LMRs during the prior Planning Year. Any existing accredited Demand Resource must submit (1) the real power test results, (2) reference performance of Scheduling Instructions for demand reduction when called upon during the calendar year prior to the upcoming Planning Year, (3) ~~alternate testing mechanism~~, relevant data, and a reference of training participation to the Transmission Provider, or (4) a Demand Resource Deferral Notice pursuant to 69A.3.5(lm) and a reference of training participation to the Transmission Provider no later than February 1 prior to such Planning Year for existing accredited DR. For new Demand Resources, (1) a real power test must be conducted and results submitted to the Transmission Provider (2) ~~alternate testing mechanism must be submitted~~, or (3) a Demand Resource Deferral Notice must be submitted prior to qualifying as a Demand Resource, but no later than March 1 prior to the PRA in accordance with the BPM for Resource Adequacy. ~~During a transition period that shall apply only to the 2021-2022 Planning Year, Market Participants may submit a Demand Resource Deferral Notice no later than March 31, 2021 for existing accredited Demand Resource, and Market Participants may submit a Demand Resource Deferral Notice no later than March 31, 2021 prior to initially qualifying as a Demand Resource.~~

**5. Addition of sub-Section 69A.3.5(k).** *A Market Participant must provide hourly meter data for each Demand Resource being registered as detailed in the Business Practices Manual for Resource Adequacy. A Market Participant electing to use the Demand Response Deferral Notice must provide all available hourly meter data demonstrating the Demand increase justifying the Demand Response Deferral Notice at the time of the real power test required under Section 69A.3.5.m.*

**6. Renumbering of sub-Section 69A.3.5(l) and Revisions to 69A.3.5(m).** MISO is proposing to renumber the previous sub-Section 69A.3.5(k) to Section 69A.3.5(l) and the previous sub-Section 69A.3.5(l) to sub-Section 69A.3.5(m). In addition, MISO is proposing corresponding changes to sub-Section 69A.3.5(m).

**7. Revision of sub-Section 69A.4.2.** The Transmission Provider will determine the appropriate Seasonal Accredited Capacity value for Demand Resources that qualify as a

Planning Resource as established in the BPM for Resource Adequacy. *For the 2026 / 2027 and 2027 / 2028 Planning Years, a Market Participant may request an initial Seasonal Accredited Capacity of a Demand Resource not using the firm service level baseline up to the registered capacity value as set forth in Section 69A.3.5.j for Demand Resources performing a real power test, or as set forth in the Business Practices Manual for Resource Adequacy if waiving the requirement to perform a real power test. For a Demand Resource that is using the firm service level baseline, the Seasonal Accredited Capacity will be equal to the Demand Resource's contribution to the Coincident Peak Demand of the appropriate LSE/EDC less the firm service level as set forth in the Business Practices Manual for Resource Adequacy.*

## **B. THE PROPOSED TARIFF REVISIONS ARE JUST AND REASONABLE**

MISO's proposed revisions are designed to ensure that all Demand Resources are capable of providing the Demand reduction for which they have registered and are being compensated and are necessary to promote reliability and decrease the likelihood of Market Participants registering resources into the PRA in a manner that does not accurately reflect the true capability of the resource. In the IMM's Affidavit submitted in support of this filing, Dr. Patton said, "The reforms will help ensure resource performance corresponds to the capability that MISO clears in the PRA and that is expected to be available when managing grid emergencies."<sup>15</sup> Dr. Patton went on to state, "MISO is aware of the issues that we identified in the course of our investigations and proposes several important testing changes that will address the issues we found, as well as additional potential vulnerabilities."<sup>16</sup>

Furthermore, the use of "mock" tests and testing waivers instead of a real power test was highlighted in several recent FERC Office of Enforcement Orders and Stipulations as helping to perpetuate sanctionable conduct in MISO's capacity construct.<sup>17</sup> MISO has proposed several modifications to its Tariff since the beginning of the year, many of which were specifically designed to protect Market Participants and ratepayers from the kind of sanctionable conduct that is the subject of these FERC Enforcement Orders. For these reasons, the proposal set forth herein is just and reasonable and should be accepted as presented.

MISO has requested a one-day effective date for these Tariff revisions and is planning to require Market Participants to meet these testing requirements in order to register resources for the April 2026 PRA as if these requirements were in place for the entire testing window. Section 4.2.7.8 of MISO's BPM – 011 defines the testing window for Demand Resources as January 1 – December 31 of the year prior to the start of the applicable Planning Year.<sup>18</sup> As discussed by Ms. Xie, making these testing provisions effective July 15<sup>th</sup> will provide Market Participants

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<sup>15</sup> Patton Affidavit at 4.

<sup>16</sup> *Id.* at 9.

<sup>17</sup> *See Ketchup Caddy, LLC and Philip Mango*, Order Assessing Civil Penalties, 189 FERC ¶ 61,176 (December 5, 2024); *Voltus, Inc. and Gregg Dixon*, Order Approving Stipulation and Consent Agreement, 190 FERC ¶ 61,008 (January 6, 2025).

<sup>18</sup> *See* Resource Adequacy BPM-011 at 4.2.7.8.

representing Demand Resources planning to test this Summer the certainty they need regarding which rules apply for the last half of the Summer Season and the remaining calendar year, before they begin registering resources in March 2026 for the 2026 / 2027 Planning Year.<sup>19</sup> Market Participants hoping to rely on MISO's generous mock test waiver provisions have been put on notice since early 2025 that changes to the testing provision were imminent. In the IMM's Affidavit submitted in support of this filing, Dr. Patton said,

MISO is working to introduce these rules in time to apply to participants who want to participate in the 2026/27 planning year. Many stakeholders typically test in the summer, and MISO needs to have these rules in place for Summer 2025 testing season, in advance of the 2026 / 2027 PRA Registration window. Accordingly, we support MISO's request to expedite this filing and its request for a one-day effective date from the day of filing. We believe this request is reasonable because MISO has been discussing these improvements with its stakeholders since early 2025 giving them ample time to schedule tests the summer and fall that will comply with the proposed rules.<sup>20</sup>

The one-day effective date provides certainty to stakeholders for as much of the testing window as possible, including one-half of the Summer Season and the remainder of the calendar year. MISO will work with stakeholders who conducted a real power test prior to the July 15<sup>th</sup> effective date requested herein, if the test shows a reduction in Demand but does not meet the exact requirements set forth in the new provisions. However, Market Participants who did not conduct a real power test prior to July 15<sup>th</sup> because they were planning to submit mock test data to register their Demand Resources will not be able to rely on the mock test provision that was effective prior to the July 15<sup>th</sup> Effective Date of the new provisions. For those reasons stated above, the one-day effective date requested by MISO is just and reasonable and should be accepted, as presented.

MISO has worked diligently with various stakeholders, including the Organization of MISO States, Inc. ("OMS"), the IMM, and several Market Participants since March 2025 to develop this proposal. As Ms. Xie explains, MISO met with interested members of the OMS Resource Adequacy Working Group to refine the waiver provisions included in this proposal that recognize the states' primary role in resource adequacy.<sup>21</sup> MISO included the one-year waiver provision for Demand Resources participating in retail programs in order to allow one Planning Year for Market Participants to modify contracts and/or retail tariffs to explicitly exclude or waive resources from MISO's testing requirements. Pursuant to Section 69A.3.5, if a Demand Resource is participating in a state retail program, they can qualify for a waiver from MISO's testing provisions for Planning Year 2026 / 2027 if they are willing to meet the criteria set forth in that Section, even if the contract and/or retail tariff is silent on testing. The IMM expressed support for the limited, proposed one year waiver provision.<sup>22</sup>

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<sup>19</sup> Xie Testimony at 10-11.

<sup>20</sup> Patton Affidavit at 15.

<sup>21</sup> Xie Testimony at 23-24.

<sup>22</sup> Patton Affidavit at 10.

Beginning with Planning Year 2027 / 2028, if a Demand Resource is subject to oversight by a state regulatory authority and the state regulatory authority has explicitly waived or precluded testing of the Demand Resource, then MISO will recognize the state's waiver or preclusion, provided the Market Participant seeking the waiver or preclusion provides necessary documentation at the time the resource is registered into the PRA. While Aggregators of Retail Customers ("ARCs") may view these waiver provisions as discriminatory, Ms. Xie explains that these provisions are not unduly discriminatory because Demand Resources that participate in retail programs are subject to oversight by a state regulatory authority and MISO recognizes that states have the primary responsibility for ensuring resource adequacy and state regulatory authorities have the right to exempt Demand Resources from testing requirements.<sup>23</sup> Ms. Xie further explains that, in the absence of regulatory oversight by a state regulatory authority, the proposed testing requirements will help determine the efficacy of Demand Resources by requiring those resources to meet these testing requirements.<sup>24</sup> For those reasons, the waiver provisions in this proposal recognizing the role of state regulatory authorities in resource adequacy are just and reasonable and should be accepted as presented.

### III. STAKEHOLDER ENGAGEMENT

MISO engaged in detailed discussions about these proposed reforms with stakeholders at the April 9, 2025, May 21, 2025, and July 9, 2025 meetings of the Resource Adequacy Sub-Committee (the "RASC").<sup>25</sup> MISO's stakeholder process was robust and included input from the OMS Resource Adequacy Working Group and the IMM, all of which was taken into consideration and contributed to the current real power test reforms proposed herein.

Certain stakeholders have requested that MISO delay implementation of the real power testing proposal until the 2027 / 2028 Planning Year. MISO notes that approximately 3,800 MW have elected to use the waiver provisions at the risk of increased penalties in Planning Year 2025 / 2026. However, with current Capacity prices being \$666.50 in the Summer Season, a 10 MW LMR clearing the PRA will collect approximately \$613,180<sup>26</sup> while facing penalties of only ~\$108,000<sup>27</sup> for any level of performance. Combined with the infrequent nature of LMR deployments and high-capacity prices, MISO's expectation is that an increasing number of Demand Resources will attempt to participate in the MISO Capacity markets. Without the ability to positively verify the capability of each Demand Resource participating, there is risk that resources will continue to fraudulently clear the PRA, depressing the price signal to build additional generation, and compensating Market Participants for resources that cannot or will not perform. The provisions are needed immediately to standardize the testing requirements and help

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<sup>23</sup> Xie Testimony at 18-19.

<sup>24</sup> *Id.*

<sup>25</sup> See LMR Enhancements RASC Presentation, April 9, 2025.  
[https://cdn.misoenergy.org/20250409%20RASC%20Item%20007%20LMR%20Enhancements%20\(RASC-2019-9\)689342.pdf](https://cdn.misoenergy.org/20250409%20RASC%20Item%20007%20LMR%20Enhancements%20(RASC-2019-9)689342.pdf)

<sup>26</sup> 92 Days \* \$666.50 /MW\*Day \* 10 MW = \$613,180.

<sup>27</sup> 3x penalty \* 4 hours \* 9 MW of penalty per Hour \* \$1,000 Ex-Post Real-Time LMP = \$108,000.

protect the Capacity markets beginning with the 2026 / 2027 Planning Year. These reforms cannot wait.

#### **IV. DOCUMENTS SUBMITTED WITH THIS FILING**

In addition to this Transmittal letter, this submission includes:

Tab A – Redline Tariff sheets effective July 15, 2025<sup>28</sup>

Tab B – Clean Tariff sheets effective July 15, 2025

Tab C – Redline Tariff sheets effective July 19, 2025<sup>29</sup>

Tab D – Testimony of Zhaoxia Xie

Tab E – Affidavit of David B. Patton, Ph.D.

#### **V. EFFECTIVE DATE**

MISO respectfully requests that the Commission make the proposed revisions effective on July 15, 2025 to provide certainty to Market Participants and enhance reliability by allowing MISO to rely on these strengthened provisions to ensure each Demand Response megawatt is valid and capable of performing when called upon. In addition, the requested effective date will allow Market Participants the maximum amount of time to conduct real power tests in anticipation of the 2026 / 2027 Planning Year.

For this intended effective date, MISO requests the Commission to grant waiver of its regulations in 18 CFR § 35.3(a)(1) requiring that proposed revisions to rate schedules be filed not less than 60 days before their requested effective date. Good cause exists to grant this waiver as it is a change to non-rate conditions, and it will allow MISO to put into place additional measures to enhance reliability, promote MISO operator confidence in the capability of Demand Response resources and reduce potential gaming opportunities. The IMM supports MISO's request to expedite the filing, as MISO has been discussing these improvements with its stakeholders since early 2025 giving them ample time to schedule tests the summer and fall that will comply with the proposed.<sup>30</sup> Granting the waiver and accepting the filing with a one-day effective date will provide

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<sup>28</sup> MISO has not included language that has future effective dates of 9/1/2027 under Docket No. ER25-1886-000. MISO commits to making subsequent filings with the Commission to reflect and reconcile the most up-to-date versions of the then-current Tariff provisions prior to the effective dates of the language in Docket No. ER25-1886-000.

<sup>29</sup> The Tariff sheets contained in Tab C reflect a July 19, 2025 effective date and includes all pending Tariff language highlighted in yellow effective through that date, including language filed in Docket No. ER25-1729-000. MISO requests that the Commission treat such pending language in Docket No. ER25-1729-000 as subject to the outcome of that pending proceeding. MISO commits to file any revisions to the pending language as necessary to comply with any Commission orders in those proceedings.

<sup>30</sup> Patton Affidavit at 15.

certainty to stakeholders regarding real power testing rules applicable to Demand Resources seeking to register to participate in the 2026 / 2027 Planning Year.<sup>31</sup>

## VI. COMMUNICATIONS

MISO respectfully requests waiver of Rule 203(b)(3) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.203(b)(3) (2025), to the extent necessary to permit the designation of more than two persons for service on behalf of MISO in this proceeding and requests all communications related to this filing be directed to:

Michael Kessler  
Managing Assistant General Counsel  
Michelle Quinn  
Managing Senior Corporate Counsel  
Whitney Carter  
Corporate Counsel  
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## VII. 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 MISO Region and the Organization of MISO States. The filing has been posted electronically on MISO's website at <https://www.misoenergy.org/legal/ferc-filings/> for other parties interested in this matter.

MISO also requests waiver of Section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13 (2025), to the extent applicable to this filing, and requests waiver of any other applicable

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<sup>31</sup> The Commission has previously waived the 60-day prior notice and filing requirement where, as here, the moving party's proposal is in the public interest and will allow customers to benefit from reduced rates. *See Cent. Hudson Gas & Elec. Corp.*, 60 FERC ¶ 61,106, at p.2 (1992) "*Central Hudson*") (Indicating that the Commission believes that waiver of notice will generally be appropriate when the filing has no rate impact or reduces the rate, or when a rate increase and its effective date are prescribed by an agreement on file with the Commission or by a settlement agreement accepted by the Commission.), *New York Indep. Sys. Operator, Inc.* 123 FERC ¶61, 306 (2008) (citing *Central Hudson*), *PPL Elec. Utilities Corp.*, 127 FERC ¶ 63,012, 66,045 (2009) (waiving 60-day prior notice and filing requirement of FPA Section 205(d) to permit an earlier effective date for new rates, where changes would result in reduced rates); *Midland Cogeneration Venture Ltd. P'ship*, 138 FERC ¶ 63,013, 66,078 (2012) (same). MISO respectfully requests that the Commission adhere to its prior practice here.

The Honorable Debbie-Anne Reese

July 14, 2025

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requirement of 18 C.F.R. Part 35 for which waiver is not specifically requested, if necessary, in order to permit Commission acceptance of this filing.

#### **VIII. CONCLUSION**

MISO respectfully requests that the Commission accept the proposed Tariff revisions for filing, grant the effective date of July 15, 2025, and grant waiver of any regulation the Commission deems applicable to this filing in order for the Commission to accept it as proposed.

Respectfully,

/s/ Michelle Quinn

Michelle Quinn

Managing Senior Corporate Counsel

Midcontinent Independent

System Operator, Inc.

*Attorney for the Midcontinent Independent System  
Operator, Inc.*

/Attachments



Tab A

### **Demand Response Resources:**

1. Demand Response Resources - Type I and DRR - Type II are eligible to qualify as Capacity Resources by a Market Participant that possesses ownership or equivalent contractual rights in the DRR by registering such resources as Capacity Resources with the Transmission Provider as documented in the BPM for Market Registration. A DRR - Type-I or a DRR - Type-II that interrupts or controls ~~demand~~ [Demand registering for the PRA](#) shall demonstrate capability and availability to reduce demand in response to instructions from the Transmission Provider for each applicable Season and shall submit such data to the Transmission Provider, as established in ~~the BPM for Resource Adequacy~~ [Section 69A.3.5.j](#). A Market Participant that wants to qualify a DRR - Type II that is a behind the meter generation facility as a Capacity Resource shall: (i) demonstrate GVTC capability for each Season in the Planning Year as established in the BPM for Resource Adequacy; (ii) submit GVTC results to the Transmission Provider no later than October 31 prior to such Planning Year for existing Capacity Resources unless the Transmission Provider has granted an extension pursuant to Section 69A.3.1.b.4; and (iii) submit generator availability data (including, but not limited to, NERC Generation Availability Data System information) into a database provided by the Transmission Provider. A Market Participant that wants to qualify a new DRR or an existing DRR that has an increased installed capacity that is a behind the meter generator as a Capacity Resource shall submit GVTC data to the Transmission Provider prior to qualification, but no later than March 1 prior to the PRA, as established in the BPM for Resource Adequacy.

2. Installed Capacity (ICAP) Deferral

If a Market Participant for a DRR has not completed GVTC testing by the deadlines provided in 69A.3.1.b.1, is not expected to demonstrate deliverability, or is otherwise not expected to demonstrate commercial operation prior to March 1, ZRCs from such capacity may be used in the PRA, in a FRAP (including through bilateral ZRC transactions), or in an RBDC Opt Out (including through bilateral ZRC transactions) subject to the notification, credit, and non-compliance provisions of Section 69A.7.9.

3. Reporting generator availability data based on GVTC is not required for a DRR behind the meter generation facility of less than 10 MW if the Market Participant has never provided such data for such behind the meter generation facility. A Market Participant that begins reporting generator availability data for a behind the meter generation facility that is less than 10 MW based on GVTC must continue to report such data. A Demand Response Resource that has provisional Interconnection Service does not qualify as a Capacity Resource. In accordance with the qualification provisions in the BPM for Resource Adequacy, the Transmission Provider will qualify a Demand Response Resource for the applicable Season in the upcoming Planning Year.

4. A Market Participant for a DRR required to submit GVTC results must use Reasonable Efforts to submit GVTC by October 31 prior to the upcoming Planning Year. If circumstances prevent the Market Participant from submitting the GVTC results for the DRR by October 31, the Market Participant must notify the Transmission Provider no later than five (5) Business Days after October 31 and request an extension. The

extension request must include a reasonable explanation and justification for missing the deadline and an expected completion date prior to the upcoming Planning Year. The Transmission Provider will review each extension request on a case by case basis to determine whether or not to approve or deny the request to extend the GVTC deadline. Denial of an extension will not preclude the Market Participant for the DRR from utilizing the ICAP Deferral process as described in Section 69A.7.9.

### **Demand Resource Eligibility**

A Market Participant that possesses ownership or equivalent contractual rights in a Demand Resource can request accreditation for a Demand Resource as an LMR by registering such resource with the Transmission Provider as documented in the BPM for Resource Adequacy and by meeting the following requirements:

- a. The Demand Resource must be equal to or greater than 100 kW (a grouping of smaller resources aggregated together that can reduce an LSE's Coincident Peak Demand for the applicable Season may qualify in meeting this standard).
- b. ~~The Demand Resource must be available to be scheduled for a Demand reduction at the targeted Demand reduction amount or by moving to a specified firm service level with notice based on their physical availability but with no more than 12 Hours advance notice required from the Transmission Provider. Limitations due to applicable regulatory restrictions that are more restrictive than the physical limitations of the Demand Resource will supersede the physical availability of the Demand Resource; however, in no event shall the Demand Resource's maximum notice requirement be greater than 12 hours. Further, limitations due to contractual obligations that are more restrictive than the physical limitations of the Demand Resource in place as of December 21, 2018 will supersede the physical availability of the Demand Resource for the 2019/2020 and 2020/2021 Planning Years; however, in no event shall the Demand Resource's maximum notice requirement be greater than 12 hours. A Demand Resource with a notification time requirement greater than 6 hours but less than or equal to 12~~

~~hours and a minimum of 10 interruptions allowed during the Planning Year will receive 50% credit as a Planning Resource for the 2022/2023 Planning Year. For the 2022/2023 Planning Year, Demand Resources with notification time requirements greater than 6 hours but less than or equal to 12 hours with less than 10 interruptions allowed will receive no credit. Beginning in the 2023/2024 Planning Year, a~~ Demand Resource must have a notification time requirement less than or equal to six (6) hours to receive credit as a Planning Resource in the applicable Seasons.

- c. Once Scheduling Instructions are given by the Transmission Provider that require a Demand reduction, the Demand Resource must be capable of ramping down to meet the targeted Demand reduction amount or to achieve the firm service level by the Hour designated by the Transmission Provider's Scheduling Instructions.
- d. Once the targeted amount of Demand reduction or firm service level is achieved, the Demand Resource must be able to maintain the targeted amount of Demand reduction or firm service level for at least four (4) continuous Hours.
- e. ~~For the 2022/2023 Planning Year, the Demand Resource must be capable of being interrupted for at least the first five (5) times requested based on their physical availability (when called upon by the Transmission Provider for an Emergency) during any Planning Year for which the Demand Resource receives credit as a Planning Resource. This availability must include at least the entire Summer Season. In addition to notification time requirements, the amount of credit that a Demand Resource receives as a Planning Resource will be based on the number~~

~~of interruptions allowed on the Demand Resource during the Planning Year.—~~

~~Demand Resources with a notification time requirement less than or equal to 6~~

~~hours will receive credit as a Planning Resource based on a multiplier of: (i) 80%~~

~~if 5 to 9 interruptions per Planning Year are allowed on the Demand Resource; or,~~

~~(ii) 100% if 10 or more interruptions per Planning Year are allowed on the~~

~~Demand Resource.~~

~~Beginning in the 2023/2024 Planning Year, the~~[A](#) Demand Resource must have a

notification time equal to or less than six (6) hours and be capable of being

interrupted for: (i) at least the first five (5) times requested in the Summer Season;

(ii) at least the first five (5) times requested in the Winter Season; (iii) at least the

first three (3) times requested in the Spring Season; and (iv) at least the first three

(3) times requested in the Fall Season, based on their physical availability when

called upon by the Transmission Provider for an Emergency during any

applicable Season in the Planning Year for which the Demand Resource receives

credit as a Planning Resource. These obligations only apply to Seasons in which

a Demand Resource clears the Planning Resource Auction.

Limitations due to applicable regulatory restrictions that are more restrictive than

the physical limitations of the Demand Resource will supersede the physical

availability of the Demand Resource.

- f. Unless the Demand Resource is unavailable as a result of maintenance requirements or for reasons of Force Majeure, when a Demand reduction is requested by the Transmission Provider for an Emergency, the resultant reduction

must be a reduction that would not have otherwise occurred within the next twenty four (24) hour period. There shall be no penalties assessed to a Market Participant representing the entity that has offered ZRCs from the LMR if the Demand Resource is unavailable for interruption as a result of maintenance requirements in accordance with Good Utility Practice, or for reasons of Force Majeure, or in the event that the specified Demand reduction had already been accomplished for other reasons (*e.g.*, economic considerations, operating one's own Demand Resource at or above the credited level of Demand Resource, or local reliability concerns in accordance with instructions from the Local Balancing Authority).

- g. A Demand Resource for which curtailment is not an obligation during Emergency events declared by the Transmission Provider pursuant to the Transmission Provider emergency operating procedures, will not qualify as an LMR.
- h. A Market Participant shall be prohibited from registering a Demand Resource for which credit is already being taken by a Market Participant.
- i. Demand Resources that are offered into the Day-Ahead and/or Real-Time Energy and Operating Reserve Markets as price sensitive Bids are obligated to be interrupted during an Emergency pursuant to the Transmission Provider emergency operating procedures regardless of the projected or actual Real-Time Energy Market LMP.
- j. A Market Participant must demonstrate ~~demand~~-Demand reduction capability for each Planning Year on an annual basis [through the performance of a real power](#)



test using the defined baselines for the Measurement and Verification of the test,  
as described below in this subsection~~as established in the BPM for Resource~~  
~~Adequacy. Beginning with the 2020/2021 Planning Year each Demand Resource~~  
~~must validate its performance by meeting the Transmission Provider's Scheduling~~  
~~Instructions when called upon during the prior Planning Year or conducting a real~~  
~~power test.~~—A Demand Resource for which a real power test is conducted will  
receive credit as one (1) of the minimum deployments or interruptions required  
for such resource for the applicable Season of the Planning Year in which such a  
test occurs.

Alternatively, A~~a~~ Demand Resource may provide operational data and  
documentation, ~~or develop an alternative mechanism, subject to the approval of~~  
~~the Transmission Provider,~~ by which the demand reduction capability can be  
demonstrated without requiring an actual demand reduction if a real power test is  
precluded or waived due to one of the ~~two~~ conditions as specified below:

- 1) Such a real power test is either explicitly precluded or explicitly waived  
under a retail program approved by any applicable regulatory authority,  
the Market Participant registering the Demand Resource is participating in  
such retail program with the same resource being registered with the  
Transmission Provider,~~restriction~~ and documentation of such a  
~~limitation~~preclusion or waiver is ~~documented~~provided during ~~DR~~  
registration;~~or~~ for the Planning Resource Auction.

2) For the 2026 / 2027 Planning Year, A-a Market Participant registering a Demand Resource with the Transmission Provider for the Planning Resource Auction, where such resource is also participating in a retail program overseen by a regulatory authority, may waive the obligation to conduct a real power test by notifying the Transmission Provider during DR registration into the PRA and accepting a penalty equal to three (3) times the Hourly Real-Time Ex Post LMP at the Load CPNode described in and distributed pursuant to Section 69A.3.9. A Demand Resource providing such notice must satisfy the documentation requirements described in the Business Practices Manual for Resource Adequacy and credit requirements by March 1 prior to the Planning Year totaling the ICAP value registered, but not tested, multiplied by \$~~2,400~~12,000/MW, where \$~~2,400~~12,000 is the product of 3 \* 4 \* \$~~200~~1,000 to account for the three (3) times energy penalty assumed under the waiver, the four (4) hours of LMR requirements, and a \$~~200~~1,000 LMP as a proxy for pricing under ~~emergency~~ Emergency conditions.

3) A Market Participant may request waiver of the obligation to conduct a real power test of a Demand Resource provided the Demand Resource being registered meets the following conditions during the three-year period beginning on January 1st of the Year that is three years prior to the start of the applicable Planning Year:

- a) The resource has responded to at least one Scheduling Instruction, has fully met the performance requirements of all Scheduling Instructions issued, and has met the requirements of Section 69A.3.5.e; and
- b) The resource has not experienced a significant change in its operations or any change in the composition of the underlying non-residential components of the aggregation from the Planning Year prior to the Planning Year for which the resource is being registered. Aggregations comprised entirely of residential components satisfy this requirement unless they request a change in the total accredited amount of the program. The requirements of this subsection shall be further defined in the Business Practices Manual for Resources Adequacy.

Demand Resources not using a firm service level baseline.

For a resource that is not using the firm service level baseline Measurement and Verification procedure, the test must demonstrate 100% of the registered capacity value, subject to the requirements specified in the Business Practices Manual for Resource Adequacy. A weather adjustment may be applied to all such resources that have a temperature dependency. In no case will the weather adjustment increase the registered capacity value of the Demand Resource by more than 25% of the tested value. Each component of an aggregation of assets using the calculated baseline technique must provide the results of separate tests for each

component of the aggregation and these tests must be performed simultaneously.

The baseline used for the performance of a real power test is the actual hourly use in the Hour the test begins.

Demand Resource using a firm service level baseline.

An asset using the firm service level baseline must provide a real power test under one of the following two conditions:

1. A test demonstrating the ability to reduce Demand when starting from a point at the beginning of the test that is at least 80% of the maximum Hourly metered Demand and ending at a point at or below the firm service level.

When determining the maximum hourly Demand consumed to verify the real power test data submitted by a Market Participant, the Transmission Provider will exclude Hours with Demand that is at least two (2) standard deviations above the mean Demand consumed in a Season.; or

2. A test demonstrating the ability to reduce Demand when starting from a point at least as great as the maximum Demand consumed during expected Resource Adequacy Hours, as set forth in the Resource Adequacy Business Practices Manual, and ending at a point at or below the firm service level.

A test must be performed to satisfy the requirements for each Season for the most recent period spanning September 1 through August 31. A single annual test that satisfies the criteria for each Season shall satisfy this requirement.

Demand Resource using a custom baseline.

A resource using a custom baseline will be subject to the appropriate testing criteria determined by the Transmission Provider using the most appropriate baseline methodology set forth above.

All existing accredited Demand Resources that neither conduct a real power test nor meet Scheduling Instructions issued by the Transmission Provider during the prior Planning Year must participate in training provided by the Transmission Provider on the deployment of LMRs during the prior Planning Year. Any existing accredited Demand Resource must submit (1) the real power test results, (2) reference performance of Scheduling Instructions for demand reduction when called upon during the calendar year prior to the upcoming Planning Year, (3) ~~alternate testing mechanism~~, relevant data, and a reference of training participation to the Transmission Provider, or (4) a Demand Resource Deferral Notice pursuant to 69A.3.5(4m) and a reference of training participation to the Transmission Provider no later than February 1 prior to such Planning Year for existing accredited DR. For new Demand Resources, (1) a real power test must be conducted and results submitted to the Transmission Provider, ~~(2) alternate testing mechanism must be submitted~~, or (3~~2~~) a Demand Resource Deferral Notice must be submitted prior to qualifying as a Demand Resource, but no later than March 1 prior to the PRA in accordance with the BPM for Resource Adequacy. ~~During a transition period that shall apply only to the 2021-2022~~

~~Planning Year, Market Participants may submit a Demand Resource Deferral Notice no later than March 31, 2021 for existing accredited Demand Resource, and Market Participants may submit a Demand Resource Deferral Notice no later than March 31, 2021 prior to initially qualifying as a Demand Resource.~~

k. Data submission requirements

A Market Participant must provide hourly meter data for each Demand Resource being registered as detailed in the Business Practices Manual for Resource Adequacy. A Market Participant electing to use the Demand Response Deferral Notice must provide all available hourly meter data demonstrating the Demand increase justifying the Demand Response Deferral Notice at the time of the real power test required under Section 69A.3.5.m.

l. Market Participants providing physical, regulatory, or contractual limitations of the notice times and availability of Demand Resources must provide appropriate documentation to the Transmission Provider in accordance with the BPM for Resource Adequacy.

~~4m.~~ A Market Participant may defer the obligation to conduct a real power test, as set forth in section 69A.3.5(j), by providing a Demand Resource Deferral Notice to the Transmission Provider in writing and signed by an officer of the company no later than February 1<sup>st</sup> prior to the Planning Year. During a transition period that shall apply only to the 2021-2022 Planning Year, Market Participants may submit a Demand Resource Deferral Notice no later than March 31, 2021 for existing accredited Demand Resource, and Market Participants may submit a Demand

Resource Deferral Notice no later than March 31, 2021 prior to initially qualifying as a Demand Resource. The Demand Resource Deferral Notice shall contain: (1) the expected Demand Resource test value (in megawatts) from such Demand Resource and if the Demand Resource is new, the LBA or external BA where it is represented; and (2) appropriate information validating that real power test results will be submitted to the Transmission Provider by the last Business Day of May prior to the Planning Year. A Market Participant that provides a Demand Resource Deferral Notice must satisfy credit requirements by March 1 prior to the Planning Year totaling the amount of Demand Resource test value provided in the Demand Resource Deferral Notice multiplied by ~~\$2,400~~12,000/MW, where ~~\$2,400~~12,000 is the product of 3\*4\* ~~\$200~~1,000 to account for the three (3) times energy penalty assumed under the deferral, the four (4) hours of LMR requirements, and a ~~\$200~~1,000 LMP as a proxy for pricing under emergency conditions. During a transition period that shall apply only to the 2021-2022 Planning Year, Market Participants that have elected to submit a Demand Resource Deferral Notice must satisfy credit requirements by March 31, 2021. If the Market Participant submits the real power test results on or before the last Business Day of May prior to the Planning Year that are equal to or greater than the expected Demand Resource test value, then the Transmission Provider will adjust the Market Participant's credit requirement to account for these changes within twenty (20) Business Days after that real power test is submitted. In the event ZRCs associated with a Planning Resource for which Demand

Resource testing has been successfully deferred are unconverted in accordance with section 69A.7.3, the Market Participant may provide notice to the Transmission Provider that it wishes to forfeit the deferred Demand Resource value, in which case the Transmission Provider will adjust the Market Participant's Demand Resource value and credit requirement within twenty (20) Business Days. A Market Participant that provides a Demand Resource Deferral Notice and that either (1) has not submitted any real power test result for such Demand Resource by the last Business Day of May prior to the Planning Year, or (2) has submitted a real power test result by the last Business Day of May prior to the Planning Year that demonstrates fewer megawatts are available than the expected Demand Resource test value submitted in the Demand Resource Deferral Notice, shall be subject to a penalty equal to three (3) times the Hourly Real-Time Ex Post LMP at the Load CPNode for any such deficiency described in and distributed pursuant to Section 69A.3.9. In addition, such Market Participant shall not have their credit released until a real power test result demonstrating the availability of all megawatts submitted in the Demand Resource Deferral Notice is submitted and verified by the Transmission Provider, or the end of the Planning Year, whichever is earlier.



### **Seasonal Accredited Capacity of Demand Resources**

The Transmission Provider will determine the appropriate Seasonal Accredited Capacity value for Demand Resources that qualify as a Planning Resource as established in the BPM for Resource Adequacy.

For the 2026 / 2027 and 2027 / 2028 Planning Years, a Market Participant may request an initial Seasonal Accredited Capacity of a Demand Resource not using the firm service level baseline up to the registered capacity value as set forth in Section 69A.3.5.j for Demand Resources performing a real power test, or as set forth in the Business Practices Manual for Resource Adequacy if waiving the requirement to perform a real power test. For a Demand Resource that is using the firm service level baseline, the Seasonal Accredited Capacity will be equal to the Demand Resource's contribution to the Coincident Peak Demand of the appropriate LSE/EDC less the firm service level as set forth in the Business Practices Manual for Resource Adequacy.

## ATTACHMENT L

### CREDIT POLICY

#### **POLICY STATEMENT:**

It is the policy of the Transmission Provider that prior to an entity (“Applicant”) taking any service under this Tariff, holding any FTR or becoming a Transmission Customer or Market Participant, the Applicant must demonstrate its ability to meet the Transmission Provider’s credit requirements.

Prior to becoming a Transmission Customer, Market Participant or Coordination Customer (together “Tariff Customer”), of the Transmission Provider, each Applicant must have an approved credit application and establish a Total Credit Limit with the Transmission Provider for services under this Tariff, including, without limitation, Transmission Service and Market Activities. Because all Transmission Service transactions are subject to congestion costs and marginal losses, every Transmission Customer of the Transmission Provider must either apply to be a Market Participant or be represented by a duly authorized Market Participant in good standing pursuant to the terms and conditions of this Credit Policy and the Agreements. In addition to completing a credit application, each Applicant and/or Tariff Customer will be subject to a complete credit evaluation that will include, but not be limited to, a review of financial statements, Rating Agency reports, and other pertinent indicators of financial strength and creditworthiness. An existing Transmission Customer who is applying to become a Market Participant need not provide the information required in Section I.A of this Credit Policy as such information is already on file with Transmission Provider.

**POLICY INTENT:**

This Credit Policy describes requirements for: (1) the establishment and maintenance of credit by Market Participants, Transmission Customers, and Applicants pursuant to one or more Credit and Security Agreement(s) in the form attached to this Credit Policy as Exhibit V, and (2) forms of security that will be deemed acceptable (hereinafter the “Financial Security”) to cover its FTR Obligations and in the event the Applicant and/or Tariff Customer does not satisfy the financial requirements to establish Unsecured Credit to cover its Non-FTR Potential Exposure.

This policy also sets forth: (i) the basis for establishing the individual Total Credit Limit that will be imposed on an Applicant and/or Tariff Customer in order to minimize the possibility of failure of payment for services rendered pursuant to the Agreements and (ii) various obligations and requirements the violation of which will result in a Default pursuant to this policy, this Tariff and the Agreements.

The Transmission Provider shall administer and implement the terms of this Credit Policy.

**APPLICABILITY:**

This policy applies to all Applicants and Tariff Customers who take Transmission Service under this Tariff, utilize services or participate in the Energy and Operating Reserve Markets, hold FTRs, ARRs or otherwise participate in Market Activities under Module C of this Tariff or RAR activities. This policy also applies to Reliability Coordination Customers, and Congestion Management Customers that take service under Module F of this Tariff.

**NOTICE:**

All written notifications by the Transmission Provider under this policy shall be in accordance with Section 7.18 of this Tariff. Notifications to Applicants and/or Tariff Customers will be sent to their credit contact(s).

**IMPLEMENTATION:**

**I. CREDIT EVALUATION**

Each Applicant will be subject to a complete credit evaluation in order for the Transmission Provider to determine financial strength and creditworthiness and to establish an Unsecured Credit Allowance, if appropriate. Any Unsecured Credit Allowance will only be applicable to non-FTR credit requirements. The Transmission Provider will identify any necessary Financial Security requirements and establish a Total Credit Limit for each Applicant and/or Tariff Customer. All FTR credit requirements must be satisfied with Financial Security. In addition, the Transmission Provider will perform follow-up credit evaluations on at least an annual basis. *See* Section I.B of this Credit Policy entitled “Ongoing Credit Evaluation” for further information.

If a Corporate Guaranty is being utilized to establish credit for an Applicant and/or Tariff Customer, the Guarantor will be evaluated and the Unsecured Credit Allowance granted, if any, based on the financial strength and creditworthiness of the Guarantor. Any utilization of a Corporate Guaranty will only be applicable to non-FTR credit requirements and will not be applicable to cover FTR credit requirements.

**A. Initial Credit Evaluation**

In completing the initial credit evaluation, the Transmission Provider will consider:

**1) Rating Agency Reports**

In evaluating financial strength and creditworthiness, the Transmission Provider will review Rating Agency reports. The focus of the review will be on an entity's unsecured, senior long-term debt ratings. If unsecured, senior long-term debt ratings are not available the Transmission Provider may consider Issuer Ratings. The Transmission Provider will also evaluate financial strength and creditworthiness based on financial statements and other information as described below. The same quantitative and qualitative factors will be used to evaluate entities whether or not they have rated debt.

**2) Financial Statements and Related Information**

Applicants must submit audited financial statements for the three (3) fiscal years most recently ended, or the period of existence of the Applicant, if shorter. If requested by Transmission Provider, Applicants must submit financial statements for each completed fiscal quarter of the current fiscal year.

The information should include, but not be limited to, the following:

- a.** If publicly traded:

- i. Annual Reports on Form 10-K for the three (3) fiscal years most recently ended, together with any amendments thereto;
  - ii. If requested by Transmission Provider, Quarterly Reports on Form 10-Q for each completed fiscal quarter of the then current fiscal year, together with any amendments thereto; and
  - iii. Form 8-K reports, if any have been filed since the most recent Form 10-K.
- b. If privately held, for each of the three (3) fiscal years most recently ended and, if requested by Transmission Provider, each completed fiscal quarter of the then current fiscal year:
  - i. Report of Independent Accountants for each fiscal year;
  - ii. Financial Statements, including:
    - Balance Sheet
    - Income Statement
    - Statement of Cash Flows
    - Statement of Stockholder's Equity;
  - iii. Notes to Financial Statements; and
  - iv. Management's Discussion & Analysis (if available)

If the above information is available through the Internet, the Applicant may provide a letter stating where such information can be located and retrieved by the Transmission Provider. If an Applicant files Form 10-K, Form 10-Q or Form 8-K with the SEC, then the Applicant has satisfied the requirement of indicating to the Transmission Provider where the information in this Section I.A.2(a) can be located through the Internet. For certain Applicants, some of the above financial submittals may not be applicable, and alternate requirements may be specified by the Transmission Provider.

In the credit evaluation of cooperatives, government agencies and municipalities, the Transmission Provider may request additional information as part of the overall financial review process and will consider other relevant factors in determining financial strength and creditworthiness.

**3) References**

If deemed necessary by Transmission Provider, each Applicant is to provide at least one (1) bank and three (3) Significant Trade References.

**4) Litigation, Commitments and Contingencies**

Each Applicant is also required to identify and provide information as to any known pending or, to the knowledge of any such Applicant's directors, officers or general counsel, threatened litigation, arbitrations, investigations, proceedings, commitments, contingencies, or liabilities that is Material or would be Material if adversely determined, as well as any prior bankruptcy declarations or petitions by or against the Applicant, its

predecessors, subsidiaries or Affiliates, or any Material defalcations or fraud by or involving the Applicant, its predecessors, subsidiaries or Affiliates, or any of their respective assets, if any. These disclosures shall be made by Applicant upon application, and promptly upon any initiation or change with respect to any of the above matters. The Applicant shall resubmit and update such information at least annually thereafter, or as requested by the Transmission Provider.

**5) Other Disclosures**

Each Applicant is required to disclose any Affiliates that are Tariff Customers and/or Applicants of the Transmission Provider. Each Applicant is also required to disclose the existence of any ongoing investigations by the SEC, the Commission, or any other governing, regulatory, or standards body. These disclosures shall be made by all Applicants upon application, and promptly upon any initiation or change with respect to any of the above matters. The Applicant shall resubmit and update such information at least annually thereafter, or as requested by the Transmission Provider.

**6) Public Sector Adjustments to the Unsecured Credit Allowance**

**Calculation and Municipality Security Interest in Accounts**

**Receivable Exemption to Qualify as a Category A Tariff Customer**

- a) Municipality or Joint Action Agency:** A municipality or Joint Action Agency requesting (i) its suggested Unsecured Credit



Allowance calculation reflect as equity the outstanding balance of Revenue Bonds issued by the Applicant when such Revenue Bonds are issued solely in support of the Applicant's role as power supply agent for not-for-profit electric distribution utilities, and/or (ii) an exemption for granting a first priority security interest a Receivable Security Interest for the purpose of qualifying as a Category A Tariff Customer, as defined in Section II.G of this Credit Policy, must provide the Transmission Provider with the following information:

Management representation letter stating:

- (i) Principal amount, in dollars, of Revenue Bonds outstanding;
- (ii) Prior to default and after default, debt service on the Revenue Bonds is payable only after operating expenses are paid;
- (iii) Amounts payable to the Transmission Provider for transmission and energy and ancillary services under this Tariff are operating expenses for purposes of the Revenue Bonds; and
- (iv) The trustee for the Revenue Bonds has a valid and binding security interest in the revenues or net revenues from the power supply contracts to secure payment of the Revenue

Bonds and the Applicant has not granted any lien thereon prior to the lien of the bond resolution.

Opinion of counsel stating:

- (i) The power supply contracts are binding obligations of the Applicant enforceable in accordance with their terms;
- (ii) The trustee of the Revenue Bonds has a valid and binding security interest in, or assignment and pledge of, the revenues or net revenues from the power supply contracts to secure payment of the Revenue Bonds;
- (iii) The resolution or other document creating the security interest or pledge and providing for the priority of payment is enforceable in accordance with its terms;
- (iv) Prior to default and after default, debt service on the Revenue Bonds is payable only after operating expenses are paid; and
- (v) Amounts payable to the Transmission Provider for transmission and energy and ancillary services under this Tariff are operating expenses for purposes of the Revenue Bonds.
- (vi) All Rating Agency ratings on Revenue Bond(s).

The opinion of counsel referenced above shall be provided to the Transmission Provider together with copies of the most recent written

opinions of counsel, if any, for each member of the Applicant that relate to the enforceability of the power supply contract(s).

**b) Electric Generation and Transmission Cooperatives:**

An Electric Generation and Transmission Cooperative (Coop) with a Composite Credit Score between 1.00 and 3.99 as determined by the Transmission Provider's credit scoring model requesting its suggested Unsecured Credit Allowance calculation reflect as equity fifteen percent (15%) of its long-term debt as stated on its most recently audited year-end financial statement must provide the Transmission Provider with a Sample Membership Agreement and a:

Management representation letter stating:

- (i) The Sample Membership Agreement is the document which establishes the rights and obligations between the Coop and its members. The Sample Membership Agreement is the same agreement executed by the Coop and each of its members;
- (ii) The duration of the membership agreement(s) equals or exceeds the duration of the Coop's long-term debt obligations;
- (iii) The Coop and each of its members are in compliance with all of their respective debt covenants;

- (iv) The consolidated Tangible Net Worth of all of the Coop's members;
- (v) The Coop has the ability to set rates or has a formula driven rate tariff in place;
- (vi) The Coop's purchases from the Transmission Provider are covered by the fuel adjustment and/or purchased power clauses contained within the executed membership agreements and are included in the calculation of the Coop's rate structure; and
- (vii) The Sample Membership Agreement covers all operating, finance and capital expenditures incurred by the Coop.

**7) Initial value of the Total Potential Exposure for credit monitoring purposes.**

The initial value for an Applicant's or Tariff Customer's Total Potential Exposure shall be determined in accordance with the formulas in this Section I.A.7. Additionally, Transmission Provider may request and consider supplemental information in determining an Applicant's initial value of Total Potential Exposure.

**a) Estimated Peak Load Data Requirement**

Each Applicant will present to Transmission Provider staff its estimated annual peak load for Network Integration Transmission

Service by Point of Delivery and its estimated amount of reserved Capacity for Point-To-Point Transmission Service by Point of Delivery.

**b) Initial Value of Total Potential Exposure Associated with Transmission Service and Schedule 26-A Charges**

A calculation using the information provided and applicable Transmission Service rates for each month of service creates the initial value of Total Potential Exposure component associated with Transmission Service needed for credit monitoring purposes. For the initial value of Total Potential Exposure associated with Schedule 26-A charges the Applicant's estimated peak Monthly Net Actual Energy Withdrawal (excluding those Monthly Net Actual Energy Withdrawals provided under GFAs), and Export Schedules and Through Schedules be applied to the current year's indicative MVP Usage Rate (\$/MWh).

**c) Initial Value of Total Potential Exposure Associated with Energy and Operating Reserve purchases and Energy and Operating Reserve supply**

The following calculations will be used to determine the initial value of the Total Potential Exposure component associated with Energy and Operating Reserve purchases and Energy and Operating Reserve supply needed for credit monitoring purposes:

- (i) For Energy and Operating Reserve purchase exposure, the formula is:

The estimated peak load (MWh purchase requirement for a given hour) x 600 hours x the average historical Day-Ahead price for the preceding three (3) month period.

- (ii) (A) For Energy and Operating Reserve supply exposure for all entities other than ARCs, the formula is:

The maximum MWh capacity of generating unit(s) x 600 hours x the average historical Day-Ahead price for the preceding three (3) months x five percent (5%).

(B) For Energy and Operating Reserve supply exposure for ARCs the formula is:

The maximum MWh capacity of demand resource(s) x 304 hours x the average historical Day-Ahead price for the preceding three (3) months x five percent (5%).

For both (A) and (B) a value of \$26.00 per MWh will be used as the value for the historical Day-Ahead price until changed. A new value will be calculated and made effective September 1, 2009, and every three (3) months thereafter.

**d) Initial Value of Total Potential Exposure Associated with Virtual Transactions**

Each Applicant that intends to participate in any Virtual Transactions will notify the Transmission Provider staff of its desired Virtual MWh Limit. The desired Virtual MWh Limit will be used to determine the initial value of Total Potential Exposure component associated with Virtual Transactions.

**e) FTR Auction Designation**

Each Applicant that intends to submit FTR Offers or FTR Bids in an FTR Auction will notify the Transmission Provider staff of its desired FTR Auction Credit Allocation. The desired FTR Auction Credit Allocation will be considered when calculating the initial value of FTR Obligations. As with all other FTR-related credit requirements, the FTR Auction Credit Allocation *must* be covered by Financial Security. The amount of Financial Security to be allocated to support participation in the FTR Auction is addressed in Section IV.B of this Credit Policy.

**f) Initial Value of Total Potential Exposure Associated with RAR charges**

Each Applicant that intends to participate in the Planning Resource Auction will notify Transmission Provider staff of the ZRCs it intends to procure in the auction. The intended level of ZRCs may be used to determine the initial value of Total Potential Exposure component associated with RAR.

**g) Other Information**

Each Applicant will submit such additional information requested by the Transmission Provider necessary to calculate the Applicant's Total Potential Exposure.

**8) Unreasonable Credit Risk**

The Transmission Provider may require additional Financial Security, or reject an application, if the Applicant is determined by the Transmission Provider to present an unreasonable credit risk.

Unreasonable credit risk may be identified based on, but not limited to, the material provided in the customer's application including responses to Exhibit VI. Additional Financial Security will reflect the proportional increase in credit risk to MISO administered markets.

An example of unreasonable credit risk may be determined by but not limited to market manipulation, a history of market manipulation, a material financial default, or a history of material financial defaults. The Transmission Provider will work with the Tariff Customer when determining unreasonable credit risk.

**9) Re-entry of Defaulting Tariff Customer**

In addition to the provisions for curing a Tariff Customer default contained elsewhere in the Tariff, a Tariff Customer whose previous default resulted in a loss to the MISO administered market must cure such default by payment to the Transmission Provider of all outstanding and unpaid obligations, as well as meet



all Tariff Customer requirements for market participation. The Transmission Provider will evaluate relevant factors to determine if an entity seeking to participate in the MISO administered markets under a different name, affiliation, or organization, should be treated as the same Tariff Customer that experienced the previous default under this provision. Such factors may include, but are not limited to, the interconnectedness of the business relationships, overlap in relevant personnel, similarity of business activities, overlap of customer base, and the business engaged in prior to the attempted re-entry.

**B. Ongoing Credit Evaluation**

On at least an annual basis, the Transmission Provider will perform follow-up credit evaluations on each Tariff Customer. In completing the credit evaluation, the Transmission Provider will consider:

**1) Rating Agency Reports**

In evaluating financial strength and creditworthiness, the Transmission Provider will review Rating Agency reports. The focus of the review will be on an entity's unsecured, senior long-term debt ratings. If unsecured, senior long-term debt ratings are not available the Transmission Provider may consider Issuer Ratings. The Transmission Provider will also evaluate financial strength and creditworthiness based on financial statements and other information as described below. The same

quantitative and qualitative factors will be used to evaluate entities whether or not they have rated debt.

**2) Financial Statements and Related Information**

Each Tariff Customer with an Unsecured Credit Allowance, each Guarantor under a Corporate Guaranty accepted by the Transmission Provider for the benefit of the Tariff Customer, and each Affiliate of each Guarantor for whose benefit such Guarantor provided a Corporate Guaranty accepted by the Transmission Provider (“Guaranteed Affiliate”) must submit, or cause to be submitted, the following:

- a.** Audited annual financial statements by June 30<sup>th</sup> of each year or no later than one hundred twenty (120) days after such entity’s fiscal year end; and
- b.** If requested by Transmission Provider, quarterly financial statements promptly upon their issuance, but no later than sixty (60) days after the end of each fiscal quarter of such entity.

The information should include, but not be limited to, the following:

- a.** If publicly traded:
  - i.** Annual reports on Form 10-K, together with any amendments thereto;
  - ii.** If requested by Transmission Provider, quarterly reports on Form 10-Q, together with any amendments thereto; and

Effective On: July 15, 2025

In the credit evaluation of cooperatives, government agencies and municipalities, the Transmission Provider may request additional information as part of the ongoing financial review process and will consider other relevant factors in determining financial strength and creditworthiness.

**3) Material Changes**

Each Tariff Customer is responsible for informing the Transmission Provider, in writing, of any Material Change in its financial condition (or the financial condition of its Guarantor or any Guaranteed Affiliates) within five (5) Business Days of the occurrence of the Material Change. If a Tariff Customer, Guarantor or Guaranteed Affiliate files Form 10-K, Form 10-Q or Form 8-K with the SEC, then the entity has satisfied the requirement to inform the Transmission Provider in writing of any Material Change described in such filing.

For the purpose of this policy, a Material Change in financial condition includes, but is not limited to, the following:

- a. A downgrade of any debt rating or Issuer Rating;
- b. A change in the outlook of any debt rating or Issuer Rating;
- c. Being placed on a credit watch with negative implication by a Rating Agency;
- d. A bankruptcy filing;
- e. Insolvency;

- f. The filing of a lawsuit or initiation of an arbitration, investigation or other proceeding which could have a Material adverse effect on any current or future financial results or financial condition;
- g. Any changes in financial condition which, individually, or in the aggregate, are Material;
- h. Any adverse changes, events or occurrences which, individually or in the aggregate, could affect the ability of the entity to pay its debts as they become due or could have a Material adverse effect on any current or future financial results or financial condition;
- i. Disclosure of conflict of interest issues;
- j. Resignation or removal of a key officer or director;
- k. A significant increase in credit default swap (CDS) spread; or
- l. A significant decrease in market capitalization.

Upon identification of a Material Change, the financial strength and creditworthiness of the Tariff Customer may be reevaluated by the Transmission Provider. Such reevaluation may result in a requirement for the Tariff Customer to provide Financial Security or additional Financial Security, as the case may be. If applicable, the Transmission Provider will notify the Tariff Customer in writing upon completion of the reevaluation of the need for Financial Security, if any. The Tariff Customer will have two (2) Business Days from receipt of written notification to provide the required Financial Security, in an amount and form approved by the Transmission Provider.

#### **4) Litigation, Commitments, and Contingencies**

Each Tariff Customer is required to identify and provide information as to any known pending or, to the knowledge of any of such Tariff Customer's directors, officers or general counsel, threatened litigation, arbitrations, investigations, proceedings, commitments, contingencies or liabilities with respect to the Tariff Customer, the Guarantor, the Guaranteed Affiliates, their respective predecessors, subsidiaries or Affiliates that is Material or would be Material if adversely determined, as well as any prior bankruptcy declarations or petitions by or against the Tariff Customer, the Guarantor, the Guaranteed Affiliates or their respective predecessors, subsidiaries or Affiliates, or any Material defalcations or fraud by or involving any assets of the Tariff Customer, the Guarantor, the Guaranteed Affiliates, or their respective predecessors, subsidiaries or Affiliates, if any. These disclosures shall be made promptly upon any initiation or change with respect to any of the above matters. If a Tariff Customer, Guarantor or Guaranteed Affiliate files Form 10-K, Form 10-Q or Form 8-K with the SEC, then the entity has satisfied the requirement to inform Transmission Provider in writing of any such information disclosed in such filing. The Tariff Customer shall resubmit and update such information at least annually, or as requested by the Transmission Provider.

#### **5) Other Disclosures**

Each Tariff Customer is required to disclose any Affiliates that are currently Tariff Customers or are applying to be Tariff Customer. Each Tariff Customer is

also required to disclose the existence of any ongoing investigations of Tariff Customer, Guarantor or any Guaranteed Affiliate by the SEC, the Commission, or any other governing, regulatory, or standards body. These disclosures shall be made promptly upon any initiation or change with respect to any of the above matters. If a Tariff Customer, Guarantor or Guaranteed Affiliate files Form 10-K, Form 10-Q or Form 8-K with the SEC, then the entity has satisfied the requirement to inform the Transmission Provider in writing of any investigation disclosed in such filing. The Tariff Customer shall resubmit and update such information at least annually, or as requested by the Transmission Provider.

**6) Public Sector Adjustments to the Unsecured Credit Allowance Calculation**

**Municipality or Joint Action Agency:**

A Tariff Customer that initially qualified to have its suggested Unsecured Credit Allowance calculation reflect as equity the outstanding balance of Revenue Bonds issued by the Tariff Customer and/or qualified for an exemption to provide a Receivable Security Interest for the purpose of qualifying as a Category A Tariff Customer, and is requesting to continue to have its suggested Unsecured Credit Allowance calculation reflect as equity the outstanding balance of Revenue Bonds issued by the Tariff Customer when such Revenue Bonds are issued solely in support of the Tariff Customer's role as power supply agent for not-for-profit electric distribution utilities and/or requesting to qualify for an exemption to provide a Receivable Security Interest for the purpose of qualifying as a Category

A Tariff Customer, must at all times comply with the following information reporting requirements:

- (a) The Tariff Customer must advise the Transmission Provider of the principal amount of Revenue Bonds outstanding on an annual basis;
- (b) The Tariff Customer must advise the Transmission Provider within ten (10) days if the principal amount of the Revenue Bonds outstanding is reduced by more than twenty percent (20%) from the amount last certified by the Tariff Customer;
- (c) The Tariff Customer must advise the Transmission Provider immediately if the security interest of the trustee is released or the Tariff Customer grants any lien prior to the lien of the bond resolution; and
- (d) The Tariff Customer must advise the Transmission Provider within ten (10) days of any downgrade of any of the Tariff Customer's Revenue Bond ratings issued by a Rating Agency.

**7) Electric Generation and Transmission Cooperatives:**

A Coop with a current Composite Credit Score between 1.00 and 3.99 as determined by the Transmission Provider's credit scoring model that is requesting to continue to have its suggested Unsecured Credit Allowance calculation reflect as equity fifteen percent (15%) of its long-term debt as stated on its current year-end audited financial statement, must at all times comply with the following information reporting requirements, by stating the following:



- (a) The Sample Membership Agreement initially provided to the Transmission Provider in connection with its request for an Unsecured Credit Allowance continues to be the document which establishes the rights and obligations between the Coop and its members;
- (b) In the alternative, the Coop will advise the Transmission Provider of any changes to the Sample Membership Agreement previously provided and provide a redlined copy of the Sample Membership Agreement highlighting the changes;
- (c) The duration of the Sample Membership Agreement(s) equals or exceeds the duration of all of the Coop's long term debt obligations;
- (d) The Coop and each of its members are in compliance with all of their respective debt covenants;
- (e) The consolidated Tangible Net Worth of all of the Coop's members;
- (f) The Coop has the ability to set rates or has a formula driven rate tariff in place;
- (g) The Coop's purchases from the Transmission Provider are covered by the fuel adjustment and/or purchased power clauses and included in the Coop's rate structure; and
- (h) The Sample Membership Agreement covers all operating, finance and capital expenditures incurred by the Coop.

**8) Unreasonable Credit Risk:**

The Transmission Provider may require additional Financial Security, or suspend the Tariff Customer, if the Tariff Customer is determined by the Transmission Provider to present an unreasonable credit risk. Unreasonable credit risk may be identified based on, but not limited to, the material provided in the customer's ongoing credit evaluation including responses to Exhibit VI. A Tariff Customer may be suspended, in accordance with Sections 7.16(a)(1)(ii) and 7.16(a)(2) of the Tariff, from participating in the Transmission Provider's Energy and Operating Reserve Markets and from requesting any future Markets and Services unless and until Tariff Customer is determined not to present unreasonable credit risk. Additional Financial Security will reflect the proportional increase in credit risk to MISO administered markets.

An example of unreasonable credit risk may be determined by but not limited to market manipulation, a history of market manipulation, a material financial default, or a history of material financial defaults.

The Transmission Provider will work with the Tariff Customer when determining unreasonable credit risk.

## **II. CREDITWORTHINESS AND TOTAL CREDIT LIMIT**

### **A. Evaluation of Creditworthiness**

A Composite Credit Score will be generated from the Transmission Provider's review and analysis of the information obtained through the initial and ongoing credit evaluation process described in Section I of this Credit Policy. Key factors in the scoring process include, but are not limited to, Rating Agency ratings, financial

statements, if deemed necessary, and Significant Trade References. The Transmission Provider will consistently apply the credit scoring process described in Section II.A of this Credit Policy in determining Composite Credit Scores.

### **1) Composite Credit Score – Public Power Sector**

The Public Power Sector analysis will be comprised of a Quantitative and Qualitative analysis. Each analysis is then weighted as shown below to build a total composite score.

<b>Analysis</b>	<b>Weight</b>
Quantitative Score	40%
Qualitative Score	60%

#### **Quantitative Score (40%)**

The Quantitative Score is developed by evaluating and weighting the seven (7) financial metrics listed in the table below.

<b>Public Power Financial Metric</b>	<b>Weight</b>
Days Cash/SGA + Interest Expense	20%
Debt Service Coverage	15%
Equity/Total Assets	15%
Times Interest Earned	15%
Cash/Current Liabilities	15%
CFFO/Total Debt	10%
Capex/Sales	10%

The calculated measures are compared to a set of industry benchmarks appropriate for Public Power Market Participants to assign a score within six distinct quality levels ranging from 1.00 to 6.99. These scores are then assigned a weighting to calculate a total Quantitative Score.

A score of 1.00 indicates that the Tariff Customer has strong financial health with regard to the relevant measure, while a score of 6.99 indicates poor financial health with regard to the relevant measure.

Note: There are 100 basis points within each scoring range. The one (1) range represents scores from 1.00 to 1.99 while the six (6) range represents scores from 6.00 to 6.99.

Within each quality level, fractional scores are computed linearly from the defined boundaries. For example, a Times Interest Earned value of 1.85 (refer to the Public Power Financial Benchmarks table below) would result in a score of 1.67 because it is between the low and high ends of the 1.00 to 1.99 quality level range.

#### **Public Power Ratios**

***Days Cash / Selling General & Administrative Expense (SGA) + Interest Expense*** = (Cash + Cash Equivalents + Short Term Investments) \* 360 days / (SGA + Operating + Maintenance + R&D Expenses + Interest Expense)

***Debt Service Coverage*** = (Operating Income (Loss) + Depreciation + Amortization) / (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Interest Expense)

***Equity / Total Assets*** = Net Worth / Total Assets

***Times Interest Earned*** = (Net Income (Loss) + Interest Expense + Income Taxes) / Interest Expense

***Cash / Current Liabilities*** = (Cash + Cash Equivalents + Short Term Investments) / Current Liabilities

***Cash Flow from Operations (CFFO) / Total Debt*** = Net Cash Provided from Operations / (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans)

***Capital Expenditures (Capex)/ Sales*** = Capital Expenditures / Total Revenue

***Tangible Net Worth*** = Total Equity – Restricted Cash – Intangible Assets – Goodwill – Investment in High Risk Affiliates – Receivables from High Risk Affiliates – Net Value of Long Term Trading Book – Nuclear Decommissioning Fund.

### **Public Power Financial Benchmarks**

Days Cash/SGA + Financial Expense			Cash/Current Liabilities		
From	To	Rank	From	To	Rank
677	730	1.00 to 1.99	94.16	143.89	1.00 to 1.99
328	676	2.00 to 2.99	54.08	94.15	2.00 to 2.99
194	327	3.00 to 3.99	42.15	54.07	3.00 to 3.99
108	193	4.00 to 4.99	26.75	42.14	4.00 to 4.99
19	107	5.00 to 5.99	4.70	26.74	5.00 to 5.99
0	18	6.00 to 6.99	0.01	4.69	6.00 to 6.99
Debt Service Coverage			CFFO/Total Debt		
From	To	Rank	From	To	Rank
1.51	1.80	1.00 to 1.99	0.24	0.35	1.00 to 1.99
1.21x	1.50	2.00 to 2.99	0.13	0.23	2.00 to 2.99
0.91	1.20	3.00 to 3.99	0.10	0.12	3.00 to 3.99
0.61	0.90	4.00 to 4.99	0.07	0.09	4.00 to 4.99
0.31	0.60	5.00 to 5.99	0.04	0.6	5.00 to 5.99
0.01	0.30	6.00 to 6.99	0.01	0.03	6.00 to 6.99
Equity/Total Assets			Capex/Sales		
From	To	Rank	From	To	Rank
0.55	0.83	1.00 to 1.99	42.68	66.36	1.00 to 1.99
0.37	0.54	2.00 to 2.99	16.11	42.67	2.00 to 2.99
0.21	0.36	3.00 to 3.99	9.14	16.10	3.00 to 3.99
0.17	0.20	4.00 to 4.99	6.92	9.13	4.00 to 4.99
0.13	0.16	5.00 to 5.99	2.06	6.91	5.00 to 5.99
0.01	0.12	6.00 to 6.99	0.01	2.05	6.00 to 6.99

### **Times Int Earned**

From	To	Rank
1.56	2.00	1.00 to 1.99
1.26	1.55	2.00 to 2.99
0.96	1.25	3.00 to 3.99
0.66	0.95	4.00 to 4.99

0.36	0.65	5.00 to 5.99
0.01	0.35	6.00 to 6.99

### Qualitative (60%)

The qualitative score will assess all non-financial measure information about a Tariff Customer's financial health. The qualitative analysis will take into account a variety of information, but at a minimum will include the assessment of the following characteristics of each Public Power Tariff Customer:

- (i) the ability to set rates without seeking regulatory approval;
- (ii) the financial protections afforded unsecured creditors contained in the contracts and other legal documents related to the formation and governance of public power entities;
- (iii) the number and composition of members or customers of the entity;
- (iv) the exposure to energy price risk for Load served by the entity;
- (v) Rating Agency ratings assigned to unsecured debt; and
- (vi) other non-financial measures of creditworthiness.

To illustrate, assume the following for a Public Power Tariff Customer:

**Public Power Qualitative Score = 2.0**

### Quantitative Metrics:

Metrics	Value	Rank	Weight	Score
Days Cash / SGA + Financial Expense	184	4.10	20%	0.82
Debt Service Coverage	6.22	1.00	15%	0.15
Equity / Total Assets	0.13	5.99	15%	0.90
Times Int. Earned	1.85	1.67	15%	0.25
Cash / Current Liabilities	90.70	2.08	15%	0.31
CFFO / Total Debt	0.30	1.46	10%	0.15
Capex / Sales	3.34	5.73	10%	0.57

**Quantitative Score** 3.15

Public Power Composite Score = (60% x 2.0) + (40% x 3.15) = 2.46

## 2) Composite Credit Score – Non-Public Power Sector

A Non-Public Power Composite Score shall be derived for each Tariff Customer that does not meet the definition of Public Power as defined in Module A. The Non-Public Power Analysis will be comprised of a Quantitative and Qualitative analysis. Each analysis is then weighted as shown below to build a total composite score.

Analysis	Weight
Quantitative Score	60%
Qualitative Score	40%

#### **Quantitative Score (60%)**

There are twelve (12) financial metrics used in developing the Composite Credit Score for Non-Public Power companies. These individual metrics are grouped into one of three main analytical components. The weighted scores for the individual metrics form the score for each of the three major components reviewed.

The component scores are then weighted to develop the total Quantitative score. The three major components and the weightings assigned to their respective scores are as follows:

**Liquidity:** 30%

**Leverage:** 20%

**Performance:** 50%

The individual metrics reviewed to develop each of the component scores are detailed in the table below.

Metric	Weight
EBITDA / Interest Exp	25%
Cash Earnings / Debt Service	35%
Free Cash Flow / Total Debt	30%
Quick Ratio	10%

<b>Leverage (20%)</b>	
Metric	Weight
Debt / Total Capitalization	35%
Short Term Debt / Total Debt	15%
Debt / Net Fixed Assets	25%
Debt / TNW	25%
<b>Performance (50%)</b>	
Metric	Weight
Return on Sales %	25%
Return on Assets %	25%
Operating Margin %	25%
Return on Equity %	25%

The calculated measures are compared to a set of industry benchmarks appropriate for Non-Public Power Tariff Customers to assign a score within six distinct quality levels ranging from 1.00 to 6.99.

A score of 1.00 indicates that the Tariff Customer has strong financial health with regard to the relevant measure, while a score of 6.99 indicates poor financial health with regard to the relevant measure.

Note: There are 100 basis points within each scoring range. The one (1) range represents scores from 1.00 to 1.99 while the six (6) range represents scores from 6.00 to 6.99.

Within each quality level, fractional scores are computed linearly from the defined boundaries.

For example, an Operating Margin of 13.10 % (refer to the Non-Public Power Financial Benchmarks table below) would result in a score of 3.41 because it is between the low and high end of the 3.00 to 3.99 quality level range.



### Non-Public Power Financial Benchmarks

#### EBITDA / Interest Expense

From	To	Rank
7.00	9.00	1.00 to 1.99
5.00	6.99	2.00 to 2.99
3.00	4.99	3.00 to 3.99
2.00	2.99	4.00 to 4.99
1.00	1.99	5.00 to 5.99
0.00	0.99	6.00 to 6.99

#### Debt / Net Fixed Assets

From	To	Rank
0.29	0.01	1.00 to 1.99
0.50	0.30	2.00 to 2.99
0.70	0.51	3.00 to 3.99
0.89	0.71	4.00 to 4.99
0.99	0.90	5.00 to 5.99
2.00	1.00	6.00 to 6.99

#### Cash Earnings / Debt Service

From	To	Rank
6.00	8.00.0	1.00 to 1.99
4.00	5.99	2.00 to 2.99
1.01	3.99	3.00 to 3.99
0.70	1.00	4.00 to 4.99
0.31	0.69	5.00 to 5.99
0.00	0.30	6.00 to 6.99

#### Debt / Tangible Net Worth

From	To	Rank
0.50	0.01	1.00 to 1.99
0.99	0.51	2.00 to 2.99
1.99	1.00	3.00 to 3.99
3.99	2.00	4.00 to 4.99
6.99	4.00	5.00 to 5.99
12.99	7.00	6.00 to 6.99

#### Free Cash Flow / Total Debt

From	To	Rank
0.33	0.50	1.00 to 1.99
0.12	0.32	2.00 to 2.99
0.08	0.11	3.00 to 3.99
0.05	0.07	4.00 to 4.99
0.03	0.04	5.00 to 5.99
0.00	0.02	6.00 to 6.99

#### Return on Sales (%)

From	To	Rank
12.01	16.00	1.00 to 1.99
8.00	12.00	2.00 to 2.99
5.00	7.99	3.00 to 3.99
3.00	4.99	4.00 to 4.99
2.00	2.99	5.00 to 5.99
0.01	1.99	6.00 to 6.99

#### Quick Ratio

From	To	Rank
1.00	1.25	1.00 to 1.99
0.60	0.99	2.00 to 2.99
0.53	0.59	3.00 to 3.99
0.40	0.52	4.00 to 4.99
0.28	0.39	5.00 to 5.99
0.00	0.27	6.00 to 6.99

#### Return on Assets (%)

From	To	Rank
5.00	6.00	1.00 to 1.99
4.00	4.99	2.00 to 2.99
3.00	3.99	3.00 to 3.99
2.00	2.99	4.00 to 4.99
1.00	1.99	5.00 to 5.99
0.01	0.99	6.00 to 6.99

#### Debt / Total Capitalization

From	To	Rank
0.42	0.01	1.00 to 1.99
0.48	0.43	2.00 to 2.99
0.53	0.49	3.00 to 3.99
0.56	0.54	4.00 to 4.99
0.61	0.57	5.00 to 5.99
0.70	0.62	6.00 to 6.99

#### Operating Margin (%)

From	To	Rank
23.01	30.00	1.00 to 1.99
16.00	23.00	2.00 to 2.99
9.00	15.99	3.00 to 3.99
5.00	8.99	4.00 to 4.99
1.00	4.99	5.00 to 5.99
0.01	0.99	6.00 to 6.99

#### Short Term Debt / Total Debt

From	To	Rank
0.04	0.01	1.00 to 1.99
0.09	0.05	2.00 to 2.99
0.24	0.10	3.00 to 3.99
0.49	0.25	4.00 to 4.99
0.74	0.50	5.00 to 5.99
1.00	0.75	6.00 to 6.99

#### Return on Equity (%)

From	To	Rank
10.00	15.00	1.00 to 1.99
5.00	9.99	2.00 to 2.99
3.00	4.99	3.00 to 3.99
2.00	2.99	4.00 to 4.99
1.00	1.99	5.00 to 5.99
Below	0.99	6.00 to 6.99

### Non-Public Power Ratios

***EBITDA / Interest Expense*** = (Operating Income + Depreciation + Amortization) / Interest Expense.

***Cash Earnings / Debt Service*** (Net Income (Loss) + Depreciation + Amortization + Other Non Cash P&L Items (such as: Loan Loss Provision, Other Operating Cash Flows, Investment Securities (Gain/Loss), Loans (Gains/Losses), Deferred Taxes, Accounting Changes, Discontinued Operations, Extraordinary & Unusual Items, Purchased R&D, Equity in Net Earnings of Ventures) + Financial Expense - Cash Dividends Paid) / (Short Term Debt + Current Portion of Long Term Debt & Capital Leases + Financial Expense)

***Free Cash Flow (FCF) / Total Debt*** = (Net Cash Provided by Operations + Capital Expenditures + Cash Dividends Paid) / (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock).

***Quick Ratio*** = (Cash + Cash Equivalents + Short Term investments + Total Receivables (Net) + Marketable Securities + Certificate of Deposits + Trading Account Assets) / Current Liabilities

***Debt / Total Cap*** = (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock) / (Net Worth + Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock).

***Short Term Debt / Total Debt*** = (Short Term Debt + Current Portion of Long Term Debt and Capital Leases) / (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock)

***Debt / Net Fixed Assets*** = (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock) / (Fixed Assets + Property, Plant & Equipment)

***Tangible Net Worth*** = Total Equity – Restricted Cash – Intangible Assets – Goodwill – Investment in High Risk Affiliates – Receivables from High Risk Affiliates – Net Value of Long Term Trading Book – Nuclear Decommissioning Fund.

***Debt / TNW*** = (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock) / Tangible Net Worth

***Return on Sales (%)*** = Net Income or Loss / Total Revenues times 100

***Return on Assets (%)*** = Net Income or Loss / Total Assets times 100

***Operating Margin (%)*** = Operating Income or Loss / Total Revenues times 100

***Return on Equity (%)*** = Net Income or Loss / Net Worth times 100

**Qualitative (40%)**

The qualitative score will assess all non-financial measure information about a Tariff Customer's financial health. The qualitative analysis will take into account a variety of information, but at a minimum will include the assessment of the following characteristics of each Non-Public Tariff Customer:

- (i) the ability to set rates without seeking regulatory approval;

- (ii) the financial protections afforded unsecured creditors contained in the contracts and other legal documents related to the formation and governance of non-public power entities;
- (iii) the number and composition of members or customers of the entity;
- (iv) the exposure to energy price risk for load served by the entity and/or obligations to provide power to other parties;
- (v) Rating Agency ratings assigned to unsecured debt; and
- (iv) other non-financial measures of creditworthiness

To illustrate, assume the following for a Non-Public Tariff Customer:

Non-Public Power Qualitative Score = 2.5

**Quantitative Metrics:**

**Liquidity (30%)**

Metric	Value	Rank	Weight	Score
EBITDA / Interest Exp	4.70	3.14	25%	0.79
Cash Earnings / Debt Service	1.93	3.69	35%	1.29
Free Cash Flow / Total Debt	0.10	3.66	30%	1.10
Quick Ratio	0.30	5.72	10%	0.57
				3.75

**Leverage (20%)**

Metric	Value	Rank	Weight	Score
Debt / Total Capitalization	0.54	4.00	35%	1.40
Short Term Debt / Total Debt	0.11	3.07	15%	0.46
Debt / Net Fixed Assets	0.47	2.84	25%	0.71
Debt / Tangible Net Worth	1.21	3.21	25%	0.80
				3.37

**Performance (50%)**

Metric	Value	Rank	Weight	Score
Return on Sales %	5.74	3.75	25%	0.94
Return on Assets %	1.82	5.16	25%	1.29
Operating Margin %	13.10	3.41	25%	0.85
Return on Equity %	5.78	2.84	25%	0.71
				3.79

	Weight	Indicator Score	Group Score
Liquidity	30%	3.75	1.13
Leverage	20%	3.37	0.67

Performance	50%	3.79	1.90
		Financial Score	3.70

Non-Public Power Composite Score =  $(40\% \times 2.5) + (60\% \times 3.70) = 3.22$

## B. Unsecured Credit Allowance

The credit scoring model converts the Composite Credit Score to a suggested Unsecured Credit Allowance through a three step process:

### STEP ONE:

Convert the Tariff Customer's Composite Credit Score to a percentage value:

Table 1 below contains a matrix which converts the Composite Credit Score to a percentage value. The Tariff Customer's Tangible Net Worth (as adjusted for Revenue Bonds and the 15% Debt Adder if applicable) is then multiplied by this percentage value to determine an initial Unsecured Credit Allowance.

**Table 1**  
**Percent of Tangible Net**

<b>Composite Credit Score</b>	<b>Non-Public Power</b>	<b>Public Power</b>
1.00 to 1.66	10.0%	12.0%
1.67 to 2.00	9.0%	11.0%
2.01 to 2.33	8.0%	10.0%
2.34 to 2.66	7.0%	9.0%
2.67 to 3.00	6.0%	8.0%
3.01 to 3.33	5.0%	7.0%
3.34 to 3.66	4.0%	6.0%
3.67 to 4.00	3.0%	5.0%
4.01 to 4.33	2.0%	3.5%
4.34 to 4.66	1.0%	2.0%
4.67 to 5.00	0.5%	1.0%
5.01 to 6.00	0.0%	0.0%

STEP TWO: Compare the Tariff Customer's Composite Credit Score to the values contained in Table 2 (the Credit Cap Table) to determine the credit cap amount.

**Table 2: Credit Cap Table**

Composite Score Range		Unsecured Credit Cap
0.01	4.39	\$50,000,000
4.40	4.79	\$37,500,000
4.80	6.99	\$0

STEP THREE: Determine whether the final Unsecured Credit Allowance determined in Step 1 is capped at the amount determined in Step 2. The final suggested Unsecured Credit Allowance for a Tariff Customer is the lesser of:

the amount determined by applying the percentage value from Table 1 to the Tariff Customer's adjusted Tangible Net Worth (as determined in Step 1)

OR

the amount determined by applying the Tariff Customer's Composite Credit Score to Table 2 (the Credit Cap Table) detailed above (as determined in Step 2).

**EXAMPLE FOR A PUBLIC POWER MARKET PARTICIPANT:**

To illustrate, a Public Power Tariff Customer with a Composite Credit Score of 3.05 and Tangible Net Worth (as adjusted for Revenue Bonds and the 15% Debt Adder if applicable) of \$998,229,111 would have a suggested Unsecured Credit Allowance computed as follows:

Step 1: Unsecured Credit Allowance = Table 1 Percentage  $f$  (Composite Credit Score) x adjusted Tangible Net Worth

$$= 7.0\% \times \$998,229,111$$

$$= \$69,876,037 \text{ (subject to credit limit cap below)}$$

Step 2: Since the Composite Credit Score of 3.05 falls in the 0.01 – 4.39 range, the Tariff Customer's suggested Unsecured Credit Allowance would be capped at \$50,000,000 as determined using Table 2.

Step 3: The final step is to take the lower of the amount determined by applying the percentage value from Table 1 to the Tariff Customer's adjusted Tangible Net Worth or the amount determined by Table 2 (the Credit Cap Table). The lower of the two amounts is 50,000,000 based on Table 2. Accordingly, the Unsecured Credit Allowance would be capped at \$50,000,000.

#### **EXAMPLE FOR A NON-PUBLIC POWER MARKET PARTICIPANT:**

To further illustrate, a Non-Public Tariff Customer with a Composite Credit Score of 2.58 and an adjusted Tangible Net Worth of \$4.354 billion would have a suggested Unsecured Credit Allowance computed as follows:

Step 1: Unsecured Credit Allowance = Table 1 Percentage  $f$  (Credit Score) x Tangible Net Worth

$$= 7\% \times \$4,354,000,000$$

$$= \$304,780,000$$

Step 2: The maximum Unsecured Credit Allowance based on Table 2 is \$50,000,000 (2.58 falls in the 0.01 to 4.39 range).

Step 3: Take the lower of amounts in Step 1 and Step 2. The Unsecured Credit Allowance in this example is capped at \$50,000,000.

In the event that the Tariff Customer provides a Corporate Guaranty, the Unsecured Credit Allowance is based on the financial review conducted by the Transmission Provider of the entity providing the Corporate Guaranty, with a \$50 million maximum Unsecured Credit Allowance permitted (*see* Section VI entitled “Corporate Guaranty and Forms of Financial Security” for more information).

**1) Minimum Unsecured Credit Allowance**

For Public Power entities, the Unsecured Credit Floor for creditworthy entities is \$250,000. For any Public Power entity for whom the product of the applicable percentage from Table 1 multiplied by the Tangible Net Worth for the Public Power entity yields an Unsecured Credit Allowance of less than \$250,000 the Unsecured Credit Floor value shall be substituted as the authorized Unsecured Credit Allowance.

**2) Revenue Bond Adjustment to Tangible Net Worth Value for Power Supply Agents**

For Public Power entities that issue Revenue Bonds solely in support of their role as power supply agent for not-for-profit electric distribution utilities and meet: (a) the disclosure requirements in: (i) Section I.A.6 of this Credit Policy and (ii) Section I.B.6 of this Credit Policy; and (b) have a Revenue Bond rating or



Revenue Bond ratings equal to Baa1 or higher by Moody's Investor Services or BBB+ or higher by Standard & Poor's, the calculation of the suggested Unsecured Credit Allowance shall be based on an adjusted value for Tangible Net Worth. The adjusted value for Tangible Net Worth shall include the outstanding balance of Revenue Bonds as of the date of the calculation.

To illustrate, if the Public Power entity met all of the disclosure requirements for power supply agents, had Tangible Net Worth of \$1,000,000, and had \$10,000,000 principal amount of Revenue Bonds outstanding, the adjusted Tangible Net Worth to be used in computing the suggested Unsecured Credit Allowance would be \$11,000,000 (the sum of the adjusted Tangible Net Worth and the principal amount of Revenue Bonds outstanding as of the date of the calculation).

**3) Long Term Debt Adjustment to the Tangible Net Worth Value for Electric Generation and Transmission Cooperatives**

For Coops that have a Composite Credit Score between 1.0 and 3.99 as determined by the Transmission Provider's credit scoring model and meet the disclosure requirements in Sections I.A. 6 and I.B.6 of this Credit Policy, the calculation of the Unsecured Credit Allowance shall reflect as equity 15% of the Coop's long term debt as stated on its current audited financial statements.

To illustrate, if the Coop met all of the disclosure requirements, had Tangible Net Worth of \$8,000,000, and had \$100,000,000 principal amount of stated long term debt on its most current audited financial statements, the adjusted Tangible Net

Worth to be used in computing the suggested Unsecured Credit Allowance would be \$23,000,000 [the sum of the Tangible Net Worth (\$8,000,000) plus 15% of long term debt outstanding (\$15,000,000)]

**4) Revisions to Unsecured Credit Allowance**

The Transmission Provider has the right at any time to modify any Unsecured Credit Allowance and/or require additional Financial Security as may be reasonably necessary to support the Tariff Customer's ability to pay for market services provided under this Tariff and other Agreements. If the modification results in a reduction or revocation of Unsecured Credit Allowance and the reduction or revocation results in the need to provide Financial Security, the Transmission Provider will promptly notify the Tariff Customer in writing of the requirement to provide Financial Security as a result of the reduction or revocation of the previously granted amount of Unsecured Credit Allowance. The Tariff Customer shall have two (2) Business Days from receipt of written notification to provide the Financial Security required to replace the reduced or revoked amount of Unsecured Credit in an amount and form acceptable to the Transmission Provider.

**C. Credit Limit Setting for Affiliates**

In the case of affiliated Applicants or affiliated Tariff Customers the \$50 million maximum Unsecured Credit Allowance shall apply to the combined activity of the affiliated Applicants or affiliated Tariff Customers. *See* Section II.B of this Credit Policy. Thus, the sum of the individual Unsecured Credit Allowances for affiliated

Applicants or affiliated Tariff Customers shall not exceed \$50 million under any circumstances.

**D. Total Credit Limit and Allocation Requirement**

The Total Credit Limit for a Tariff Customer is the sum of its Unsecured Credit Allowance and the Financial Security provided less any Financial Security restricted for alternative capitalization purposes, if any. FTR Obligations (*i.e.*, FTR Potential Exposure plus FTR Auction Credit Allocation) must be covered by Financial Security. The Non-FTR Credit Limit is the sum of its Unsecured Credit Allowance and any Available Non-FTR Financial Security (*i.e.*, Financial Security provided in excess of its FTR Obligations). A portion of the Tariff Customer's Financial Security must be allocated to the FTR Auctions if the Tariff Customer wishes to engage in this activity.

The amount of credit to be allocated to support participation in the FTR Auction activity is addressed in Section IV.B of this Credit Policy.

**E. Monitoring of Activity Relative to Total Credit Limit**

The Transmission Provider will monitor each Tariff Customer's use of services and associated financial obligations on a regular basis. A Tariff Customer's cumulative financial obligation is its Total Potential Exposure. For credit monitoring purposes, Total Potential Exposure is broken down into two components, FTR Potential Exposure and Non-FTR Potential Exposure. Should a Tariff Customer's FTR Potential Exposure equal or exceed ninety percent (90%) of its total Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit

Allocation) the Transmission Provider shall promptly notify the Tariff Customer in writing of this fact. Likewise, should a Tariff Customer's Non-FTR Potential Exposure equal or exceed ninety percent (90%) of its Non-FTR Credit Limit the Transmission Provider shall promptly notify the Tariff Customer in writing of this fact. The Tariff Customer shall maintain its FTR Potential Exposure to a value less than its total Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) at all times. Additionally, the Tariff Customer shall maintain its Non-FTR Potential Exposure at a value less than its Non-FTR Credit Limit at all times.

**F. Requirement to Provide Financial Security**

Should a Tariff Customer's FTR Potential Exposure equal or exceed its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) and/or should its Non-FTR Potential Exposure equal or exceed its Non-FTR Credit Limit, the Transmission Provider shall promptly notify the Tariff Customer in writing of the need to (i) pay invoiced amounts to reduce the Tariff Customer's FTR Potential Exposure and/or its Non-FTR Potential Exposure, whichever applicable, and/or (ii) provide Financial Security in an amount sufficient to increase the Tariff Customer's Total Credit Limit, and/or (iii) lower FTR Auction Credit Allocation or Virtual MWh Limit such that after making such payments, providing such Financial Security, and/or lowering FTR Auction Allocation or Virtual MWh limit, the Tariff Customer's FTR Potential Exposure will not equal or exceed its Financial Security (less its alternative capitalization restrictions, if any, and

FTR Auction Credit Allocation) and/or its Non-FTR Potential Exposure will not equal or exceed its Non-FTR Credit Limit. The amount paid by Tariff Customer to Transmission Provider for the above-items (ii) and (iii) (i.e., Financial Security, and lower FTR Auction Credit Allocation or Virtual MWh Limit) will be rounded up to the nearest integral multiple of \$10,000 for any such items valued less than \$500,000. The Tariff Customer shall have two (2) Business Days from receipt of written notification to reduce its FTR Potential Exposure below its total Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) and/or its Non-FTR Potential Exposure below its Non-FTR Credit Limit.

#### **G. Security Interest in Accounts Receivable**

Each Tariff Customer will have an option of granting a continuing first-priority security interest to the Transmission Provider in all right, title and interest in any and all accounts receivable and other rights of payment of the Tariff Customer for goods and services provided under, or otherwise arising under, pursuant to or in connection with, the Tariff and/or any of the Agreements (the Receivable Security Interest).

Non-FTR Potential Exposure will be calculated differently for those Tariff Customers who grant a Receivable Security Interest (Category A Tariff Customer) as opposed to those who do not grant a Receivable Security Interest (Category B Tariff Customer).

See Section V of this Credit Policy for information on the Non-FTR Potential Exposure calculation to be used for each category of Tariff Customer. In the event the Tariff Customer grants the Transmission Provider a Receivable Security Interest, the Tariff Customer shall execute and deliver the Security Interest Agreement in the

form attached to this Credit Policy as Exhibit IV. A Category A Tariff Customer also includes a municipality or joint action agency that has qualified for an exemption of the requirement to grant a Receivable Security Interest under this Attachment L.

### **III. MINIMUM PARTICIPATION REQUIREMENTS**

#### **A. Annual Certification**

Prior to certification, Applicants shall provide to Transmission Provider an executed Annual Certification as set forth in Exhibit VI to this Attachment L. All existing Tariff Customers shall provide to Transmission Provider an executed Annual Certification as set forth in Exhibit VI to this Attachment L by January 31, 2012. Subsequent Annual Certifications must be executed and submitted by Tariff Customers to the Transmission Provider in acceptable form by April 30<sup>th</sup> of each year or five (5) Business Days in advance of submitting any Bids or Offers in the annual FTR Auction, whichever occurs first. Failure to provide an executed Annual Certification in a form acceptable to the Transmission Provider and by the specified deadlines may result in a Default under the Tariff. The Annual Certification shall include a certification that the Applicant or Tariff Customer is an “appropriate person” per section 4(c)(3) of the Commodity Exchange Act “CEA”. The Final Order of the Commodity Futures Trading Commission at 77 FR 30596 states that under section 4(c)(3)(K) the definition of “appropriate person” includes “eligible contract participants” as defined in section 1a(18) of the CEA, and persons in the business of: (1) generating, transmitting, or distributing electric energy, or (2) providing electric energy services that are necessary to support the reliable operation

of the transmission system. If, at any time, a Tariff Customer cannot meet the eligibility requirements set forth above, it shall immediately notify Transmission Provider and immediately cease conducting transactions in MISO Markets.

Applicants or Tariff Customers shall submit to Transmission Provider, upon request, any information or documentation required to confirm Applicant's or Tariff Customer's compliance with the Tariff or the Annual Certification.

**B. Demonstration of Appropriate Person Status**

Transmission Provider may conduct periodic verification that Applicants and Tariff Customers can demonstrate that they meet the definition of "appropriate person" to further ensure minimum criteria are in place. Such demonstration will consist of the submission of evidence and an executed Appropriate Person Verification as set forth in Exhibit VII to this Attachment L in a form acceptable to Transmission Provider. If a Tariff Customer does not provide sufficient evidence for verification to Transmission Provider within seven (7) calendar days of written request then such Tariff Customer shall be subject to Default under this Tariff. Demonstration of "appropriate person" status and support of other certifications on the Annual Certification is one part of the minimum participation requirements for the MISO Markets and does not obviate the need to meet the other minimum participation requirements such as those for minimum capitalization and risk management in Sections III.C and III.D below. One of the ways an Applicant or Tariff Customer can demonstrate "appropriate person" status is by meeting the language in 4(c)(3)(F) of the CEA. The following provisions apply for such demonstrations:

- **Demonstrating “appropriate person” status with financial statements**

An Applicant or Tariff Customer can demonstrate “appropriate person” status by submitting financial statements which show they have a net worth exceeding \$1 million or total assets exceeding \$5 million. If unaudited financial statements are submitted as evidence then they need to be accompanied by a memo signed by an officer of the Applicant or Tariff Customer which attests to the accuracy of the financial statements.

- **Demonstrating “appropriate person” status by posting Cash Deposit**

An Applicant or Tariff Customer can demonstrate “appropriate person” status by posting a Cash Deposit exceeding \$5 million with the Transmission Provider in accordance with Section VI.B.1. Cash Deposit relied upon for the demonstration of “appropriate person” status can be used to cover FTR and Non-FTR Potential Exposure and FTR Auction Credit Allocation if not set aside as unavailable Financial Security per Section III.C.

- **Demonstrating “appropriate person” status with a Corporate Guaranty**

If an Applicant or Tariff Customer is relying on a Corporate Guaranty to meet the “appropriate person” requirement then such Corporate Guaranty must be acceptable to Transmission Provider per the requirements in Section VI.A and must be from a Guarantor that has demonstrated it is an “appropriate person”. The Corporate Guaranty must be issued for an unlimited amount or in an amount sufficient to cover the sum of positive exposure from both FTR Potential Exposure and Non-FTR Potential Exposure of the Applicant or Tariff Customer.



If multiple Applicants or Tariff Customers are being covered by the same Guarantor then the Guarantor providing the Corporate Guaranty must exceed \$5 million in total assets or \$1 million in net worth for each Applicant or Tariff Customer being covered by the Corporate Guaranty. For example, if a Guarantor is covering three Tariff Customers with a Corporate Guaranty then it must exceed \$15 million in total assets or \$3 million in net worth.

- **Demonstrating “appropriate person” status with an Irrevocable Letter of Credit**

If an Applicant or Tariff Customer is relying on an Irrevocable Letter of Credit to meet the “appropriate person” requirement then the issuer must at all times qualify as an “appropriate person.” In addition, such Irrevocable Letter of Credit must be acceptable to Transmission Provider per the requirements in Section VI.B.2 and must cover the sum of positive exposure from both FTR and Non-FTR Potential Exposure.

### **C. Demonstration of Minimum Capitalization**

In advance of certification, Applicants shall meet the minimum capitalization requirements below. Existing Tariff Customers shall satisfy the initial minimum capitalization requirements by December 31, 2011 and on an annual basis thereafter. Applicants or Tariff Customers may satisfy the minimum capitalization requirements by either demonstrating minimum tangible net worth or total assets as detailed in this Section III.C.1, or by providing alternative capitalization as detailed below in Section III.C.2.

### **1) Minimum Tangible Net Worth or Total Assets**

Minimum capitalization may be met by demonstrating minimum levels of tangible net worth or total assets. Applicants or Tariff Customers seeking authorization to participate in any or all service categories must provide sufficient evidence to demonstrate a minimum tangible net worth of \$1 million or minimum total assets of \$10 million. Applicants or Tariff Customers seeking authorization to participate in any or all service categories with the exception of FTR markets must demonstrate a minimum tangible net worth of \$500,000 or minimum total assets of \$5 million.

- i. Demonstration of minimum tangible net worth or total assets must be presented in the form of audited financial statements for the Applicant's, Tariff Customer's, or Guarantor's most recent fiscal year.
- ii. Consideration of tangible net worth shall exclude assets (net of any matching liabilities, assuming the result is a positive value) which Transmission Provider reasonably believes to be restricted, highly risky, or potentially unavailable to settle a claim in the event of a default. Examples include, but are not limited to, restricted assets and Affiliate assets, derivative assets, goodwill, and any other intangible assets.
- iii. The audited financial statements of Applicant's or Tariff Customer's approved Guarantor may be submitted as demonstration of minimum tangible net worth or minimum total assets. If the Guarantor is not deemed creditworthy based on the creditworthiness assessment requirements detailed in Section II of this

Credit Policy (or if the Applicant or Tariff Customer declines a creditworthiness assessment), the Applicant or Tariff Customer may still use an approved guaranty to satisfy the minimum capitalization requirements in which case, the approved guaranty must be executed with a minimum face-value of either (a) \$500,000 for an Applicant or Tariff Customer not seeking access to the FTR markets or (b) \$1,000,000 for an Applicant or Tariff Customer seeking access to the FTR markets. A Guarantor will be deemed not creditworthy if the creditworthiness assessment detailed in Section II yields a result below \$500,000 or \$1,000,000 as applicable. Where a Guarantor is not deemed sufficiently creditworthy, the guaranty value will not be considered when calculating the Applicant's or Tariff Customer's Non-FTR Credit Limit.

Additionally, Guarantor must have, in aggregate, sufficient tangible net worth or total assets to meet the minimum capitalization requirements for each Market Participant seeking qualification by using Guarantor's audited financial statements. For example, if three (3) Market Participants are seeking approval to transact in all service categories using a common Guarantor's audited financial statements, the Guarantor must have a minimum of \$1 million of tangible net worth or \$10 million of total assets for each Market Participant it guaranties. In this example, the Guarantor must demonstrate a minimum of \$3 million of tangible net worth or \$30 million in total assets.

- iv. Audited annual financial statements must be submitted by June 30<sup>th</sup> of each year or no later than one hundred twenty (120) days after such entity's fiscal year end
- v. If Tariff Customer or Guarantor files Form 10-K with the SEC, then the Tariff Customer or Guarantor has satisfied the requirement of indicating to the Transmission Provider where the information can be located.

If the audited financial statements provided do not demonstrate sufficient evidence of adequate tangible net worth or total assets relative to the level of service Tariff Customer is transacting, as determined by the Transmission Provider, notice may be provided to Tariff Customer that, in order to maintain such level of participation, additional evidence must be provided or alternative capitalization, as detailed in Section III.C.2, must be provided within two (2) Business Days of request from Transmission Provider.

Applicants or Tariff Customers shall provide written notice to Transmission Provider of any event that has occurred since the date of Applicant's, Tariff Customer's, or Guarantor's most recent annual audited financial statements that could adversely affect compliance with the minimum capitalization criteria.

## **2) Alternative Capitalization**

If an Applicant or Tariff Customer does not qualify for minimum capitalization as described in Section III.C.1, it may qualify for participation by providing alternative capitalization in the form of Financial Security. Approval of the

Financial Security provided to satisfy the alternative capitalization requirements is subject to the terms and conditions set forth in this Credit Policy.

The two levels of alternative capitalization and the service category rights associated with those levels are summarized below:

<b>Level of Service Tariff Customer or Applicant is Seeking Authorization</b>	<b>Minimum Financial Security Required</b>
For Applicants or Tariff Customers seeking authorization to participate in any or all service categories	\$500,000
For Applicants or Tariff Customers seeking authorization to participate in any or all service categories except for any FTR(s) with a term beyond the next calendar month	\$200,000

- i. Financial Security provided by the Applicant or Tariff Customer to satisfy the alternative capitalization requirement must be provided and maintained until all obligations associated with such level of participation have expired and in advance of entering into any additional obligations.
- ii. 50% of the applicable Financial Security related to alternative capitalization shall be set aside and unavailable for Tariff Customer to use for participation in any service category, while 50% will be available for Tariff Customer to use for participation in the service categories Tariff Customer is authorized to participate.

Financial Security that is provided in connection with alternative capitalization does not solely apply to the alternative capitalization requirements, but instead secures all payment obligations of the Tariff Customer under this Tariff and/or the other Agreements. Regardless of the alternative capitalization amount, any

Financial Security that is provided by or on behalf of Tariff Customer may be pursued in the event of a Default to satisfy any amount owed by the Tariff Customer under this Tariff and/or the other Agreements.

#### **D. Risk Management**

Applicant, Tariff Customer or their applicable agents must maintain current written risk management policies, procedures or controls to address those risks that could materially affect the ability to pay MISO invoices when due. Transmission Provider shall conduct periodic verification of such risk management policies, procedures or controls for Applicants and Tariff Customers in which planned or known FTR positions for any calendar month are at least 1,000 megawatts greater than their obligations to serve load or rights to generate electricity in the MISO Markets. Transmission Provider may conduct periodic verification of risk management policies, procedures or controls for Applicants and Tariff Customers on a random basis to ensure minimum criteria are in place. If random verification is successful, Applicant or Tariff Customer shall be excluded from random verification for a period of two (2) years.

Applicant's or Tariff Customer's risk management policies, procedures and controls pertaining to its activities in the MISO Markets will be assessed against the following standards:

- i. The risk management framework is documented in a risk policy addressing market, credit, and liquidity risks that has been approved by Tariff Customer's risk management function which includes a third party or appropriate corporate

persons or bodies that are independent of Tariff Customer's trading functions, such as a risk management committee, a designated risk officer, Tariff Customer's board or board committee, or, if applicable, a board or committee of Tariff Customer's parent company;

- ii. Tariff Customer or Applicant maintains an organizational structure with clearly defined roles and responsibilities that clearly segregates trading and risk management functions;
- iii. Delegations of authority specify the transactions into which traders are allowed to enter;
- iv. Tariff Customer or Applicant has requirements that traders have adequate training relative to their authority in the systems and MISO Markets in which they transact;
- v. As appropriate, risk limits are in place to control risk exposures;
- vi. Reporting is in place to ensure risks are adequately communicated throughout the organization;
- vii. Processes are in place for qualified independent review of trading activities; and
- viii. As appropriate, there is periodic valuation or mark-to-market of risk positions.

Applicants subject to verification must demonstrate that they have implemented prudent risk management policies and procedures in order to be authorized to participate in MISO Markets. Tariff Customers subject to verification must demonstrate on no more than an annual basis that they have implemented prudent risk management policies and procedures in order to continue to participate in MISO

Markets. Upon written request, Tariff Customer will have fourteen (14) calendar days to provide current governing risk management policies, procedures, or controls applicable to Tariff Customer's MISO Market activities and shall also include written guidance referencing the procedures and controls in their governing risk management policies that satisfy the standards listed above. Tariff Customers shall also provide such further information or documentation pertaining to Tariff Customer's activities in the MISO Markets as reasonably requested in writing by Transmission Provider. In the event Tariff Customer fails to submit such documentation to Transmission Provider within fourteen (14) calendar days, such Tariff Customer may be subject to Default under this Tariff.

If Transmission Provider is unable to successfully complete the verification process based on Tariff Customer's submitted documentation, Transmission Provider shall send written notice explaining the deficiencies preventing successful verification. Tariff Customer shall have fourteen (14) calendar days to provide sufficient evidence for verification. If Tariff Customer does not provide sufficient evidence for verification to Transmission Provider within the required cure period, such Tariff Customer may be subject to Default under this Tariff. If, prior to the expiration of such fourteen (14) calendar days, Tariff Customer demonstrates to Transmission Provider that it has filed with the Commission an appeal of Transmission Provider's risk management verification determination, Tariff Customer shall retain its transaction rights pending the Commission's determination on Tariff Customer's appeal.



#### **E. Disclosures Regarding Affiliates and Issued Securities**

Prior to certification, Applicants shall provide to Transmission Provider an executed Annual Disclosure as set forth in Exhibit VIII to this Attachment L. All existing Tariff Customers shall provide to Transmission Provider an executed Annual Disclosure as set forth in Exhibit VIII to this Attachment L by April 30<sup>th</sup> of each year. Failure to provide an executed Annual Disclosure acceptable to the Transmission Provider by the specified deadline may result in a Default under the Tariff. Applicants or Tariff Customers shall submit to Transmission Provider, upon request, any information or documentation required to confirm Applicant's or Tariff Customer's compliance with the Tariff.

#### **IV. ALLOCATION OF CREDIT LIMIT TO VIRTUAL TRANSACTION ACTIVITY AND FTR AUCTION ACTIVITY**

Tariff Customer participation in Virtual Transactions requires designation of the Virtual MWh Limit as defined in this Tariff. A portion of the Tariff Customer's Financial Security must be allocated to support FTR Auction activity as specified in Section IV.B of this Credit Policy.

##### **A. Virtual Transactions MWh Limit**

To be eligible to submit Virtual Bids or Virtual Supply Offers, a Tariff Customer must designate its Virtual MWh Limit as defined in this Tariff.

##### **1) Establishing a Virtual MWh Limit**

A Tariff Customer shall submit its proposed Virtual MWh Limit via the Market Portal to the Transmission Provider by 7 PM Eastern Prevailing Time. It is the

sole responsibility of the Tariff Customer to maintain a listing of the Tariff Customer's personnel authorized to conduct such Market Portal transactions specific to Attachment L of this Tariff.

The Transmission Provider will evaluate the Tariff Customer's submission, including the impact of the requested Virtual MWh Limit on the amount of the remaining Non-FTR Total Credit Limit relative to the Tariff Customer's Non-FTR Potential Exposure. If the requested Virtual MWh Limit will cause the Non-FTR Potential Exposure to equal or exceed the Non-FTR Total Credit Limit, the Virtual MWh Limit will be rejected. A Tariff Customer's Virtual MWh Limit must be approved by the Transmission Provider before a Tariff Customer can participate in any Virtual Transaction. The Transmission Provider shall process submissions of proposed Virtual MWh Limit one (1) Business Day following the day on which the Transmission Provider receives such submission via the Market Portal, provided the submission is received by 7 PM Eastern Prevailing Time. An approved Virtual MWh Limit takes effect within two (2) Calendar Days following the day it is approved by the Transmission Provider.

## **2) Modifying the Virtual MWh Limit**

Modifications to a Tariff Customer's Virtual MWh Limit may be requested via the Market Portal. The Transmission Provider shall process Virtual MWh Limit submission via the Market Portal one (1) Business Day following the day on which such submission was received by the Transmission Provider, provided the submission is received by 7 PM Eastern Prevailing Time. The Transmission

Provider must approve any proposed modification to a Tariff Customer's Virtual MWh Limit before the modification becomes effective. A decrease to a Tariff Customer's Virtual MWh Limit will decrease its Virtual Transactions credit requirement at most nine (9) calendar Days after the new Virtual MWh Limit is approved, depending on the quantity of outstanding Virtual Bids and/or Virtual Supply Offers at the time such request is made.

In evaluating a request to increase a Tariff Customer's Virtual MWh Limit, the Transmission Provider will evaluate the impact of the requested change on the amount of the remaining Non-FTR Credit Limit relative to the Tariff Customer's Non-FTR Potential Exposure. If the requested change causes the Tariff Customer's Non-FTR Potential Exposure to exceed its Non-FTR Credit Limit, the request will be denied.

### **3) Periodic Reassessment of the MPD in Calculating the Virtual Transactions Credit Requirement**

Each Tariff Customer's Virtual Transactions credit requirement will be recalculated in accordance with the periodic re-assessment of the value for variable MPD by the Transmission Provider. The Transmission Provider may require Tariff Customers to: (a) reduce their Virtual MWh Limit or (b) provide additional Financial Security within two (2) Business Days from receipt of written notification, if there is an increase in the MPD.

### **4) Enforcing the Virtual MWh Limit**

The sum of the absolute value of Virtual Bid MWhs and the absolute value of Virtual Supply Offer MWhs submitted by a Tariff Customer for a given Operating Day may not exceed its Virtual MWh Limit. If both a Virtual Bid and a Virtual Supply Offer are submitted for a given Node, then the absolute value of the greater of the Virtual Supply Offer MWhs or the Virtual Bid MWhs at that Node will be counted when evaluating the sum of the absolute value of all Virtual Bid MWhs and Virtual Supply Offer MWhs relative to the Virtual MWh Limit. The Transmission Provider shall have the right to reject Virtual Bids and/or Virtual Supply Offers that cause the sum of Virtual Bids and/or Virtual Supply Offers submitted for a given Operating Day to exceed the Tariff Customer's Virtual MWh Limit.

**B. Allocation of Credit Limit to FTR Auction Activity**

To be eligible to submit FTR Offers, or FTR Bids, in an FTR Auction, the FTR Auction Participant must satisfy the requirements set forth in this policy.

**1) Credit Limit Allocation Requirement for Participation in FTR Auctions**

FTR Auction Participants must allocate a portion of their total Financial Security in order to participate in FTR Auctions. An FTR Auction Participant's FTR Auction Credit Exposure must not equal or exceed the FTR Auction Participant's FTR Auction Credit Allocation. The FTR Auction Participant's FTR Potential Exposure must not equal or exceed the FTR Auction Participant's total Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation).

## **2) Establishing an FTR Auction Credit Allocation**

FTR Auction Participants shall establish their FTR Auction Credit Allocation by submitting such information via the Market Portal. The Transmission Provider shall process the FTR Auction Market Portal submission one (1) Business Day following the day on which the submission is received, provided it is received by 4 PM Eastern Prevailing Time. The Transmission Provider must approve FTR Auction Participant's FTR Auction Credit Allocation before the FTR Auction Participant may participate in the relevant FTR Auction. The new FTR Auction Credit Allocation takes effect within two (2) Calendar Days following the day it is approved by the Transmission Provider.

Financial Security required in connection with an FTR Auction Participant's FTR Auction Credit Allocation must be received by the Transmission Provider no later than five (5) Business Days prior to the start of the Bid window for the relevant FTR Auction. Therefore, the Transmission Provider recommends that FTR Auction Participants submit their requests to establish FTR Auction Credit Allocations at least fifteen (15) Business Days prior to the start of the Bid window for the relevant FTR Auction. The Transmission Provider may delay commencing its review of any request to establish an FTR Auction Credit Allocation that is submitted after 4 PM Eastern Prevailing Time on the fifth (5<sup>th</sup>) Business Day prior to the start of an FTR Auction Bid window until after such Bid window closes.

## **3) Modifying the FTR Auction Credit Allocation**

Modifications to an FTR Auction Participant's FTR Auction Credit Allocation may be requested by submitting such modifications via the Market Portal. The Transmission Provider shall process the FTR Auction Credit Allocation modification submission one (1) Business Day following the day on which the submission is received, provided the submission is received by 4 PM Eastern Prevailing Time. The Transmission Provider must approve any proposed modification to an FTR Auction Participant's FTR Auction Credit Allocation before the modification becomes effective. The new approved FTR Auction Credit Allocation takes effect within two (2) Calendar Days following the Day it is approved by the Transmission Provider.

#### **4) Enforcing the FTR Auction Credit Requirement**

The Transmission Provider shall have the right to reject FTR Bids and/or FTR Offers that cause the FTR Auction Credit Exposure (as determined by the formula in Section IV.B.5 below) to exceed the FTR Auction Participant's FTR Auction Credit Allocation. For the purpose of evaluating FTR Bids during the auction process, the Transmission Provider shall use the greater of the FTR Minimum Bid Requirement or the actual amount of a FTR Auction Participant's FTR Bids to determine if the FTR Auction Participant is in compliance with the requirement for the FTR Auction Participant's FTR Auction Credit Exposure to at all times be less than the FTR Auction Participant's FTR Auction Credit Allocation.

The FTR Auction Credit Exposure is calculated using the formula below:

#### **5) FTR Auction Credit Exposure**

FTR Auction Credit Exposure is calculated per the formula below:

$$\sum_{p \in P} \text{Max}(\text{MPB}_p, \text{MMB}_p * \text{MDM}_p) + \sum_{k \in K} \text{MMB}_k * \text{MDM}_k + \sum_{g \in G} |\text{MNO}|_g$$

Where:

MPB = The maximum of all price points specified for a given positive FTR Bid,  
calculated as the MW value specified for the price-point, times the dollar  
value per megawatt specified for the price-point

MMB = The maximum MW point specified for a given FTR Bid

MDM = The Minimum Bid Price (dollar per MW) for positive FTR Bids as  
specified in Section IV.C.1 of Attachment L or the Minimum Bid Price  
(dollar per MW) for zero or negative FTR Bids as specified in Section  
IV.C.2 below

MNO = The minimum of all price points specified for a given negative FTR  
Offer, calculated as the MW value specified for the price-point, times the  
dollar value per megawatt specified for the price-point

P = Set of all positive Bids to be submitted by a given FTR Auction  
Participant during an open FTR Bid window.

K = Set of all zero and negative Bids to be submitted by a given FTR Auction  
Participant during an open FTR Bid window

G = Set of all negative FTR Offers to be submitted by a given FTR Auction  
Participant during an open FTR Bid window.

**6) Submission of Financial Security for FTR Auction Credit Requirement**

Financial Security required to meet the Total Credit Limit, as impacted by the FTR Auction Credit Allocation, must meet the requirements set forth for Financial Security defined in this Tariff. Such Financial Security must be in place at least five (5) Business Days prior to the start of a given FTR Auction bid window.

Any Financial Security provided as required in this Section IV.B will be included as part of the FTR Auction Participant's Total Credit Limit. Financial Security that is provided in connection with an FTR Auction Credit Allocation does not solely secure the FTR Auction Participant's FTR Auction payment obligations, but instead secures all payment obligations of the FTR Auction Participant under this Tariff and/or the other Agreements. Regardless of the FTR Auction Credit Allocation, any Financial Security that is provided by or on behalf of an FTR Auction Participant may be pursued in the event of a Default to satisfy any amount owed by the FTR Auction Participant under this Tariff and/or the other Agreements.

FTR Auction Participants may request that their FTR Auction Credit Allocation be reduced one (1) Business Day after the close of the bid window for a given FTR Auction. The amount of the reduction may not exceed the difference between the FTR Auction Credit Allocation minus the FTR Auction Credit Exposure as determined by Section V.B.5 of this Attachment L.



FTR Auction Participants may request that their FTR Auction Credit Allocation be reduced two (2) Business Days after a given FTR Auction clears.

All requests to reduce an FTR Auction Credit Allocation are subject to approval by the Transmission Provider.

#### **7) Impact of a Violating Allocation to FTR Auctions**

An FTR Auction Participant may have its access to submit FTR Bids and/or FTR Offers suspended by Transmission Provider if the FTR Auction Participant violates its FTR Auction Credit Allocation as defined in Module A of this Tariff.

### **C. Minimum Bid Price for FTR Auction Activity**

#### **1) Minimum Bid Price for FTR Bids on Positive FTRs**

The Minimum Bid Price for Bids to acquire positive FTRs shall be a function of the duration of the FTR Auction as follows:

- Seasonal component of annual auction = \$100 per MW
- Monthly auction = \$100 per MW x (# days in month / # days in season)

The Transmission Provider shall use the greater of the Minimum Bid Requirement for positive FTRs or the value for the variable MPB defined in Section V.B.5 of Attachment L for determining the FTR Auction Credit Exposure for such bids.

#### **2) Minimum Bid Price for FTR Bids of Zero or Negative Value**

The Minimum Bid Price for FTR Bids that are zero or negative in value shall be a function of the duration of the FTR Auction as follows:

- Summer Season of annual auction = \$375 per MW
- Winter Season of annual auction = \$300 per MW
- Fall and Spring Season of annual auction = \$200 per MW
- Monthly Auction = seasonal value x (# days in month / # days in season)

The Transmission Provider shall use the absolute value of the Minimum Bid Requirement for FTR Bids that are zero or negative in value in determining the FTR Auction Credit Exposure for such bids.

## **V. Potential Exposure to Non-Payment and Total Potential Exposure**

Potential exposure to non-payment is calculated separately for each category of Markets and Services. The information in Section V of this Credit Policy addresses the calculation and use of the value for Non-FTR Potential Exposure and FTR Potential Exposure by Market Participant, Reliability Coordination Customer, or Congestion Management Customer.

### **A. Non-FTR Potential Exposure**

For credit purposes, the following service categories, as calculated per the formulas in Section V of this Credit Policy, shall be used to calculate Non-FTR Potential Exposure:

1. Real-Time Energy and Operating Reserve Markets Potential Exposure
  - Including all charge types associated with Congestion Management Service under Part II of Module F
  - During an Extreme Event, the Transmission Provider reserves the right to

use best-available information to calculate PEEE. Best-available information will be used when the use of the existing calculation will result in potential exposure calculations impacted by Extreme Events that far exceed the expected actual exposure of such entities. When the Transmission Provider implements the use of best-available information: (i) notification will be given to the market; (ii) the use of best-available information will be used to address a recognized problem; (iii) the time frame for the use of best-available information will be specified in the notice provided to the market; and (iv) the Transmission Provider will continue to ensure sufficient collateralization of its markets.

2. Day-Ahead Energy and Operating Reserve Markets Potential Exposure

- Including all charge types associated with Congestion Management Service under Part II of Module F
- During an Extreme Event, the Transmission Provider reserves the right to use best-available information to calculate DAEE. Best-available information will be used when the use of the existing calculation will result in potential exposure calculations impacted by Extreme Events that far exceed the expected actual exposure of such entities. When the Transmission Provider implements the use of best-available information: (i) notification will be given to the market; (ii) the use of best-available information will be used to address a recognized problem; (iii) the time frame for the use of best-available information will be specified in the

notice provided to the market; and (iv) the Transmission Provider will continue to ensure sufficient collateralization of its markets.

3. Virtual Transactions Potential Exposure

4. Congestion and Losses Potential Exposure

- During an Extreme Event, the Transmission Provider reserves the right to use best-available information to calculate CLEE. Best-available information will be used when the use of the existing calculation will result in potential exposure calculations impacted by Extreme Events that far exceed the expected actual exposure of such entities. When the Transmission Provider implements the use of best-available information: (i) notification will be given to the market; (ii) the use of best-available information will be used to address a recognized problem; (iii) the time frame for the use of best-available information will be specified in the notice provided to the market; and (iv) the Transmission Provider will continue to ensure sufficient collateralization of its markets.

5. Transmission Service Potential Exposure

- Including Schedule 31 charges associated with Reliability Coordination Service under Part I of Module F
- Including all charges associated with providing HVDC Service
- Including Schedule 26-A charges associated with Multi-Value Projects

6. RAR Potential Exposure

- Including all charge types under RAR

In the event no FTRs are owned by the Tariff Customer, ARR Settled Exposure and/or FTR and ARR Transactions Cleared But Not Yet Settled Exposure may be included in the Non-FTR Potential Exposure calculation and may be covered by Tariff Customer's Non-FTR Credit Limit, accordingly.

In general, the calculation of potential exposure to non-payment within each service category is based on one or more of the following exposure components:

1. Invoiced but not paid;
2. Measured but not invoiced, where measured means the Transmission Provider's Settlement systems have computed the charges and credits for all transactions for a given Operating Day; and
3. Estimated for future Operating Days based on known and/or potential activity.

With respect to a Category A Tariff Customer, Non-FTR Potential Exposure shall be the sum of all charges and credits for all service categories as calculated per the formulas in Section V of this Attachment L.

With respect to a Category B Tariff Customer, the calculation of Non-FTR Potential Exposure will be the sum of all charges and credits for all service categories, with the exception of Transmission Service Potential Exposure. If the result of summing these categories is a net credit amount, where a net credit amount is the amount of funds owed to the Tariff Customer from the Transmission Provider, then the result will be moved to zero and the Non-FTR Potential Exposure will consist of only Transmission Service Potential Exposure. If the result of summing these categories is a net charge amount, where a net charge amount represents funds owed to the Transmission

Provider from the Tariff Customer, then this value will be added to the Transmission Service Potential Exposure to determine Non-FTR Potential Exposure.

As a result, for Category B Tariff Customers, all Non-FTR Potential Exposure service categories are eligible to be netted against one another with the exception of Transmission Service Potential Exposure.

In the event a Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit on three (3) consecutive Business Days, then for the next ten (10) days the Tariff Customer's Non-FTR Potential Exposure shall be equal to the sum of: (i) the amount calculated per the formulas in this Section V; plus (ii) a factor of up to ten (10) times the average amount of the excess exposure over the three (3) consecutive Business Days, if the Transmission Provider determines, after consultation with the Tariff Customer, that such additional collateral is necessary to reflect the potential exposure associated with the Tariff Customer's expected market activity.

On the same day the third consecutive margin call is made, the Transmission Provider will initiate the consultation process by notifying the Tariff Customer of the additional collateral requirement based on the maximum amount permitted under the formula above and by requesting the Tariff Customer to supply any information that would permit the Transmission Provider to set the additional collateral requirement at a level lower than the maximum. Such information shall include, but is not limited to: (i) the Tariff Customer's estimated exposure, (ii) explanations for any recent change in the Tariff Customer's market activity, (iii) any relevant new load or unit

Outage information; or (iv) any default or supply contract expiration, termination or suspension. The Tariff Customer shall have one (1) Business Day to respond to the Transmission Provider's request. If the requested information is provided in full to the Transmission Provider's satisfaction during said period, the additional collateral requirement shall reflect the Tariff Customer's anticipated exposure based on the information provided. If the Tariff Customer fails to provide the requested information in full during said period, the additional collateral requirement shall equal the maximum amount permitted under the formula set forth above. In both cases, the additional collateral shall be provided by Tariff Customer by close of the second Business Day following the day on which the third consecutive margin call was made, upon confirmation from the Transmission Provider.

To illustrate, assume a Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit on day one by \$100,000. The Transmission Provider would issue a margin call for financial assurances pursuant to Section II.F of this Attachment L. Next, assume that on day two a Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit by \$200,000, the Transmission Provider issues another margin call, and the excess is in addition to any financial assurances the Tariff Customer provided for the exposure on day one. Finally, assume on day three the Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit by an additional \$200,000. Again the Transmission Provider would issue a margin call.

The average amount of the excess exposure over these three days is \$166,667.

Therefore, for ten (10) days after the third consecutive margin call, the Tariff Customer's Non-FTR Potential Exposure value would be that calculated per the existing formulae plus the addition of up to \$1,666,670. On the eleventh day (the fourteenth day after the first margin call), assuming the Tariff Customer's Non-FTR Potential Exposure did not continue to exceed its Non-FTR Credit Limit, the Non-FTR Potential Exposure value would be calculated per the existing formulae without the adder for the most recent three days multiplied by a factor of up to ten (10) times the average amount of the excess exposure.

If the Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit for more than three (3) consecutive Business Days, then the three (3) day average will be calculated on a rolling basis and the highest calculation for the days following will apply. Using the example above, assume the Tariff Customer's Non-FTR Potential Exposure exceeded its Non-FTR Credit Limit on days four, five and six by \$200,000, \$100,000 and \$50,000, respectively. Beginning on day five and continuing through the fourteenth day after the first margin call, up to \$200,000 would be added to the existing formulae (days two, three and four are each \$200,000 for an average of \$200,000, ten times of which is \$2,000,000). For the sixteenth day after the first margin call, the number would be reduced to \$1,166,666 (ten times the average of days four, five and six). Finally, assuming the Tariff Customer's Non-FTR Potential Exposure did not continue to exceed its Non-FTR Credit Limit after day six, the Non-FTR Potential Exposure value would be calculated per the existing



formulae without the adder beginning on the seventeenth day after the first margin call.

**1) Real-Time Energy and Operating Reserve Markets Potential Exposure**

Potential exposure to non-payment associated with Real-Time Energy and Operating Reserve Markets transactions is calculated per the formula below:

$$\sum_{c \in C} PEIE_c + \sum_{d \in D} PEME_d + PEEE$$

Where:

PEIE = the values of the Real-Time Energy and Operating Reserve Charges/Credits that have been invoiced, but not yet paid.

C = the set of all Real-Time Energy and Operating Reserve Charge Types that have been invoiced but not yet paid.

PEME= the values of the Real-Time Energy and Operating Reserve Charges/Credits that have been settled and/or calculated, but not yet invoiced.

D = the set of all Real-Time Energy and Operating Reserve Charge Types that have been settled and/or calculated, but not yet invoiced

PEEE (Real-Time Energy and Operating Reserve Estimated Exposure)

*PEEE will be the greater of:*

(1) The seven day rolling average of daily Real-Time Energy and Operating Reserve Charges/Credits from previously approved initial Settlements times six (6).

*OR*

(2) The three hundred sixty five (365) day rolling average of daily Real-Time Energy and Operating Reserve Charges/Credits from previously approved S7 Settlements times six (6).

However, expected credits from Financial Schedules will not be netted against Non-FTR potential exposure.

## **2) Day-Ahead Energy and Operating Reserve Markets Potential Exposure**

Potential exposure to non-payment associated with Day-Ahead Energy and Operating Reserve Market transactions is calculated per the formula below:

$$\sum_{g \in G} DAIE_g + \sum_{h \in H} DAME_h + DAEE$$

Where:

DAIE= The value of the Day-Ahead Energy and Operating Reserve Charges/Credits that have been invoiced but not yet paid.

G = The set of all Day-Ahead Energy and Operating Reserve Charge Types that have been invoiced but not yet paid.

DAME = The values of the Day-Ahead Energy and Operating Reserve

Charges/Credits that have been settled and/or calculated, but not yet invoiced, including charge types for Operating Reserve from the Energy and Operating Reserve Markets.

H = The set of all Day-Ahead Energy and Operating Reserve Charge Types that have been settled and/or calculated, but not yet invoiced.

DAEE (Day-Ahead Energy and Operating Reserve Estimated Exposure)

*DAEE will be the greater of:*

- (1) The seven day rolling average of daily Day Ahead Energy and Operating Reserve Charges/Credits from previously approved initial Settlements times six (6).

*OR*

- (2) The three hundred sixty five (365) day rolling average of daily Day Ahead Energy and Operating Reserve Charges/Credits from previously approved S7 Settlements times six (6).

However, expected credits from Financial Schedules will not be netted against Non-FTR potential exposure.

### **3) Virtual Transaction Potential Exposure**

Potential exposure to non-payment associated with Virtual Transactions is calculated per the formula below:

$$\sum_{g \in G} VIE_g + \sum_{h \in H} VME_h + (DMWhL \times MPD \times VMEW)$$

Where:

VIE (Virtual Invoiced Exposure) = the value of a given Virtual Energy Charge/Credit that has been invoiced, but not yet paid.

G = the set of all Virtual Energy Charge Types that have been invoiced but not yet paid.

VME (Virtual Energy Measured Exposure) = the value of a given Virtual Energy Charge/Credit that has been settled and/or calculated, but not yet invoiced.

H = the set of all Virtual Energy Charge Types that have been settled and/or calculated, but not yet invoiced.

DMWhL = the Market Participant's daily Virtual MWh Limit

MPD = The greater of the highest differential between the Day-Ahead and Real-Time Locational Marginal Prices at the 50<sup>th</sup> percentile over the previous twelve (12) months, assessed during the month of April and implemented May 1 of that Year and annually thereafter, or the Minimum MPD Value.

The MPD that will be applied for April 2006 through April 2007 using the prior twelve (12) months data is \$13.33 per MWh.

The Minimum MPD Value to be used in determining MPD is \$12.00 per MWh.

The Transmission Provider may re-evaluate and re-establish the Minimum MPD Value as market conditions dictate.

VMEW = the number of days in the Virtual Transactions Estimated Exposure Window (2 Days).

#### 4) Congestion and Losses Potential Exposure

Potential exposure to non-payment associated with Congestion and Losses is calculated per the formula below:

$$\sum_{k \in K} CLIE_k + \sum_{l \in L} CLME_l + CLEE$$

Where:

CLIE (Congestion and Losses Invoiced Exposure) = the value of a given Congestion and Losses Charge/Credit that has been invoiced, but not yet paid.

K = the set of all Congestion and Losses Charge Types that have been invoiced but not yet paid.

CLME (Congestion and Losses Measured Exposure) = the value of a given Congestion and Losses Charge/Credit that has been settled and/or calculated, but not yet invoiced.

L = the set of all Congestion and Losses Charge Types that have been settled and/or calculated, but not yet invoiced.

CLEE (Congestion and Losses Estimated Exposure):

*CLEE will be the greater of:*

(1) The seven day rolling average of daily Congestion and Losses

Charges/Credits from previously approved initial Settlements times six

(6).

*OR*

(2) The three hundred sixty five (365) day rolling average of daily

Congestion and Losses Charges/Credits from previously approved S7

Settlements times six (6).

## **5) Transmission Service Potential Exposure**

Transmission Service Potential Exposure is calculated per the formula below:

$$\sum \text{TIE} + \sum \text{RCIE} + \sum \text{HVDCIE} + \sum \text{MVPIE} + \sum \text{TME} + \sum \text{RCME} + \sum \text{HVDCME} + \sum \text{MVPME}$$

Where:

TIE (Transmission Invoiced Exposure) = all transmission service charges associated with confirmed Transmission Service reservations from the number of days in the previous month which have been calculated or invoiced but not yet paid.

RCIE (Reliability Coordination Invoiced Exposure) = all Schedule 31 charges associated with Reliability Coordination Service under Part I of Module F that have been invoiced but not yet paid.

HVDCIE (HVDC Service Invoiced Exposure) = all charges associated with HVDC Service that have been invoiced but not yet paid.

MVPIE (Multi-Value Project Invoiced Exposure) = all Schedule 26-A charges from the number of days in the previous month which have been calculated or invoiced but not yet paid.

TME (Transmission Measured Exposure) = all transmission service charges associated with confirmed Transmission Service reservations for:

A. The number of days of the current month which when added to the number of days in the previous month equals 50 Calendar Days if the TIE has not been paid.

OR

B. The number of days in the current month plus the required number of days in the subsequent month to equal 50 Calendar Days if the TIE has been paid.

RCME (Reliability Coordination Measured Exposure) = all Schedule 31 charges associated with Reliability Coordination Service under Part I of Module F that have been measured but not yet paid.

HVDCME (HVDC Service Measured Exposure) = all charges associated with HVDC Service that have been measured but not yet paid.

MVPME (Multi-Value Project Measured Exposure) = all Schedule 26-A charges calculated for:

A. The number of days of the current month which when added to the number of days in the previous month equals 50 Calendar Days if the MVPIE has not been paid.

OR

B. The number of days in the current month plus the required number of days in the subsequent month to equal 50 Calendar Days if the MVPIE has been paid.

## 6) RAR Potential Exposure

Potential exposure to non-payment associated with RAR transactions is calculated per the formula below:

$$\sum_{c \in C} RARIEc + \sum_{d \in D} RARMEd + \sum RAREE$$

Where:



RARIE (RAR Invoiced Exposure) = the value of a given RAR Charge/Credit that has been invoiced, but not yet paid.

C = the set of RAR Charges/Credits that have been invoiced but not yet paid.

RARME (RAR Measured Exposure) = the value of a given RAR Charge/Credit that has been settled and/or calculated, but not yet invoiced.

D = the set of RAR Charges/Credits that have been settled and/or calculated, but not yet invoiced

RAREE = The seven day rolling average of daily RAR Charges/Credits from previously approved initial Settlements times six (6). Additional exposure will be included in this calculation of RAREE for Tariff Customers subject to the ICAP Deferral, Demand Resource Deferral Notice, or DR testing waiver credit requirements in Module E-1. For ICAP Deferral, such exposure will be the product of the ICAP value provided in the ICAP Deferral Notice multiplied by ninety (90) days of daily CONE values (i.e., 90/365 times CONE) for the LRZ where the Planning Resource is located. However, Capacity Deficiency Charges, Reliability Based Demand Curve Opt Out Deficiency Charges, and Capacity Replacement Non-Compliance Charges will be excluded from the RAREE calculation as they are settled all at once rather than daily. For the DR testing waiver or the Demand Resource Deferral Notice, the credit requirements will be the product of the ICAP value registered but not tested multiplied by ~~\$2,400~~12,000/MW, where ~~\$2,400~~12,000 is the product of 3\*4\*\$~~200~~1,000 to account for the three (3) times energy penalty assumed

under the waiver, the minimum four (4) hours of LMR response requirements, and the ~~\$200~~-1,000 LMP as a proxy for pricing under emergency conditions.

## **B. FTR Potential Exposure**

For credit purposes, the following service categories, as calculated per the formulas in Section V of this Credit Policy, shall be used to calculate FTR Potential Exposure:

1. FTR Auction Settled Transactions Exposure
2. Auction Revenue Rights Settled Exposure
3. FTR and ARR Transactions Cleared But Not Yet Settled Exposure
4. FTR Portfolio Potential Exposure

In the event no FTRs are owned by the Tariff Customer, ARR Settled Exposure and/or FTR and ARR Transactions Cleared But Not Yet Settled Exposure may be excluded from the FTR Potential Exposure calculation and may be covered by Tariff Customer's Non-FTR Credit Limit, accordingly.

In general, the calculation of potential exposure to non-payment within each service category is based on one or more of the following exposure components:

1. Invoiced but not paid;
2. Measured but not invoiced, where measured means the Transmission Provider's Settlement systems have computed the charges and credits for all transactions for a given Operating Day; and
3. Estimated for future Operating Days based on known and/or potential activity.

The service category "FTR and ARR Transactions Cleared But Not Yet Settled" (item 3 above) only has an estimated exposure component. The

estimated exposure is the sum of the net positive monthly values of all cleared but not yet settled FTRs and ARRs. A net negative monthly value of all cleared but not yet settled FTRs and ARRs is not included in the FTR Potential Exposure calculation. The FTRs included in this calculation reflect the values from an FTR Auction(s) which have been cleared but not yet settled. The ARR values included in this calculation reflect the clearing prices established as a result of the annual FTR Auction.

In the event a Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) on three (3) consecutive Business Days, then for the next ten (10) days the Tariff Customer's FTR Potential Exposure shall be equal to the sum of: (i) the amount calculated per the formulas in this Section V; plus (ii) a factor of up to ten (10) times the average amount of the excess exposure over the three (3) consecutive Business Days, if the Transmission Provider determines, after consultation with the Tariff Customer, that such additional collateral is necessary to reflect the potential exposure associated with the Tariff Customer's expected market activity.

On the same day the third consecutive margin call is made, the Transmission Provider will initiate the consultation process by notifying the Tariff Customer of the additional collateral requirement based on the maximum amount permitted under the formula above and by requesting the Tariff Customer to supply any information that would permit the Transmission Provider to set the additional collateral requirement at a level lower than the maximum. Such information shall include, but is not limited

to: (i) the Tariff Customer's estimated exposure, (ii) explanations for any recent change in the Tariff Customer's market activity, (iii) any relevant new load or unit Outage information; or (iv) any default or supply contract expiration, termination or suspension. The Tariff Customer shall have one (1) Business Day to respond to the Transmission Provider's request. If the requested information is provided in full to the Transmission Provider's satisfaction during said period, the additional collateral requirement shall reflect the Tariff Customer's anticipated exposure based on the information provided. If the Tariff Customer fails to provide the requested information in full during said period, the additional collateral requirement shall equal the maximum amount permitted under the formula set forth above. In both cases, the additional collateral shall be provided by the Tariff Customer by close of the second Business Day following the day on which the third consecutive margin call was made, upon confirmation from the Transmission Provider.

To illustrate, assume a Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) on day one by \$100,000. The Transmission Provider would issue a margin call for financial assurances pursuant to Section II.F of this Attachment L. Next, assume that on day two a Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) by \$200,000, the Transmission Provider issues another margin call, and the excess is in addition to any financial assurances the Tariff Customer provided for the exposure on day one. Finally, assume on day

three the Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) by an additional \$200,000. Again the Transmission Provider would issue a margin call.

The average amount of the excess exposure over these three days is \$166,667. Therefore, for ten (10) days after the third consecutive margin call, the Tariff Customer's FTR Potential Exposure value would be that calculated per the existing formulae plus the addition of up to \$1,666,670. On the eleventh day (the fourteenth day after the first margin call), assuming the Tariff Customer's FTR Potential Exposure did not continue to exceed its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation), the FTR Potential Exposure value would be calculated per the existing formulae without the adder for the most recent three days multiplied by a factor of up to ten (10) times the average amount of the excess exposure.

If the Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) for more than three (3) consecutive Business Days, then the three (3) day average will be calculated on a rolling basis and the highest calculation for the days following will apply. Using the example above, assume the Tariff Customer's FTR Potential Exposure exceeded its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) on days four, five and six by \$200,000, \$100,000 and \$50,000, respectively. Beginning on day five and continuing

through the fourteenth day after the first margin call, up to \$200,000 would be added to the existing formulae (days two, three and four are each \$200,000 for an average of \$200,000, ten times of which is \$2,000,000). For the sixteenth day after the first margin call, the number would be reduced to \$1,166,666 (ten times the average of days four, five and six). Finally, assuming the Tariff Customer's FTR Potential Exposure did not continue to exceed its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) after day six, the FTR Potential Exposure value would be calculated per the existing formulae without the adder beginning on the seventeenth day after the first margin call.

#### **1) FTR Auction Settled Transactions Exposure**

Potential exposure to non-payment associated with settled FTR Auction transactions is calculated per the formula below:

$$\sum_{h \in H} \text{FTRTIE}_h + \sum_{i \in I} \text{FTRTME}_i$$

Where:

FTRTIE (FTR Transaction Invoiced Exposure) = the value of a given FTR Charge/Credit that has been invoiced, but not yet paid.

H = the set of all FTR Charge Types that have been invoiced but not yet paid.

FTRTME (FTR Transaction Measured Exposure) = the value of the given FTR Charge/Credit that has been settled and/or calculated, but not yet invoiced.

I = the set of all FTR Charge Types that have been settled and/or calculated, but not yet invoiced.

## 2) Auction Revenue Rights Settled Exposure

Potential exposure to non-payment associated with settled ARRs is calculated per the formula below:

$$\sum_{c \in C} \text{ARRIE}_c + \sum_{d \in D} \text{ARRME}_d$$

Where:

ARRIE (Auction Revenue Rights Invoiced Exposure) = the value of a given Auction Revenue Rights Charge/Credit that has been invoiced, but not yet paid.

C = the set of all Auction Revenue Rights Charge Types that have been invoiced, but not yet paid.

ARRME (Auction Revenue Rights Measured Exposure) = the value of a given Auction Revenue Rights Charge/Credit that has been settled and/or calculated, but not yet invoiced

D = the set of all Auction Revenue Rights Charge Types that have been settled and/or calculated, but not yet invoiced.

## 3) FTR and ARR Transactions Cleared But Not Yet Settled Exposure

The potential exposure to non-payment associated with the FTR and ARR

Transactions Cleared But Not Yet Settled is calculated per the formula below:

$$\sum_{a \in A} APEM_a = \sum_{r \in R} FTRTEE_r + \sum_{e \in E} ARREE_e$$

Where:

APEM (Auction Payable Exposure Month(s)) = any current or forward month where the sum of the FTRTEE and ARREE is calculated as a net payable exposure by a given Tariff Customer to the Transmission Provider.

A = the set of all current or forward months where the sum of the FTRTEE and ARREE is calculated as a net payable exposure by a given Tariff Customer to the Transmission Provider

FTRTEE (FTR Transaction Estimated Exposure) = the value of a given FTR Charge/Credit that has been cleared, but not yet settled.

R = the set of all FTR Charge Types by month that have been cleared, but not yet settled.

ARREE (Auction Revenue Rights Estimated Exposure) = the value of a given Auction Revenue Rights Charge/Credit that has been cleared, but not yet settled



E = the set of all Auction Revenue Rights Charge Types by month that have been cleared, but not yet settled

#### 4) FTR Portfolio Potential Exposure

Potential exposure to non-payment associated with FTRs registered in the name of the Tariff Customer is calculated per the formula below:

$$\sum_{a \in A} \text{FTRPIE}_a + \sum_{b \in B} \text{FTRPME}_b + \sum \text{FTRPEE}$$

Where:

FTRPIE (FTR Portfolio Invoiced Exposure) = the value of a given FTR Portfolio charge/credit that has been invoiced, but not yet paid.

A = the set of all FTR Portfolio Charge Types that have been invoiced, but not yet paid.

FTRPME = (FTR Portfolio Measured Exposure) = the value of a given FTR Portfolio Charge/Credit that has been settled and/or calculated, but not yet invoiced.

B = the set of all FTR Portfolio Charge Types that have been settled and/or calculated, but not yet invoiced.

FTRPEE = (FTR Portfolio Estimated Exposure) = any current or forward month where the value of the FTR Portfolio is calculated as a net payable exposure by a

given Tariff Customer to the Transmission Provider, which is the greater of the three calculations, FTRHCR, FTRMCR, and FTRMtA, per the following formula:

$$FTRPEE = \max(FTRHCR, FTRMCR, FTRMtA)$$

Where:

FTRHCR = Historical Collateral Requirement is calculated per the formula below:

$$\sum (FTRMW \times (\max(SRMCC_{P(50)} - SKMCC_{P(50)}, SRMCC_{P(75)} - SKMCC_{P(75)})) \times PR \times HUM)_m$$

$$m \in M$$

Where

FTRMW = the MW value of the given FTR.

$SRMCC_{P(50)}$  = the \$/MW/h Marginal Congestion Cost of the given FTR's Source Commercial Pricing Node at the 50<sup>th</sup> Percentile. The 50<sup>th</sup> Percentile Value (the P50 Value) for each Commercial Price Node will be developed on a rolling twelve (12) month basis using the actual values from the previous applicable twelve (12) months. These P50 values will be the value used as the Monthly Proxy Value. A new Monthly Proxy Value will be calculated each month using the actual values for the

previous twelve (12) months and will become effective as soon as practicable each month.

$SRMCC_{P(75)}$  = the \$/MW/h Marginal Congestion Cost of the given FTR's Source Commercial Pricing Node at the 75<sup>th</sup> Percentile. The 75<sup>th</sup> Percentile Value (the P75 Value) for each Commercial Price Node will be developed on a rolling twelve (12) month basis using the actual values from the previous applicable twelve (12) months. These P75 values will be the value used as the Monthly Proxy Value. A new Monthly Proxy Value will be calculated each month using the actual values for the previous twelve (12) months and will become effective as soon as practicable each month.

$SKMCC_{P(50)}$  = the \$/MW/h Marginal Congestion Cost of the given FTR's Sink Commercial Pricing Node at the 50<sup>th</sup> Percentile. The 50<sup>th</sup> Percentile value for each Commercial Price Node will be developed on a rolling twelve (12) month basis using the actual values from the previous applicable twelve (12) months. These P50 values will be the values used as the Monthly Proxy Value. A new Monthly Proxy Value will be calculated each month using the actual values for the previous twelve (12) months and will become effective as soon as practicable each month.

$SKMCC_{P(75)}$  = the \$/MW/h Marginal Congestion Cost of the given FTR's Sink Commercial Pricing Node at the 75<sup>th</sup> Percentile. The 75<sup>th</sup> Percentile

value for each Commercial Price Node will be developed on a rolling twelve (12) month basis using the actual values from the previous applicable twelve (12) months. These P75 values will be the values used as the Monthly Proxy Value. A new Monthly Proxy Value will be calculated each month using the actual values for the previous twelve (12) months and will become effective as soon as practicable each month.

PR (Peak Ratio) = the percentage of hours for peak and off-peak products. The peak percentage is 48% and the off-peak percentage is 52%.

HUM (Hours until Maturity) = the number of days remaining in the life of the FTR by month times 24 (to translate Days to Hours).

M = the set of all on-peak and off-peak FTRs owned by a given Market Participant.

FTRMCR = Minimum Collateral Requirement is calculated per the formula below:

$$\text{FTRMCR} = \sum (\text{FTRMW} \times \text{PR} \times \text{MCR} \times \text{HUM})_m$$

$$m \in M$$

Where:

FTRMW = the MW value of the given FTR

PR (Peak Ratio) = the percentage of hours for peak and off-

peak products. The peak percentage is 48% and the off-peak percentage is 52%.

MCR = Minimum per Collateral Requirement (set at \$0.05)

HUM (Hours until Maturity) = the number of days remaining in the life of the FTR by month, times 24 (to translate Days to Hours).

M = the set of all on-peak and off-peak FTRs owned by a given Market Participant.

FTRMtA = Mark-to-Auction Adjustment is calculated per the formula below:

$$\text{FTRMtA} = \sum (\text{FTRMW} \times \text{PR} \times \text{HUM} \times \text{FTRMtADiff})_m$$

$$m \in M$$

Where:

FTRMW = the MW value of the given FTR

PR (Peak Ratio) = the percentage of hours for peak and off-peak products. The peak percentage is 48% and the off-peak percentage is 52%.

HUM (Hours until Maturity) = the number of days remaining in the life of the FTR by month, times 24 (to translate Days to Hours).

$$\text{FTRMtADiff} = (\text{Purchase Price} - \text{Current Auction Price})$$

Purchase Price = The original acquisition price of  
the FTR for the appropriate time frame

Current Auction Price = The most recently cleared  
FTR auction price for the appropriate time frame

M = the set of all on-peak and off-peak FTRs owned by a given  
Market Participant.

### **C. Non-FTR Potential Exposure and/or FTR Potential Exposure Violations**

A Tariff Customer will be required to (i) make payments of invoiced but unpaid amounts to reduce its Non-FTR Potential Exposure and/or its FTR Potential Exposure and/or (ii) provide additional Financial Security to increase its Total Credit Limit when the following occurs:

- a. its Non-FTR Potential Exposure equals or exceeds its Non-FTR Credit Limit (i.e., a Non-FTR Potential Exposure Violation); or
- b. its FTR Potential Exposure plus the larger of the FTR Auction Credit Allocation or FTR Auction Credit Exposure exceeds its Financial Security less its alternative capitalization requirement (i.e., a FTR Potential Exposure Violation).

#### **1) Submission of Financial Security for Non-FTR Potential Exposure and/or FTR Potential Exposure Violations**

Financial Security submitted to increase a Tariff Customer's Total Credit Limit must meet the requirements set for Financial Security as defined in Section VI.B of this Credit Policy.

A Tariff Customer will have two (2) Business Days from receipt of written notification of a Non-FTR Potential Exposure Violation and/or FTR Potential Exposure Violation to remedy the situation in a manner deemed acceptable by the Transmission Provider.

**2) Suspension from Transmission Service and/or Market Services**

A Tariff Customer that fails to cure a Non-FTR Potential Exposure Violation or an FTR Potential Exposure Violation within the required cure period shall be suspended, in accordance with Sections 7.16(a)(1)(ii) and 7.16(a)(2) of the Tariff, from participating in the Transmission Provider's Energy and Operating Reserve Markets and from requesting any future Markets and Services unless and until Tariff Customer's Non-FTR Potential Exposure Violation and/or its FTR Potential Exposure Violation is cured.

**VI. CORPORATE GUARANTY AND FORMS OF FINANCIAL SECURITY**

Each and every Corporate Guaranty shall secure any and all non-FTR obligations of such Applicant and/or Tariff Customer under or in connection with this Tariff and/or other agreements. Any acceptable Financial Security provided by or on behalf of an Applicant and/or Tariff Customer shall secure any and all obligations of such Applicant and/or Tariff Customer under or in connection with this Tariff and/or the other Agreements. The Tariff and the other Agreements are subject to cross-default under Section 7.16.1 of

this Tariff, such that Default under any Agreement (including, without limitation, any Financial Security) shall be deemed a Default under all of the Agreements.

The Transmission Provider reserves the right to deny, reject, or terminate acceptance of any Foreign Guaranty at any time, including for material adverse circumstances or occurrences.

#### **A. Corporate Guaranty**

In those cases where an Applicant and/or Tariff Customer is an Affiliate of another entity and would like to utilize the consolidated financial statements and other relevant information of its parent company or another Affiliate for obtaining credit, a signed Corporate Guaranty is required. A Corporate Guaranty may be accepted from a Guarantor that is organized under the laws of a jurisdiction within the United States or Canada (a Non-Foreign Guarantor) or a Guarantor that is organized under the laws of a jurisdiction outside of the United States or Canada (Foreign Guarantor). Through this financial instrument the parent company or other Affiliate guarantees all the Non-FTR liabilities of the Applicant and/or Tariff Customer.

Applicants and/or Tariff Customers will have an opportunity to utilize a Corporate Guaranty if all of the following conditions are met:

- 1) This Credit Policy sets forth financial standards for Non-Foreign Guarantors or Foreign Guarantors. The Guarantor will be eligible to provide a Corporate Guaranty if the Guarantor is found to meet the creditworthiness criteria of the Transmission Provider for its respective category.



- 2) The form and substance of the Corporate Guaranty must be acceptable to the Transmission Provider. *See* Exhibit I of this policy for an acceptable form of Non-Foreign Guaranty and Exhibit I.A for an acceptable form of Foreign Guaranty. The Transmission Provider may amend the form of Non-Foreign Guaranty and the form of Foreign Guaranty from time to time, either generally or on a case-by-case basis. In general, the Corporate Guaranty should clearly state the identities of the “Guarantor,” “Beneficiary” (Transmission Provider), and the “Obligor” (Transmission Customer and/or Market Participant). Further, the Corporate Guaranty should specify the relationship between the “Guarantor” and the “Obligor.”
- 3) The Non-Foreign Guaranty must be duly authorized by the Guarantor and signed by an officer of the Guarantor. The Transmission Provider may require the Non-Foreign Guarantor to furnish to the Transmission Provider:
  - (i) a properly executed opinion of the Guarantor’s counsel with respect to the enforceability of the Corporate Guaranty, and/or
  - (ii) a certificate of Corporate Guaranty that includes a seal of corporation with the Resolution to the Board of Directors and the Secretary’s Certificate of Director’s Resolutions (both contained in Exhibit I of this Credit Policy) certifying that the execution,

delivery, and performance of the Corporate Guaranty has been  
duly authorized.

Adequate documentation regarding the signature authority of the person signing the  
Corporate Guaranty must be provided to the Transmission Provider.

The Guarantor will be subject to periodic financial reviews for the purpose of  
monitoring its creditworthiness, and the Corporate Guaranty will obligate the  
Guarantor to submit all information and documents required of Applicant(s) and/or  
Tariff Customer(s) under Section I of this Credit Policy including, without limitation,  
Rating Agency reports, current financial statements, and information on any Material  
Change in its financial condition.

Any breach of the Corporate Guaranty by the Guarantor or the requirements of the  
Guarantor under this policy shall be deemed a breach of this policy and a Default  
under this Tariff by the Guarantor and the respective Applicant(s) and/or Tariff  
Customer(s) for whose benefit the Corporate Guaranty was issued. A breach of this  
policy and a Default under this Tariff shall also occur if: (i) the Corporate Guaranty  
expires or terminates (other than in accordance with its terms or upon the written  
consent of the Transmission Provider); (ii) the Guarantor disaffirms, disclaims,  
repudiates or rejects or challenges the validity of all or any part of the Corporate  
Guaranty; or (iii) the Corporate Guaranty or any material provision of the Corporate  
Guaranty ceases to be in full force and effect (other than in accordance with its terms  
or upon the written consent of the Transmission Provider).

An Applicant and/or Tariff Customer or the Guarantor may request the withdrawal of its Corporate Guaranty by providing a written request to do so to Transmission Provider credit personnel. Notwithstanding any withdrawal request, a Corporate Guaranty may be withdrawn and/or terminated only upon approval by Transmission Provider. The Transmission Provider will not approve withdrawal or termination of a Corporate Guaranty unless and until:

- (i) alternate Financial Security acceptable to the Transmission Provider has been provided; or
- (ii) all financial obligations of Applicant and/or Tariff Customer under this Tariff and all other Agreements have been irrevocably satisfied in full and, if an Applicant, the Applicant has withdrawn its application to become a Market Participant, Transmission Customer or Coordination Customer and, if a Tariff Customer, the Tariff Customer is no longer a Market Participant, Transmission Customer or Coordination Customer.

If a Guarantor provides Corporate Guaranties for multiple Applicants and/or Tariff Customers and/or is also a Tariff Customer, the sum value of the Unsecured Credit Allowance of all such Applicants and/or Tariff Customer and the Guarantor shall not exceed the lesser of:

- (i) the approved Unsecured Credit Allowance for the Guarantor based on Transmission Provider's financial review of Guarantor; or
- (ii) \$50 million for Non-Foreign Guaranties and \$25 million for Foreign Guaranties.

If a Corporate Guaranty is utilized to establish an Unsecured Credit Allowance for an Applicant or Tariff Customer, the value of the Corporate Guaranty shall be the least of:

- (i) the limit imposed in the Corporate Guaranty; or
- (ii) the portion of the Unsecured Credit Allowance calculated for the Guarantor that is allocated to such Applicant and/or Tariff Customer in Transmission Provider's discretion; or
- (iii) \$50 million for Non-Foreign Guaranties and \$25 million for Foreign Guaranties.

*See* Section II.B for further information on Unsecured Credit Allowance.

#### **1. Non-Foreign Guaranties**

Applicants and/or Tariff Customers who request a Non-Foreign form of Guaranty may be extended unsecured credit equal to the least of:

- (i) the amount determined as a result of financial review of the Guarantor by the Transmission Provider;
- (ii) the amount guaranteed by the Guarantor if the Transmission Provider finds such amount appropriate; and
- (iii) \$50 Million or, the total of all unsecured credit where the Guarantor is also an Applicant and/or Tariff Customer or guarantees the obligations of more than one Applicant and/or Tariff Customer, the portion of the \$50 million

Unsecured Credit maximum that the Transmission Provider allocates to the Applicant and/or Tariff Customer, in the Transmission Provider's discretion.

Any shortfall between the Total Potential Exposure and the Unsecured Credit granted to the Applicant and/or Tariff Customer as a result of financial review of the Guarantor will require additional Financial Security.

## **2. Foreign Guaranties**

A Foreign Guaranty is a Corporate Guaranty that is provided by a Foreign Guarantor.

A Tariff Customer may provide a Foreign Guaranty in satisfaction of part of its credit obligations provided that all of the following conditions are met:

### **a. A Foreign Guaranty:**

- i. Must contain provisions equivalent to those contained in the Transmission Provider's standard form of Foreign Guaranty with any modifications subject to review and approval by the Transmission Provider's counsel.
- ii. Must be denominated in US currency.
- iii. Must be written and executed solely in English, including any duplicate originals.
- iv. Will not be accepted towards a Tariff Customer's Unsecured Credit Allowance for more than the following limits, depending on the Foreign Guarantor's credit rating and the sovereign rating of the country:

Rating of Foreign Guarantor	Maximum Accepted Guaranty if Country Rating is AA+ (in U.S. Dollars)
A- or above	\$25,000,000

BBB+	\$15,000,000
BBB	\$5,000,000
BBB- or below	\$0

- v. May not exceed 50% of the Tariff Customer's Unsecured Credit Allowance, if the Foreign Guarantor is rated less than BBB+ or equivalent.

**b. A Foreign Guarantor:**

i. Credit Requirements:

Must not only satisfy all provisions of the Transmission Provider's Credit Policy applicable to Non-Foreign Guarantors, but must also have a Senior Unsecured debt rating equal to BBB or greater (or the equivalent, in the Transmission Provider's sole discretion) by any and all Rating Agencies that provide rating coverage of the entity. The credit limit extended to a Foreign Guarantor will be based on the Transmission Provider's credit scoring model applicable to Domestic Guarantors; however, the maximum Unsecured Credit Allowance will be capped by the credit rating and the sovereign rating as detailed in the above table.

ii. Additional Requirements

- Must be an Affiliate of the Tariff Customer.
- Must provide audited financials in United States and/or Canadian GAAP format or International Financial Reporting Standards (IFRS) format with a clear representation of net worth, intangible assets, and any other information the Transmission Provider may

require in order to determine the entity's Unsecured Credit Allowance.

- Must maintain an agent for acceptance of service of process in the United States; such agent shall be situated in the State of Indiana
- Must provide a Secretary's Certificate certifying the adoption of Corporate Resolutions:
  1. Authorizing and approving the Guaranty; and
  2. Authorizing the Officers to execute and deliver the Guaranty on behalf of the Guarantor.
- Must be domiciled in a country with a minimum long-term sovereign (or equivalent) rating of AA+/Aa1, with the following conditions:
  1. Sovereign ratings must be available from at least two (2) Rating Agencies.
  2. Each Rating Agency's sovereign rating for the domicile will be considered to be the lowest of: country ceiling, senior unsecured government debt, long-term foreign currency sovereign rating, long-term local currency sovereign rating, or other equivalent measures, at the Transmission Provider's sole discretion.

3. If ratings are available from more than one Rating Agency, the lowest available rating will be used.
- Must be domiciled in a country that recognizes and enforces judgments of US courts.
  - Must demonstrate financial commitment to activity in the United States as evidenced by one of the following:
    1. American Depositary Receipts (ADR) are traded on the New York Stock Exchange, American Stock Exchange, or NASDAQ.
    2. Equity ownership worth over USD 100,000,000 in the wholly-owned or majority owned subsidiaries in the United States
  - Must satisfy all other applicable provisions of the Transmission Provider's Tariff and/or Market Participant Agreement, including this Credit Policy.
  - Must pay for all expenses incurred by the Transmission Provider related to reviewing and accepting Foreign Guaranty beyond nominal in-house credit and legal review.
  - Must, at its own cost, provide the Transmission Provider with an independent legal opinion from an attorney/solicitor of the Transmission Provider's choosing and licensed to practice law in



the United States and/or Guarantor's domicile, in form and substance acceptable to the Transmission Provider in its sole discretion, confirming the enforceability of the Foreign Guaranty, the Guarantor's legal authorization to grant the Guaranty, the conformance of the Guaranty, Guarantor, and Guarantor's domicile to all of these requirements, and such other matters as the Transmission Provider may require in its sole discretion.

**B. Acceptable Forms of Financial Security**

Applicants and/or Tariff Customers who provide Financial Security under the terms of this Credit Policy may submit Financial Security in the form of Cash Deposit or Irrevocable Letter of Credit. All of the above instruments may be submitted separately or in combinations to constitute the full amount of any required Financial Security. The Transmission Provider will instruct the Applicant and/or Tariff Customer as to the form of Financial Security most appropriate to its circumstances. The Applicant and/or Tariff Customer will be required to fulfill their obligations for Financial Security per the Transmission Provider's instructions.

Any breach of Financial Security by the person issuing the Financial Security under this policy shall be deemed a breach of this policy and a Default under this Tariff by the person issuing the Financial Security and the respective Applicant(s) and/or Tariff Customer(s) for whose benefit the Financial Security was issued. A breach of this policy and a Default under this Tariff shall also occur if: (i) the Financial Security expires or terminates (other than in accordance with its terms or upon the written

consent of the Transmission Provider); (ii) the person issuing the Financial Security disaffirms, disclaims, repudiates or rejects or challenges the validity of all or any part of the Financial Security; or (iii) the Financial Security or any material provision of the Financial Security ceases to be in full force and effect (other than in accordance with its terms or upon the written consent of the Transmission Provider).

### **1) Cash Deposits**

A Cash Deposit in an amount determined by the Transmission Provider may serve as a form of Financial Security. The initial Cash Deposit must be accompanied by execution and delivery of a Cash Collateral Agreement in the form attached to this Credit Policy as Exhibit III and, upon the request of the Transmission Provider, a “Control Agreement” in a form approved by the Transmission Provider. The Transmission Provider may amend the forms of agreement from time to time, either generally or on a case-by-case basis.

The Cash Deposit will be placed in a segregated account to be registered in Transmission Provider’s name and to be held within the complete control of the Transmission Provider to secure the payment of the Applicant’s and/or Tariff Customer’s obligations under or in connection with the Tariff and/or any of the other Agreements. Cash Deposits will be held in accordance with the Cash Collateral Agreement and will accrue interest at the Transmission Provider’s overnight bank rate. This interest will accrue to the benefit of the Applicant and/or Tariff Customer and be added to the balance of the segregated account. Accrued and unpaid interest that has not been applied to satisfy the Applicant’s

and/or Tariff Customer's obligations will be released and paid to the Applicant and/or Tariff Customer quarterly by the last business day in January, April, July, and October of each year; provided that the Transmission Provider shall not be obligated to pay any interest to the Applicant and/or Tariff Customer or release any amount from the segregated account after and during the continuation of a Default.

The Applicant and/or Tariff Customer shall be required in the Credit and Security Agreement and/or Cash Collateral Agreement to grant Transmission Provider a first priority security interest in and to any and all cash, cash collateral and deposit accounts held or controlled by the Transmission Provider then existing or thereafter opened and any and all proceeds of such collateral, including, without limitation, the cash and interest deposited therein. This security interest secures the prompt payment when due of any and all obligations of the Applicant and/or Tariff Customer under or in connection with this Tariff, and/or any and all other Agreements.

Should an Applicant and/or Tariff Customer fail to make a timely payment, the Applicant's and/or Tariff Customer's outstanding account balance will be satisfied using deposited funds. If any portion or all of the deposit is used to satisfy an Applicant's and/or Tariff Customer's obligation, the deposit must be promptly replenished within ten (10) Business Days.

At the Transmission Provider's discretion, an Applicant or Tariff Customer may replace Cash Deposits with other forms of Financial Security.

## 2) Irrevocable Letter of Credit

An Irrevocable Letter of Credit for the value of Financial Security required by the Transmission Provider may be submitted as a form of Financial Security. *See* Exhibit II of this Credit Policy for an acceptable form of Irrevocable Letter of Credit. The Transmission Provider may amend the form of Irrevocable Letter of Credit from time to time, generally or on a case-by-case basis.

The Irrevocable Letter of Credit should clearly specify the “Issuer,” the “Account Party” and “Beneficiary,” the initial term of one (1) year and the dollar amount available for drawing. It should also include a statement as to the instructions and terms for funds disbursement (*see* Exhibit II). At the time of issuance and at all times the Irrevocable Letter of Credit is outstanding, the financial institution issuing the Irrevocable Letter of Credit cannot have a Long Term rating lower than “A-” by Standard & Poor’s or lower than “A3” by Moody’s. Further, a non-domestic or non-Canadian financial institution issuing the Irrevocable Letter of Credit must issue the Irrevocable Letter of Credit from a domestic branch in addition to meeting the above mentioned minimum rating requirement. All costs associated with obtaining an Irrevocable Letter of Credit will be the sole responsibility of the Applicant and/or Tariff Customer. If Tariff Customer chooses to replace an Irrevocable Letter of Credit with a new Irrevocable Letter of Credit, the Transmission Provider will return the initial Irrevocable Letter of Credit when the replacement Irrevocable Letter of Credit is received by the

Transmission Provider in form and amount acceptable to the Transmission Provider.

Under the form of Irrevocable Letter of Credit, the Irrevocable Letter of Credit automatically renews each year unless the issuing financial institution provides a notice to the Transmission Provider at least one hundred twenty (120) days prior to its expiration date stating its decision not to renew the Irrevocable Letter of Credit. Regardless of whether the Irrevocable Letter of Credit automatically renews, if the Irrevocable Letter of Credit is not renewed, for at least an additional year, at least one hundred twenty (120) days prior to its stated expiration date (a “Non-Renewal Event”), the Applicant and/or Tariff Customer must submit another form of Financial Security acceptable to the Transmission Provider, in the Transmission Provider’s sole discretion, no later than one hundred ten (110) days prior to the stated expiration date.

Should the amount of the Irrevocable Letter of Credit fall below the required level due to a drawing, it must be promptly replenished or substituted by another form of Financial Security acceptable to the Transmission Provider within ten (10) Business Days.

If the issuing financial institution’s Long Term rating is lower than “A-” by Standard & Poor’s or lower than “A3” by Moody’s , the Transmission Provider may require the Applicant and/or Tariff Customer to submit another form of Financial Security acceptable to the Transmission Provider, in the Transmission

Provider's sole discretion, promptly (no later than ten (10) Business Days of such request) in place of the Irrevocable Letter of Credit.

If the Applicant and/or Tariff Customer fails to submit the required Financial Security within the required time period after a Non-Renewal Event or Rating Event, it may be a Default under this Credit Policy and the Tariff. In addition to any other remedies available to the Transmission Provider, the Transmission Provider may draw down the entire Irrevocable Letter of Credit and hold the proceeds in an unsegregated account and apply such proceeds to amounts owed by the Applicant and/or Tariff Customer under this Tariff, and/or any of the other Agreements. If the Applicant and/or Tariff Customer executes and delivers the documents required by the Transmission Provider, including, without limitation, a Cash Collateral Agreement in the form attached to this Credit Policy (or such other form acceptable to the Transmission Provider) or an amendment thereto, the Transmission Provider shall treat the amount obtained upon such draw and not previously applied to amounts owed by such Applicant and/or Tariff Customer as a Cash Deposit and transfer it to a segregated account.

By executing the Credit and Security Agreement in the form attached to this Credit Policy as Exhibit V, the Applicant and/or Tariff Customer grants the Transmission Provider a first priority security interest in and to any and all proceeds of any and all Letters of Credit then existing or thereafter issued with the Transmission Provider as Beneficiary and Applicant and/or Tariff Customer as Account Party, including, without limitation, the cash issued upon a draw thereon.

This security interest secures the prompt payment when due of any and all obligations of the Applicant and/or Tariff Customer under or in connection with the Tariff and any and all other Agreements.

Should an Applicant and/or Tariff Customer fail to make a timely payment, the Transmission Provider may use proceeds from the Irrevocable Letter of Credit to satisfy the Applicant's and/or Tariff Customer's outstanding account balance.

## **VII. REQUESTS TO CHANGE UNSECURED CREDIT OR FINANCIAL SECURITY**

If there is a positive Material Change in the financial condition of the Tariff Customer, a significant reduction in the Total Potential Exposure of the Tariff Customer, or any other change that the Tariff Customer believes may warrant an increase in the Tariff Customer's Unsecured Credit Allowance and/or a reduction in the Financial Security provided by the Tariff Customer, the Tariff Customer may make a written request to the Transmission Provider to reevaluate the Tariff Customer's Unsecured Credit Allowance and/or the Tariff Customer's level of Financial Security. The Transmission Provider will respond to such a request within a reasonable time after receiving all information that it requests in response to the Tariff Customer's request. The Transmission Provider anticipates that it will respond to the Tariff Customer's request within ten (10) Business Days of receiving all such information.

## **VIII. DEFAULTS**

Any violation of any provision of this Credit Policy as it may be amended from time to time, unless cured within any applicable cure period set forth herein, shall be a Default under this Credit Policy and this Tariff. Section 7.16.1 of this Tariff provides that any

Default under this Tariff (including, without limitation, this Credit Policy) and/or any other Agreements shall constitute a Default under the Tariff and all of the Agreements.



## EXHIBIT I

### CORPORATE GUARANTY

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, including, without limitation, the credit advance by the Midcontinent Independent System Operator, Inc. (“Transmission Provider”) to \_\_\_\_\_ (“Company”), the undersigned guarantor (“Guarantor”), hereby unconditionally and irrevocably guarantees the prompt and complete payment of all amounts that Company now or hereafter owes, and the performance of all other obligations of the Company, under the terms and conditions of the Transmission Provider’s Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission (“Commission”), as may be amended and supplemented from time to time, together with all schedules and attachments thereto and any replacements or substitutes (the “Tariff”), any agreements entered into by Company under, pursuant to, or in connection with the Tariff and/or any agreements to which Transmission Provider and Company are Parties, as may be amended or supplemented from time to time whether now existing or hereafter arising in accordance with their respective terms, together with costs of enforcement and collection, including attorneys’ fees (collectively, the “Liabilities”). The Tariff, any and all agreements entered into by Company under, pursuant to or in connection with the Tariff, and any and all agreements to which the Company and Transmission Provider are parties, each as it may be amended from time to time and whether it currently exists or is entered into at anytime in the future are collectively referred to herein as the “Agreements”. The Agreements include, without limitation, the Tariff,

the Service Agreement, dated \_\_\_\_\_, \_\_\_\_\_, and the Market Participant Agreement, dated \_\_\_\_\_, \_\_\_\_\_.

1. If Company does not perform each of its obligations in strict accordance with each respective Agreement, Guarantor shall immediately pay upon demand all amounts now or hereafter due under all of the Agreements (including, without limitation, all principal, interest and fees) and otherwise proceed to complete the same and satisfy all of the Liabilities, including Company's obligations under all of the Agreements. This Guaranty may be satisfied by Guarantor paying and/or performing (as appropriate) Company's Liabilities or by the Guarantor causing Company's Liabilities to be paid or performed; provided, however, that Guarantor shall at all times remain fully responsible and liable for its obligations hereunder notwithstanding any such payment or performance (or failure thereof) by any third party.
2. This Guaranty is an absolute, unconditional and continuing guaranty of the full and punctual payment and performance by Company of all of the Liabilities, including each of its obligations under each of the Agreements, and not of collectibility only, and is in no way conditioned upon any requirement that Transmission Provider (or any other person) first attempt to collect payment from Company or any other guarantor or surety or resort to any security or other means of obtaining payment of all or any part of the Liabilities or upon any other contingency. This is a continuing guaranty and shall be binding upon Guarantor regardless of: (i) how long after the date hereof the Agreement is entered into; (ii) how long after the date hereof any part of the obligations under the Agreements is incurred by Company; and (iii) the amount of the obligations under the Agreements at

any time outstanding. Transmission Provider may enforce this Guaranty from time to time and as often as occasion for such enforcement may arise.

3. The obligations hereunder are independent of the obligations of Company and a separate action or actions may be brought and prosecuted against Guarantor whether action is brought against Company or whether Guarantor is joined in any such action or actions. Guarantor's liability under this Guaranty is not conditioned or contingent upon genuineness, validity, regularity or enforceability of any of the Agreements.
4. Guarantor authorizes Transmission Provider, without notice or demand and without affecting its liability hereunder, from time to time, to: (i) renew, extend, modify, supplement or otherwise change the terms of any or all the Agreements or any part thereof; (ii) take and hold security for the payment of this Guaranty or any or all of the Liabilities, and exchange, enforce, waive and release any such security; and (iii) apply such security and direct the order or manner of sale of any collateral provided as such security as Transmission Provider (or any other person) in its sole discretion may determine. The obligations and liabilities of Guarantor hereunder shall be absolute and unconditional, shall not be subject to any counterclaim, set-off, deduction or defense based upon any claim Guarantor may have against Company, any other Guarantor, or any other person or entity, and shall remain in full force and effect until all of the obligations of Guarantor hereunder and all of the Liabilities, including all obligations of Company under each of the Agreements, have been fully and irrevocably satisfied, without regard to, or release or discharge by, any event, circumstance or condition (whether or not Guarantor shall have knowledge or notice thereof) which might constitute a legal or

equitable defense or discharge of a Guarantor or surety or which might in any way limit recourse against Guarantor, including without limitation: (i) any renewal, amendment or modification of, or supplement to, the terms of any or all of the Agreements; (ii) any waiver, consent or indulgence by Transmission Provider (or any other person), or any exercise or non-exercise by Transmission Provider (or any other person) of any right, power or remedy, under or in respect of this Guaranty or any of or all the Agreements (whether or not Guarantor or Company has or have notice or knowledge of any such action or inaction); (iii) the invalidity or unenforceability, in whole or in part, of any or all of the Agreements, or the termination, cancellation or frustration of any thereof, or any limitation or cessation of Company's liability under any thereof (other than any limitation or cessation expressly provided for therein), including without limitation any invalidity, unenforceability or impaired liability resulting from Company's lack of capacity, power and/or authority to enter into any or all of the Agreements and/or to incur any or all of the obligations thereunder, or from the execution and delivery of any or all of the Agreements by any person acting for Company without or in excess of authority; (iv) any actual, purported or attempted sale, assignment or other transfer by Transmission Provider (or any other person) of any or all of the Agreements or of any or all of its rights, interests or obligations thereunder; (v) the taking or holding by Transmission Provider of a security interest, lien or other encumbrance in or on any property as security for any or all of the Liabilities, including any or all of the obligations of Company under any or all of the Agreements, the posting of a cash deposit, letter of credit, performance bond or other financial accommodation, or any exchange, release, non-perfection, loss or

alteration of, or any other dealing with, any such security; (vi) the addition of any party as a guarantor or surety of all or any part of the Liabilities, including obligations of Company under any or all of the Agreements; (vii) any merger, amalgamation or consolidation of Company into or with any other entity, or any sale, lease, transfer or other disposition of any or all of Company's assets or any sale, transfer or other disposition of any or all of the shares of capital stock or other securities of Company to any other person or entity; or (viii) any change in the financial condition of Company or (as applicable) of any subsidiary, affiliate, partner or controlling shareholder thereof, or Company's entry into an assignment for the benefit of creditors, an arrangement or any other Agreement or procedure for the restructuring of its liabilities, or Company's insolvency, bankruptcy, reorganization, dissolution, liquidation or any similar action by or occurrence with respect to Company.

5. Guarantor unconditionally waives, to the fullest extent permitted by law: (i) notice of any of the matters referred to in §4 hereof; (ii) any right to the enforcement, assertion or exercise by Transmission Provider (or any other person) of any of Guarantor of its rights, powers or remedies under, against or with respect to (a) any of the Agreements, (b) any other guarantor or surety, or (c) any security for all or any part of the Liabilities, including the obligations of Company under all or any of the Agreements or obligations of Guarantor hereunder; (iii) any requirement of diligence and any defense based on a claim of laches; (iv) all defenses which may now or hereafter exist by virtue of any statute of limitations, or of any stay, valuation, exemption, moratorium or similar law, except the sole defense of full and indefeasible payment; (v) any requirement that

Guarantor be joined as a party in any action or proceeding against Company to enforce any of the provisions of any of the Agreements; (vi) any requirement that Guarantor be involved in any dispute resolution procedures involving the Company to enforce any of its obligations under any of the Agreements (including the dispute resolution procedures set forth in the Tariff); (vii) any requirement that Transmission Provider (or any other person) mitigate or attempt to mitigate damages resulting from a default by Guarantor hereunder or from a default by Company under any of the Agreements; (viii) acceptance of this Guaranty; and (ix) all presentments, protests, notices of dishonor, demands for performance and any and all other demands upon and notices to Company, and any and all other formalities of any kind, the omission of or delay in performance of which might but for the provisions of this Section constitute legal or equitable grounds for relieving or discharging Guarantor in whole or in part from its irrevocable, absolute and continuing obligations hereunder, it being the intention of Guarantor that its obligations hereunder shall not be discharged except by payment and performance and then only to the extent thereof.

6. Guarantor waives any right to require Transmission Provider (or any other person) to (i) proceed against Company; (ii) proceed against or exhaust any security held from Company; or (iii) pursue any other remedy whatsoever. So long as any obligations remain outstanding under this Guaranty or any of the Agreements, Guarantor shall not exercise any rights against Company arising as a result of payment by Guarantor hereunder, by way of subrogation or otherwise, and will not prove any claim in competition with Transmission Provider (or any other party to any of the Agreements) in

respect of any payment under the Agreements in bankruptcy or insolvency proceedings of any nature. Guarantor will not claim any set-off or counterclaim against Company in respect of any liability of Guarantor to Company and Guarantor waives any benefit of any right to participate in any collateral which may be held by Transmission Provider (or any other party to any of the Agreements or holding any security for any of the Liabilities).

7. If after receipt of any payment of, or the proceeds of any collateral for, all or any part of the Liabilities, the surrender of such payment or proceeds is compelled or volunteered to any person because such payment or application of proceeds is or may be avoided, invalidated, recaptured, or set aside as a preference, fraudulent conveyance, impermissible set -off or for any other reason, whether or not such surrender is the result of: (i) any judgment, decree or order of any court or administrative body having jurisdiction, or (ii) any settlement or compromise of any claim as to any of the foregoing with any person (including Company), then the Liabilities, or part thereof affected, shall be reinstated and continue and this Guaranty shall be reinstated and continue in full force as to such Liabilities or part thereof as if such payment or proceeds had not been received, notwithstanding any previous cancellation of any instrument evidencing any such Liabilities or any previous instrument delivered to evidence the satisfaction thereof. The provisions of this Section shall survive the termination of this Guaranty and any satisfaction and discharge of Company by virtue of any payment, court order or any Federal, state or local law.

8. Any indebtedness of Company now or hereafter held by Guarantor is hereby subordinated to the Liabilities and any indebtedness of Company under any of the Agreements; and such indebtedness of Company to Guarantor shall be collected, enforced and received by Guarantor as trustee for Transmission Provider and be paid over to Transmission Provider on account of the Liabilities but without reducing or affecting in any manner the liability of Guarantor under the other provisions of this Guaranty.
9. Guarantor represents and warrants to Transmission Provider, as an inducement to Transmission Provider to make the credit advances to Company, that: (i) the execution, delivery and performance by Guarantor of this Guaranty (a) are within Guarantor's powers and have been duly authorized by all necessary action; (b) do not contravene Guarantor's charter documents or any law or any contractual restrictions binding on or affecting Guarantor or by which Guarantor's property may be affected; and (c) do not require any authorization or approval or other action by, or any notice to or filing with, any public authority or any other person except such as have been obtained or made; (ii) this Guaranty constitutes the legal, valid and binding obligation of Guarantor, enforceable in accordance with its terms, except as the enforceability thereof may be subject to or limited by bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws relating to or affecting the rights of creditors generally and by general principles of equity; (iii) Company is a wholly owned subsidiary of Guarantor; and (iv) there is no action, suit or proceeding affecting Guarantor pending or threatened before



any court, arbitrator, or public authority that may materially adversely affect Guarantor's ability to perform its obligations under this Guaranty.

10. The Guarantor must submit any and all documents that the Guarantor would be required to submit under Transmission Provider's Credit Policy (as may be amended from time to time) if the Guarantor applied for and/or obtained credit under such Credit Policy, including, without limitation, (i) at least annually a current bond/debt rating report for senior unsecured debt of the Guarantor and an issuer rating issued by Moody's Investor Services or Standard & Poor's, promptly upon its issuance, and (ii) financial reports of the Guarantor promptly upon their issuance including, without limitation, annual audited financial statements prepared in accordance with generally accepted accounting principles, with auditor notes and auditor's report, to be delivered no later than one hundred twenty (120) days after the end of each fiscal year of the Guarantor and internally prepared quarterly financial statements, if requested by Transmission Provider, prepared in accordance with generally accepted accounting principles, no later than sixty (60) days after the end of each fiscal quarter of the Guarantor. Further, Guarantor must inform Transmission Provider in writing within five (5) Business Days of any Material Change (as defined in the Transmission Provider's Credit Policy, as may be amended from time to time) in its financial status. In addition to any other remedies available at law or in equity, a Guarantor's failure to provide this information may result in proceedings by Transmission Provider to terminate the Agreements with the Company.
11. Guarantor agrees to pay on demand reasonable attorneys' fees and all other costs and expenses which Transmission Provider, and any ITCs (as defined in the Tariff), their

affiliates, representatives, successors and assigns may incur in the enforcement of this Guaranty. No terms or provisions of this Guaranty may be changed, waived, revoked or amended without Transmission Provider's prior written consent. Should any provision of this Guaranty be determined by a court of competent jurisdiction to be unenforceable, all of the other provisions shall remain effective. This Guaranty embodies the entire Agreement among the parties hereto with respect to the matters set forth herein, and supersedes all prior Agreements among the parties with respect to the matters set forth herein. No course of prior dealing among the parties, no usage of trade, and no parole or extrinsic evidence of any nature shall be used to supplement, modify or vary any of the terms hereof. There are no conditions to the full effectiveness of this Guaranty.

Transmission Provider may assign this Guaranty, and its rights hereunder in whole or in part, without consent and without in any way affecting Guarantor's liability under it. This Guaranty shall inure to the benefit of Guarantor, Transmission Provider, Company, the ITCs and their successors and assigns. Guarantor may not assign this Guaranty without Transmission Provider's consent. This Guaranty is in addition to the guaranties of any other guarantors and any and all other guaranties of any of the Liabilities, including Company's indebtedness or obligations under any or all of the Agreements.

12. This Guaranty shall be governed by the laws of the State of Indiana, without regard to conflicts of law principles. Guarantor hereby irrevocably submits to the jurisdiction of any Indiana or United States Federal court sitting in Indiana over any action or proceeding arising out of or relating to this Guaranty or any of the Agreements, and Guarantor hereby irrevocably agrees that all claims in respect of such action or

proceeding may be heard and determined in such Indiana state or federal court. Guarantor irrevocably consents to the service of any and all process in any such action or proceeding by the mailing of copies of such process to Guarantor at its address set forth herein. Guarantor agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Guarantor further waives any objection to venue in Indiana and any objection to an action or proceeding in such State on the basis of forum non-conveniens. Guarantor further agrees that any action or proceeding brought against Transmission Provider shall be brought only in Indiana or the United States Federal courts sitting in Indiana. Nothing herein shall affect the right of Transmission Provider to bring any action or proceeding against the Guarantor or its property in the courts of any other jurisdictions.

13. GUARANTOR ACKNOWLEDGES THAT IT HAS BEEN ADVISED BY COUNSEL OF ITS CHOICE WITH RESPECT TO THIS GUARANTY AND THAT IT MAKES THE FOLLOWING WAIVER KNOWINGLY AND VOLUNTARILY. GUARANTOR IRREVOCABLY WAIVES TRIAL BY JURY IN ANY COURT AND IN ANY SUIT, ACTION OR PROCEEDING OR ANY MATTER ARISING IN CONNECTION WITH OR IN ANY WAY RELATED TO THE TRANSACTIONS CONTEMPLATED BY THIS GUARANTY, THE AGREEMENTS OR ANY DOCUMENTS RELATED THERETO (INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS) AND THE ENFORCEMENT OF ANY OF COMPANY'S RIGHTS AND REMEDIES.

14. GUARANTOR HEREBY KNOWINGLY AND VOLUNTARILY AGREES THAT  
THE RESOLUTION OF ANY DISPUTE THAT ARISES UNDER THIS GUARANTY  
SHALL NOT BE SUBJECT TO THE DISPUTE RESOLUTION PROCEDURES SET  
FORTH IN THE TARIFF AND WAIVES ANY RIGHTS TO THE CONTRARY.

IN WITNESS WHEREOF, the undersigned Guarantor has executed this Guaranty as of  
this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

[GUARANTOR]

Tax I.D. No. \_\_\_\_\_

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

(Officer of the Corporation)

Address: \_\_\_\_\_

\_\_\_\_\_

**CONTINUED, EXHIBIT I -CORPORATE GUARANTY**

***SECRETARY'S CERTIFICATE OF DIRECTORS' RESOLUTIONS***

I, \_\_\_\_\_, do hereby certify that I am the Secretary of  
\_\_\_\_\_, a \_\_\_\_\_ corporation;  
that I am the keeper of the corporate records and the seal of said Corporation; that the foregoing  
is true and correct copy of resolutions duly adopted and ratified by the Board of Directors of said  
Corporation in accordance with its bylaws and the laws of the said State on the \_\_\_\_\_ day of  
\_\_\_\_\_, \_\_\_\_\_ as compared by me with the original of said resolutions recorded  
in the minutes of said Corporation which resolutions authorize the Corporation to execute that  
certain Unconditional Corporate Guaranty in consideration for, among other things, the credit  
advance of the Midcontinent Independent System Operator, Inc. to \_\_\_\_\_; and the  
same have not in any way been modified, repealed or rescinded but are in full force and effect;  
that the foregoing resolutions are not inconsistent with the Certificate of Incorporation and the  
bylaws of this Corporation.

WITNESS, my hand and the seal of said corporation this \_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_.

\_\_\_\_\_  
Secretary

[CORPORATE SEAL]

**CONTINUED, EXHIBIT I- CORPORATE GUARANTY**

***RESOLUTION TO THE BOARD OF DIRECTORS***

WHEREAS, \_\_\_\_\_ (the “Subsidiary”) desires to become and/or remain a Transmission Customer or Market Participant under the Transmission, Energy and Operating Reserve Markets Tariff (the “Tariff”) of the Midcontinent Independent System Operator, Inc. (the “Company”) and for the Company to make credit advances to the Subsidiary; and

WHEREAS, this Corporation deems it to be in its direct benefit and in its best interests to guaranty all present and future obligations of the Subsidiary under the Tariff and certain other agreements as an inducement to the Company to allow the Subsidiary to become or remain a Transmission Customer and/or Market Participant under the Tariff and to provide credit advances to the Subsidiary;

NOW THEREFORE, it is hereby:

RESOLVED, that the Board of Directors of this Corporation hereby approves the guaranty of obligations of the Subsidiary by this Corporation substantially as set forth in the Corporate Guaranty attached to these Resolutions as Exhibit A; and it is further

RESOLVED, that the officers and agents of this Corporation are hereby authorized, directed and empowered to make, execute and deliver, either jointly or individually, for and on behalf of and in the name of this Corporation, a guaranty with respect to the obligations of the Subsidiary under the Tariff and certain other agreements and any and all amendments, supplements and modifications thereto substantially in the form of the Corporate Guaranty attached to these Resolutions as Exhibit A; and it is further

RESOLVED, that said officers and agents, and each of them, are hereby authorized, directed and empowered, either jointly or individually, to execute and deliver any and all instruments, papers and documents and to do all other acts that each of them may deem convenient or proper to effectuate the purpose and intent of these Resolutions from time to time or otherwise; and it is further

RESOLVED, that all action heretofore taken and all documentation heretofore delivered by any of said officers and agents, or by any individual who currently holds or has held any of said offices, in furtherance of the foregoing is hereby ratified, adopted, approved and confirmed and declared to be binding and enforceable obligations of this Corporation in accordance with the respective terms and provisions hereof, and it is further

RESOLVED, that the authorization herein set forth shall remain in full force and effect until written notice of their modification or discontinuance shall be given to and actually received by the Company, but no such modification or discontinuance shall affect the validity of the acts of any person, authorized to so act by these resolutions performed prior to the receipt of such notice by the Company.



**CONTINUED, EXHIBIT I- CORPORATE GUARANTY**

***FOREIGN GUARANTY***

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, including, without limitation, the credit advance by the Midcontinent Independent System Operator, Inc. (“Transmission Provider”) to (“Company”), the undersigned guarantor (“Guarantor”), hereby unconditionally and irrevocably guarantees the prompt and complete payment of all amounts that Company now or hereafter owes, and the performance of all other obligations of the Company, under the terms and conditions of the Transmission Provider’s Open Access Transmission, Energy and Operating Reserve Markets Tariff on file with the Commission, as may be amended and supplemented from time to time, together with all schedules and attachments thereto and any replacements or substitutes (the “Tariff”), any agreements entered into by Company under, pursuant to, or in connection with the Tariff and/or any agreements to which Transmission Provider and Company are Parties, as may be amended or supplemented from time to time whether now existing or hereafter arising in accordance with their respective terms, together with costs of enforcement and collection, including attorneys’ fees (collectively, the “Liabilities”). The Tariff, any and all agreements entered into by Company under, pursuant to or in connection with the Tariff, and any and all agreements to which the Company and Transmission Provider are parties, each as it may be amended from time to time and whether it currently exists or is entered into at anytime in the future are collectively referred to herein as the “Agreements”. The Agreements include, without limitation, the Tariff, the Service Agreement, dated \_\_\_\_\_, \_\_\_\_\_, and the Market Participant Agreement, dated \_\_\_\_\_, \_\_\_\_\_.

1. If Company does not perform each of its obligations in strict accordance with each respective Agreement, Guarantor shall immediately pay upon demand all amounts now or hereafter due under all of the Agreements (including, without limitation, all principal, interest and fees) and otherwise proceed to complete the same and satisfy all of the Liabilities, including Company's obligations under all of the Agreements. This Guaranty may be satisfied by Guarantor paying and/or performing (as appropriate) Company's Liabilities or by the Guarantor causing Company's Liabilities to be paid or performed; provided, however, that Guarantor shall at all times remain fully responsible and liable for its obligations hereunder notwithstanding any such payment or performance (or failure thereof) by any third party.
2. This Guaranty is an absolute, unconditional and continuing guaranty of the full and punctual payment and performance by Company of all of the Liabilities, including each of its obligations under each of the Agreements, and not of collectibility only, and is in no way conditioned upon any requirement that Transmission Provider (or any other person) first attempt to collect payment from Company or any other guarantor or surety or resort to any security or other means of obtaining payment of all or any part of the Liabilities or upon any other contingency. This is a continuing guaranty and shall be binding upon Guarantor regardless of: (i) how long after the date hereof the Agreement is entered into; (ii) how long after the date hereof any part of the obligations under the Agreements is incurred by Company; and (iii) the amount of the obligations under the Agreements at any time outstanding. Transmission Provider may enforce this Guaranty from time to time and as often as occasion for such enforcement may arise.

3. The obligations hereunder are independent of the obligations of Company and a separate action or actions may be brought and prosecuted against Guarantor whether action is brought against Company or whether Guarantor is joined in any such action or actions. Guarantor's liability under this Guaranty is not conditioned or contingent upon genuineness, validity, regularity or enforceability of any of the Agreements.
4. Guarantor authorizes Transmission Provider, without notice or demand and without affecting its liability hereunder, from time to time, to: (i) renew, extend, modify, supplement or otherwise change the terms of any or all the Agreements or any part thereof; (ii) take and hold security for the payment of this Guaranty or any or all of the Liabilities, and exchange, enforce, waive and release any such security; and (iii) apply such security and direct the order or manner of sale of any collateral provided as such security as Transmission Provider (or any other person) in its sole discretion may determine. The obligations and liabilities of Guarantor hereunder shall be absolute and unconditional, shall not be subject to any counterclaim, set-off, deduction or defense based upon any claim Guarantor may have against Company, any other Guarantor, or any other person or entity, and shall remain in full force and effect until all of the obligations of Guarantor hereunder and all of the Liabilities, including all obligations of Company under each of the Agreements, have been fully and irrevocably satisfied, without regard to, or release or discharge by, any event, circumstance or condition (whether or not Guarantor shall have knowledge or notice thereof) which might constitute a legal or equitable defense or discharge of a Guarantor or surety or which might in any way limit recourse against Guarantor, including without limitation: (i) any renewal, amendment or

modification of, or supplement to, the terms of any or all of the Agreements; (ii) any waiver, consent or indulgence by Transmission Provider (or any other person), or any exercise or non-exercise by Transmission Provider (or any other person) of any right, power or remedy, under or in respect of this Guaranty or any of or all the Agreements (whether or not Guarantor or Company has or have notice or knowledge of any such action or inaction); (iii) the invalidity or unenforceability, in whole or in part, of any or all of the Agreements, or the termination, cancellation or frustration of any thereof, or any limitation or cessation of Company's liability under any thereof (other than any limitation or cessation expressly provided for therein), including without limitation any invalidity, unenforceability or impaired liability resulting from Company's lack of capacity, power and/or authority to enter into any or all of the Agreements and/or to incur any or all of the obligations thereunder, or from the execution and delivery of any or all of the Agreements by any person acting for Company without or in excess of authority; (iv) any actual, purported or attempted sale, assignment or other transfer by Transmission Provider (or any other person) of any or all of the Agreements or of any or all of its rights, interests or obligations thereunder; (v) the taking or holding by Transmission Provider of a security interest, lien or other encumbrance in or on any property as security for any or all of the Liabilities, including any or all of the obligations of Company under any or all of the Agreements, the posting of a cash deposit, letter of credit, performance bond or other financial accommodation, or any exchange, release, non-perfection, loss or alteration of, or any other dealing with, any such security; (vi) the addition of any party as a guarantor or surety of all or any part of the Liabilities, including obligations of

Company under any or all of the Agreements; (vii) any merger, amalgamation or consolidation of Company into or with any other entity, or any sale, lease, transfer or other disposition of any or all of Company's assets or any sale, transfer or other disposition of any or all of the shares of capital stock or other securities of Company to any other person or entity; or (viii) any change in the financial condition of Company or (as applicable) of any subsidiary, affiliate, partner or controlling shareholder thereof, or Company's entry into an assignment for the benefit of creditors, an arrangement or any other Agreement or procedure for the restructuring of its liabilities, or Company's insolvency, bankruptcy, reorganization, dissolution, liquidation or any similar action by or occurrence with respect to Company.

5. Guarantor waives any right to require Transmission Provider (or any other person) to (i) proceed against Company; (ii) proceed against or exhaust any security held from Company; or (iii) pursue any other remedy whatsoever. So long as any obligations remain outstanding under this Guaranty or any of the Agreements, Guarantor shall not exercise any rights against Company arising as a result of payment by Guarantor hereunder, by way of subrogation or otherwise, and will not prove any claim in competition with Transmission Provider (or any other party to any of the Agreements) in respect of any payment under the Agreements in bankruptcy or insolvency proceedings of any nature. Guarantor will not claim any set-off or counterclaim against Company in respect of any liability of Guarantor to Company and Guarantor waives any benefit of any right to participate in any collateral which may be held by Transmission Provider (or

any other party to any of the Agreements or holding any security for any of the Liabilities).

6. If after receipt of any payment of, or the proceeds of any collateral for, all or any part of the Liabilities, the surrender of such payment or proceeds is compelled or volunteered to any person because such payment or application of proceeds is or may be avoided, invalidated, recaptured, or set aside as a preference, fraudulent conveyance, impermissible set -off or for any other reason, whether or not such surrender is the result of: (i) any judgment, decree or order of any court or administrative body having jurisdiction, or (ii) any settlement or compromise of any claim as to any of the foregoing with any person (including Company), then the Liabilities, or part thereof affected, shall be reinstated and continue and this Guaranty shall be reinstated and continue in full force as to such Liabilities or part thereof as if such payment or proceeds had not been received, notwithstanding any previous cancellation of any instrument evidencing any such Liabilities or any previous instrument delivered to evidence the satisfaction thereof. The provisions of this Section shall survive the termination of this Guaranty and any satisfaction and discharge of Company by virtue of any payment, court order or any Federal, state or local law.
7. Any indebtedness of Company now or hereafter held by Guarantor is hereby subordinated to the Liabilities and any indebtedness of Company under any of the Agreements; and such indebtedness of Company to Guarantor shall be collected, enforced and received by Guarantor as trustee for Transmission Provider and be paid over to Transmission Provider on account of the Liabilities but without reducing or

affecting in any manner the liability of Guarantor under the other provisions of this Guaranty.

8. Guarantor represents and warrants to Transmission Provider, as an inducement to Transmission Provider to make the credit advances to Company, that: (i) the execution, delivery and performance by Guarantor of this Guaranty (a) are within Guarantor's powers and have been duly authorized by all necessary action; (b) do not contravene Guarantor's charter documents or any law or any contractual restrictions binding on or affecting Guarantor or by which Guarantor's property may be affected; and (c) do not require any authorization or approval or other action by, or any notice to or filing with, any public authority or any other person except such as have been obtained or made; (ii) this Guaranty constitutes the legal, valid and binding obligation of Guarantor, enforceable in accordance with its terms, except as the enforceability thereof may be subject to or limited by bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws relating to or affecting the rights of creditors generally and by general principles of equity; (iii) Company is a wholly owned subsidiary of Guarantor; and (iv) there is no action, suit or proceeding affecting Guarantor pending or threatened before any court, arbitrator, or public authority that may materially adversely affect Guarantor's ability to perform its obligations under this Guaranty.
9. The Guarantor must submit any and all documents that the Guarantor would be required to submit under Transmission Provider's Credit Policy (as may be amended from time to time) if the Guarantor applied for and/or obtained credit under such Credit Policy, including, without limitation, (i) at least annually a current bond/debt rating report for

senior unsecured debt of the Guarantor and an issuer rating issued by Moody's Investor Services or Standard & Poor's, promptly upon its issuance, and (ii) financial reports of the Guarantor promptly upon their issuance including, without limitation, annual audited financial statements prepared in accordance with generally accepted accounting principles, with auditor notes and auditor's report, to be delivered no later than one hundred twenty (120) days after the end of each fiscal year of the Guarantor and internally prepared quarterly financial statements, if requested by Transmission Provider, prepared in accordance with generally accepted accounting principles, no later than sixty (60) days after the end of each fiscal quarter of the Guarantor. Further, Guarantor must inform Transmission Provider in writing within five (5) Business Days of any Material Change (as defined in the Transmission Provider's Credit Policy, as may be amended from time to time) in its financial status. In addition to any other remedies available at law or in equity, a Guarantor's failure to provide this information may result in proceedings by Transmission Provider to terminate the Agreements with the Company.

10. Guarantor agrees to pay on demand reasonable attorneys' fees and all other costs and expenses which Transmission Provider, and any ITCs (as defined in the Tariff), their affiliates, representatives, successors and assigns may incur in the enforcement of this Guaranty. No terms or provisions of this Guaranty may be changed, waived, revoked or amended without Transmission Provider's prior written consent. Should any provision of this Guaranty be determined by a court of competent jurisdiction to be unenforceable, all of the other provisions shall remain effective. This Guaranty embodies the entire Agreement among the parties hereto with respect to the matters set forth herein, and



supersedes all prior Agreements among the parties with respect to the matters set forth herein. No course of prior dealing among the parties, no usage of trade, and no parole or extrinsic evidence of any nature shall be used to supplement, modify or vary any of the terms hereof. There are no conditions to the full effectiveness of this Guaranty.

Transmission Provider may assign this Guaranty, and its rights hereunder in whole or in part, without consent and without in any way affecting Guarantor's liability under it.

This Guaranty shall inure to the benefit of Guarantor, Transmission Provider, Company, the ITCs and their successors and assigns. Guarantor may not assign this Guaranty without Transmission Provider's consent. This Guaranty is in addition to the guaranties of any other guarantors and any and all other guaranties of any of the Liabilities, including Company's indebtedness or obligations under any or all of the Agreements.

11. This Guaranty shall be governed by the laws of the State of Indiana, without regard to conflicts of law principles. Guarantor hereby irrevocably submits to the jurisdiction of any Indiana or United States Federal court sitting in Indiana over any action or proceeding arising out of or relating to this Guaranty or any of the Agreements, and Guarantor hereby irrevocably agrees that all claims in respect of such action or proceeding may be heard and determined in such Indiana state or federal court. Guarantor irrevocably consents to the service of any and all process in any such action or proceeding by the mailing of copies of such process to Guarantor at its address set forth herein. Guarantor agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Guarantor further waives any objection to venue in

Indiana and any objection to an action or proceeding in such State on the basis of forum non-conveniens. Guarantor further agrees that any action or proceeding brought against Transmission Provider shall be brought only in Indiana or the United States Federal courts sitting in Indiana. Nothing herein shall affect the right of Transmission Provider to bring any action or proceeding against the Guarantor or its property in the courts of any other jurisdictions.

12. Payments. All payments by Guarantor under this Guaranty shall be made (a) in U.S. dollars to such account in the United States as Transmission Provider may from time to time designate to Guarantor and (b) free and clear of, and without deduction or withholding for or on account of any present or future income, stamp other taxes or levies, imposts, duties, charges, fees, deductions or withholdings now or hereafter imposed, levied, collected, withheld or assessed by an governmental authority (collectively “Taxes”). If any Taxes are required to be withheld from any amounts payable by Guarantor under this Guaranty, the amounts payable shall be increased to the extent necessary to provide the full amount (after payment of all Taxes) owing by Guarantor under this Guaranty.

13. Judgment Currency. The obligations of Guarantor under this Guaranty shall, notwithstanding judgment in a currency other than U.S. dollars (the “Judgment Currency”), be discharged only to the extent that, on any day following receipt by Transmission Provider of any sum adjudged to be due in the Judgment Currency, Transmission Provider may in accordance with normal banking procedures purchase U.S. dollars with the Judgment Currency. If the amount of U.S. dollars so purchased is less

than the sum originally due to the Transmission Provider in U.S. dollars, Guarantor agrees, as a separate obligation and notwithstanding such judgment, to indemnify the Transmission Provider against such loss.

14. GUARANTOR ACKNOWLEDGES THAT IT HAS BEEN ADVISED BY COUNSEL OF ITS CHOICE WITH RESPECT TO THIS GUARANTY AND THAT IT MAKES THE FOLLOWING WAIVER KNOWINGLY AND VOLUNTARILY. GUARANTOR IRREVOCABLY WAIVES TRIAL BY JURY IN ANY COURT AND IN ANY SUIT, ACTION OR PROCEEDING OR ANY MATTER ARISING IN CONNECTION WITH OR IN ANY WAY RELATED TO THE TRANSACTIONS CONTEMPLATED BY THIS GUARANTY, THE AGREEMENTS OR ANY DOCUMENTS RELATED THERETO (INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS) AND THE ENFORCEMENT OF ANY OF COMPANY'S RIGHTS AND REMEDIES.
15. GUARANTOR HEREBY KNOWINGLY AND VOLUNTARILY AGREES THAT THE RESOLUTION OF ANY DISPUTE THAT ARISES UNDER THIS GUARANTY SHALL NOT BE SUBJECT TO THE DISPUTE RESOLUTION PROCEDURES SET FORTH IN THE TARIFF AND WAIVES ANY RIGHTS TO THE CONTRARY.

IN WITNESS WHEREOF, the undersigned Guarantor has executed this Guaranty as of

this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

[GUARANTOR]

Tax I.D. No. \_\_\_\_\_

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

(Officer of the Corporation)

Address: \_\_\_\_\_

**CONTINUED, EXHIBIT I – FOREIGN GUARANTEE**

***SECRETARY'S CERTIFICATE OF DIRECTORS' RESOLUTIONS***

I, \_\_\_\_\_, do hereby certify that I am the Secretary of  
\_\_\_\_\_, a \_\_\_\_\_ corporation;  
that I am the keeper of the corporate records and the seal of said Corporation; that the foregoing  
is true and correct copy of resolutions duly adopted and ratified by the Board of Directors of said  
Corporation in accordance with its bylaws and the laws of the said State on the \_\_\_\_\_ day of  
\_\_\_\_\_, \_\_\_\_\_ as compared by me with the original of said resolutions recorded  
in the minutes of said Corporation which resolutions authorize the Corporation to execute that  
certain Unconditional Corporate Guaranty in consideration for, among other things, the credit  
advance of the Midcontinent Independent System Operator, Inc. to \_\_\_\_\_; and the  
same have not in any way been modified, repealed or rescinded but are in full force and effect;  
that the foregoing resolutions are not inconsistent with the Certificate of Incorporation and the  
bylaws of this Corporation.

WITNESS, my hand and the seal of said corporation this \_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_.

\_\_\_\_\_  
Secretary

[CORPORATE SEAL]

**CONTINUED, EXHIBIT I- FOREIGN GUARANTEE**

***RESOLUTION TO THE BOARD OF DIRECTORS***

WHEREAS, \_\_\_\_\_ (the “Subsidiary”) desires to become and/or remain a Transmission Customer or Market Participant under the Open Access Transmission, Energy and Operating Reserve Markets Tariff (the “Tariff”) of the Midcontinent Independent System Operator, Inc. (the “Company”) and for the Company to make credit advances to the Subsidiary; and

WHEREAS, this Corporation deems it to be in its direct benefit and in its best interests to guaranty all present and future obligations of the Subsidiary under the Tariff and certain other agreements as an inducement to the Company to allow the Subsidiary to become or remain a Transmission Customer and/or Market Participant under the Tariff and to provide credit advances to the Subsidiary;

NOW THEREFORE, it is hereby:

RESOLVED, that the Board of Directors of this Corporation hereby approves the guaranty of obligations of the Subsidiary by this Corporation substantially as set forth in the Corporate Guaranty attached to these Resolutions as Exhibit A; and it is further

RESOLVED, that the officers and agents of this Corporation are hereby authorized, directed and empowered to make, execute and deliver, either jointly or individually, for and on behalf of and in the name of this Corporation, a guaranty with respect to the obligations of the Subsidiary under the Tariff and certain other agreements and any and all amendments, supplements and

modifications thereto substantially in the form of the Corporate Guaranty attached to these Resolutions as Exhibit A; and it is further

RESOLVED, that said officers and agents, and each of them, are hereby authorized, directed and empowered, either jointly or individually, to execute and deliver any and all instruments, papers and documents and to do all other acts that each of them may deem convenient or proper to effectuate the purpose and intent of these Resolutions from time to time or otherwise; and it is further

RESOLVED, that all action heretofore taken and all documentation heretofore delivered by any of said officers and agents, or by any individual who currently holds or has held any of said offices, in furtherance of the foregoing is hereby ratified, adopted, approved and confirmed and declared to be binding and enforceable obligations of this Corporation in accordance with the respective terms and provisions hereof, and it is further

RESOLVED, that the authorization herein set forth shall remain in full force and effect until written notice of their modification or discontinuance shall be given to and actually received by the Company, but no such modification or discontinuance shall affect the validity of the acts of any person, authorized to so act by these resolutions performed prior to the receipt of such notice by the Company.

## EXHIBIT II

### IRREVOCABLE LETTER OF CREDIT

Irrevocable Standby Letter of Credit No. \_\_\_\_\_

Issued: [Date]

Expires at our counter (unless evergreen): [Date]

Midcontinent Independent System Operator, Inc.

720 City Center Drive

Carmel, IN 46032

Attn: Manager, Credit & Risk Management

Ladies and Gentlemen:

We, \_\_\_\_\_ [Fill in name of Bank] \_\_\_\_\_ (“Issuer”) do hereby issue this Irrevocable Non-Transferable Standby Letter of Credit No. \_\_\_\_\_ by order of, for the account of and on behalf of \_\_\_\_\_ (“Account Party”) and in favor of the Midcontinent Independent System Operator, Inc. (“Beneficiary” or “Transmission Provider”).

The term “Beneficiary” includes any successor by operation of law of the named beneficiary including without limitation any liquidator, receiver or conservator.

This Letter of Credit is issued, presentable and payable and we guaranty to the drawers, endorsers and bona fide holders of this Letter of Credit that drafts under and in compliance with the terms of this Letter of Credit will be honored on presentation and surrender of certain documents pursuant to the terms of this Letter of Credit.



This Letter of Credit is available in one or more drafts and may be drawn hereunder for the account of \_\_\_\_\_ up to an aggregate amount not exceeding \$ \_\_\_\_\_ .00 (United States Dollars \_\_\_\_\_ and 00/100).

This Letter of Credit is drawn against by presentation to us at our office located at \_\_\_\_\_ of a drawing certificate: (i) signed by an officer or authorized agent of the Beneficiary; (ii) dated the date of presentation; and (iii) containing one (1) of the following statements:

1. “The undersigned hereby certifies to \_\_\_\_\_ (“Issuer”), with reference to its Irrevocable Non-Transferable Standby Letter of Credit No. \_\_\_\_\_, dated \_\_\_\_\_, issued on behalf of \_\_\_\_\_ (“Account Party”) and in favor of the Midcontinent Independent System Operator, Inc. (“Beneficiary”) that said Account Party has failed to make a payment in accordance with the terms and provisions of one or more of the following, as applicable: Beneficiary’s Transmission, Energy and Operating Reserve Markets Tariff, as may be amended and supplemented from time to time, together with all replacements and substitutes (the “Tariff”), any and all agreements entered into by Account Party under, pursuant to, or in connection with the Tariff and any and all agreements to which Account Party and Beneficiary are parties, as such agreements may be amended and supplemented from time to time, whether now or hereafter executed, and any replacements or substitutions thereof, (collectively, the “Agreements”). The Beneficiary hereby draws upon the Letter of Credit in an amount equal to \$ \_\_\_\_\_ (United States Dollars \_\_\_\_\_ and 00/100)”; or

2. “As of the close of business on \_\_\_\_\_, 20\_\_ (fill in date which is less than one hundred- ten (110) days before the expiration date of the Letter of Credit), Account Party has failed to renew, replace or amend the Letter of Credit in a manner acceptable to Beneficiary”; or
3. “As of the close of business on \_\_\_\_\_, 20\_\_ (fill in date which is more than ten (10) Business Days after the Beneficiary has requested that Account Party replace the Letter of Credit because the Issuer’s Long Term rating is lower than “A-” by S&P or lower than “A3” by Moody’s), Account Party has failed to replace the Letter of Credit in a manner acceptable to Beneficiary.”

Beneficiary shall have the right, in the event of a draw pursuant to subparagraph (2) or (3) of the immediately preceding paragraph, to draw down the entire face value of the Letter of Credit.

If presentation of any drawing certificate is made on a Business Day and such presentation is made on or before 10:00 a.m. \_\_\_\_\_ Time, Issuer shall satisfy such drawing request on the same Business Day. If the drawing certificate is received after 10:00 a.m. \_\_\_\_\_ Time, Issuer will satisfy such drawing request on the next Business Day.

It is a condition of this Letter of Credit that it will be automatically extended without amendment for one (1) year from the expiration date hereof, or any future expiration date, unless at least one hundred twenty (120) days prior to any expiration date we notify you at the above address by registered mail that we elect not to consider this Letter of Credit renewed for any such period.

In connection with any draw on this Letter of Credit, if you have not received from us within five (5) Calendar Days from the date of your draw, a notice from us in the form of the certificate attached hereto as Exhibit A appropriately completed, indicating we have not reinstated the

Letter of Credit for all amounts drawn on this Letter of Credit, your right to draw on us for the full face amount of this Letter of Credit shall be automatically reinstated and this automatic reinstatement of your right to make a draw for the full face amount of this Letter of Credit shall be applicable to successive draws so long as this Letter of Credit shall have not terminated as set forth herein.

This Letter of Credit may be terminated upon Beneficiary's irrevocable receipt of full payment from the Account Party of all amounts due from Account Party under the Tariff and each of the Agreements, Account Party ceasing to be a Market Participant and/or Transmission Customer under the Tariff and Issuer's receipt of a written release from the Beneficiary releasing the Issuer from its obligations under this Letter of Credit.

Disbursements under the Letter of Credit shall be in accordance with the following terms and conditions:

1. The amount, which may be drawn by the Beneficiary under this Letter of Credit, shall be automatically reinstated by the amount of any drawings hereunder unless Issuer timely delivers the Certificate of Non Reinstatement of Amounts Available under the Irrevocable Standby Letter of Credit attached as Exhibit A hereto as provided above.
2. All commissions and charges will be borne by the Account Party.
3. This Letter of Credit may not be transferred or assigned by the Issuer.
4. This Letter of Credit is irrevocable.
5. This Letter of Credit shall be governed by the International Standby Practices Publication No. 590 of the International Chamber of Commerce, including any amendments, modifications or revisions thereof (the "ISP"), except to the extent that terms hereof are

inconsistent with the provisions of the ISP, in which case the terms of the Letter of Credit shall govern. This Letter of Credit shall be governed by the internal laws of the State of Indiana to the extent that the terms of the ISP are not applicable; provided that, in the event of any conflict between the ISP and such Indiana laws, the ISP shall control.

6. This Letter of Credit may not be amended, changed or modified without the express written consent of the Beneficiary and the Issuer.
7. The Beneficiary shall not be deemed to have waived any rights under this Letter of Credit, unless the Beneficiary or an authorized agent of the Beneficiary shall have signed a written waiver.

No such waiver, unless expressly so stated therein, shall be effective as to any transaction that occurs subsequent to the date of the waiver, nor as to any continuance of a breach after the waiver.

8. A failure to make any partial drawings at any time shall not impair or reduce the availability of this Letter of Credit in any subsequent period or our obligation to honor your subsequent demands for payment made in accordance with the terms of this Letter of Credit.

---

[Authorized Signature]

---

[Date]

Name: \_\_\_\_\_ Title: \_\_\_\_\_

**CONTINUED, EXHIBIT II- IRREVOCABLE LETTER OF CREDIT**

**CERTIFICATE OF NONREINSTATEMENT  
OF AMOUNTS AVAILABLE UNDER IRREVOCABLE  
LETTER OF CREDIT NO. \_\_\_\_\_**

The undersigned, a duly authorized officer of \_\_\_\_\_ (the “Bank”), hereby certifies to Midcontinent Independent System Operator, Inc. (“Transmission Provider”) with reference to Bank’s Irrevocable Letter of Credit No. \_\_\_\_\_ (the “Letter of Credit”) issued by the Bank in favor of Transmission Provider that the amount drawn by Transmission Provider pursuant to its most recent drawing dated as of \_\_\_\_\_ has not been reinstated either (a) because the Bank has not been reimbursed for such drawing, or (b) a Default has occurred under the Reimbursement and Pledge Agreement dated as of \_\_\_\_\_, 20\_\_\_\_, between the Bank and the Account Party, as defined in the Letter of Credit, and is continuing.

Except as herein expressly set forth, all other terms and conditions of the Letter of Credit remain unchanged.

IN WITNESS WHEREOF, the Bank has executed and delivered this certificate this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

[Name of Bank]: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

### EXHIBIT III

#### CASH COLLATERAL AGREEMENT

\_\_\_\_\_ (Entity Code) \_\_\_\_\_ (“Tariff Customer”) has agreed to deliver cash collateral to the Midcontinent Independent System Operator, Inc. (“Transmission Provider”) to secure Tariff Customer’s performance under the terms and conditions of the Transmission Provider’s Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission, as may be amended and supplemented from time to time, together with all replacements and substitutes (the “Tariff”), any and all agreements entered into by Tariff Customer under, pursuant to, or in connection with the Tariff and any and all agreements to which the Tariff Customer and Transmission Provider are parties, as such Tariff and agreements may be amended from time to time, whether now or hereafter executed (the “Agreements”), together with costs of enforcement and collection, including attorneys’ fees (collectively, the “Liabilities”). The Agreements include, without limitation, the Tariff, agreements with Transmission Provider related to the purchase and/or sale of electric capacity, energy, ancillary services and related products or services, each as amended from time to time, between Tariff Customer and Transmission Provider.

Tariff Customer agrees to deliver to Transmission Provider cash collateral (the “INITIAL MARGIN”) by wire transfer to a segregated account designated by Transmission Provider in a written notice to Tariff Customer. Such account (the “Account”) shall be with a Qualified Institution (the “Custodian”) and registered in the name of Transmission Provider for the benefit of Tariff Customer. Transmission Provider shall have complete and total control over the Account and the Margin, provided that the Tariff Customer has certain contract rights to the

Margin as provided under the Tariff and/or this Agreement. Qualified Institution means a commercial bank or trust company organized under the law of the United States or a political subdivision thereof, with a Credit Rating not lower than “A-” by S&P or “A3” in the case of Moody’s. The INITIAL MARGIN, together with any additional amounts deposited by or at the direction of Tariff Customer in the Account and any and all interest, shall be referred to herein as the “MARGIN”. Transmission Provider agrees that Tariff Customer shall earn interest on the MARGIN at the Transmission Provider’s overnight bank rate from and including the date of deposit to, but excluding, the date such MARGIN is returned (or applied as described below). Interest shall be deposited and held in the Account and may be used upon the occurrence of a Default (as defined in the Tariff) to satisfy the obligations of Tariff Customer. Any unpaid interest earned and not applied to amounts owed by Tariff Customer shall be released and paid to Tariff Customer quarterly subject to the terms and conditions of Section 7.15 of the Tariff and provided that no Default shall exist and be continuing.

To secure its obligations under this Cash Collateral Agreement and the other Liabilities, the Tariff Customer hereby grants to Transmission Provider a present and continuing first-priority security interest in, and lien on and right of offset against, all of the undersigned’s right, title, and interest in the ACCOUNT and the MARGIN (including all interest thereon), including all products and proceeds of the foregoing, any and all renewals, extensions, replacements, modifications, additions, and substitutions of the foregoing, and all rights, remedies, claims and demands under or in connection with the foregoing (the “Collateral”). Tariff Customer agrees to take such action as Transmission Provider reasonably requires in order to perfect Transmission Provider’s first-priority continuing security interest in, and lien on and right of offset against the

COLLATERAL, including, without limitation entering into a control agreement, in form and substance acceptable to Transmission Provider to give Transmission Provider control of the COLLATERAL.

Transmission Provider agrees that it shall not have the right to sell, pledge, assign, invest, use, commingle or otherwise dispose of, or otherwise use in its business the COLLATERAL unless and until a Default has occurred, provided that Transmission Provider shall have all the rights of a secured party as contemplated by the UCC. Transmission Provider further agrees that it shall be entitled to apply any portion or all of the COLLATERAL to satisfy any of the Liabilities, including any outstanding payment obligation of Tariff Customer under any of the Agreements only if a Default, as defined in the Tariff, with respect to Tariff Customer has occurred and is continuing. In such event, Transmission Provider may do any one or more of the following: (a) exercise any of the rights and remedies of a secured party with respect to the COLLATERAL, including any such rights and remedies under law then in effect; and/or (b) exercise its rights of setoff against any and all of the COLLATERAL, including interest accrued and not yet paid to Tariff Customer. In addition to other rights available to Transmission Provider, Transmission Provider shall have the right, upon realizing on the COLLATERAL to (x) apply the COLLATERAL to reduce Tariff Customer's obligations under the Tariff, this Cash Collateral Agreement and/or any other Agreements and/or (y) hold the proceeds as collateral security for Tariff Customer's obligations under the Tariff, the Credit and Security Agreement, this Cash Collateral Agreement and/or the other Agreements.

If additional cash collateral is required by the Credit Policy or Transmission Provider and Tariff Customer agrees to add additional cash collateral, then such cash collateral shall be added to the



existing MARGIN under this Cash Collateral Agreement and the security interest granted under this Agreement shall attach to such additional cash collateral.

Tariff Customer hereby constitutes and appoints Transmission Provider, through any of its officers, as its true and lawful attorney-in-fact, with full power of substitution and authority in the place and stead of Tariff Customer and in the name of Tariff Customer or in its own name, from time to time, for the purpose of carrying out the terms of this Agreement from and after the occurrence of a Default, to take any and all appropriate action and to execute any and all documents and instruments which may be necessary or desirable to accomplish the purposes of this Agreement. Such power of attorney is coupled with an interest and shall be irrevocable until such time as all of the Liabilities, including Tariff Customer's obligations under the Tariff and the other Agreements, are fully and finally and irrevocably paid and performed, all of the Agreements (other than the Tariff and this Cash Collateral Agreement) have terminated and Tariff Customer is no longer a Market Participant and/or Transmission Customer (as such terms are defined in the Tariff). Tariff Customer hereby ratifies and approves all acts of such attorneys. Neither Transmission Provider nor any attorney will be liable for any acts or omissions nor for any error of judgment or mistake of fact or law, absent gross negligence, bad faith or willful misconduct and subject to the limitations on liability set forth in the Tariff.

Until such time as Transmission Provider exercises its remedies hereunder, all income, earnings and profits with respect to the ACCOUNT (and all COLLATERAL) shall be reported for state and federal income tax purposes as attributable to Tariff Customer and not Transmission Provider; and Tariff Customer hereby instructs Transmission Provider (and any other person

authorized to report taxable income distributions) to issue, or cause to be issued, IRS Form 1099 indicating Tariff Customer as the recipient of such income, earnings and profits.

Subject to the approval of Transmission Provider, Tariff Customer may substitute any portion of the MARGIN deposited hereunder with a letter of credit issued by a Qualified Institution in form and substance acceptable to Transmission Provider or other form of collateral acceptable to Transmission Provider, in Transmission Provider's sole discretion.

Tariff Customer hereby expressly acknowledges and agrees that this Cash Collateral Agreement shall be in effect as of the date the INITIAL MARGIN is delivered to Transmission Provider and shall govern the period of time during which the MARGIN is held by Transmission Provider in the Account.

Within one hundred twenty (120) days after the last to occur of (i) the termination of all of the Agreements (other than the Tariff and this Cash Collateral Agreement); (ii) the irrevocable payment and satisfaction of all obligations of Tariff Customer under all Agreements (including the Tariff), and (iii) the Participant ceasing to be a Market Participant and/or Transmission Customer under the Tariff, Transmission Provider shall return any remaining MARGIN to Tariff Customer.

Please acknowledge your agreement to the terms hereof by signing the acknowledgement set forth below.

Very truly yours,  
Company Name: \_\_\_\_\_  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

ACKNOWLEDGED AND AGREED:

MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.

By: \_\_\_\_\_  
Name:  
Title:

## EXHIBIT IV

### SECURITY INTEREST AGREEMENT

All rights and obligations as defined in the Open Access Transmission, Energy and Operating Reserve Markets Tariff of the Midcontinent Independent System Operator, Inc. (“Tariff”) and described in this Security Agreement (both are available at [www.misoenergy.org](http://www.misoenergy.org)) are subject to change.

This Security Agreement (“**Security Agreement**”) is made as of the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by \_\_\_\_\_, a(n) \_\_\_\_\_, having its chief executive offices at \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and with a taxpayer ID number of \_\_\_\_ - \_\_\_\_\_ (the “**Company**”), in favor of Midcontinent Independent System Operator, Inc. , a Delaware non-profit, non-stock corporation, having a notice address of 720 City Center Drive, Carmel, Indiana 46032 (both in its capacity as agent for Transmission Owners and in its separate capacity as Energy Market Counterparty under the Tariff and related agreements, the “**Transmission Provider**”).

### Recitals

WHEREAS, Transmission Provider administers that certain Open Access Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission (“Commission”), including but not limited to, any other applicable Commission-accepted tariff or rate schedule, as the same may be amended and supplemented from time to time and together with all replacements and substitutes thereto (collectively, the “Tariff”);

WHEREAS, Transmission Provider maintains a Credit Policy (which is Attachment L to the Tariff, as the same may be amended from time to time in accordance with applicable law) in

order to determine, on a case by case basis, the level of unsecured credit available to each person who takes services under the Tariff and the form and amount of financial assurance to be required by each person, if any;

WHEREAS, Company has requested that Transmission Provider net the invoiced and measured Settlements owed to Company against invoiced, measured and estimated Settlements owed by Company to Transmission Provider in order to reduce the amount of Financial Security provided by, or on behalf of, Company; and

WHEREAS, as a condition precedent to Transmission Provider's agreement to net amounts owed to, and by, Company, and to secure the full and prompt repayment of all of the Liabilities (as hereinafter defined), Company is required to, and shall, grant a continuing first priority security interest in, and to, the Collateral (as hereinafter defined).

1 of 6

Transmission Provider Security Agreement

NOW, THEREFORE, in consideration the representations, warranties and covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Company and Transmission Provider hereby agree to, and accept, all of the following:

(1) The “Liabilities” as that term is used in this Security Agreement means all of the payment obligations (including, without limitation, reasonable attorneys’ fees) of the Company in favor of the Transmission Provider or any ITC (as defined in the Tariff) (whether for the Transmission Provider’s or ITC’s own account or for the account of any other person) under the Tariff and/or any and all agreements entered into, under, pursuant to, or in connection with the Tariff (including, without limitation, the Transmission Provider’s Credit Policy) and any and all other agreements to which Transmission Provider and the Company are parties (collectively, the “Agreements”).

(2) As security for the payment and performance of all of the obligations of the Company under the Tariff and/or the Agreements (including, without limitation, all costs to enforce the obligations of the Company and collect all amounts owed by the Company thereunder or hereunder, including reasonable attorneys’ fees), Transmission Provider shall have, and the Company hereby pledges, assigns, conveys and transfers to Transmission Provider, and hereby grants to Transmission Provider a present and continuing first priority security interest in and to, and a general first lien upon and right of setoff against, all right, title and interest in any and all accounts receivable and other rights of payment of the Company for goods and services provided

under, or otherwise arising under, pursuant to or in connection with, the Tariff and/or any of the Agreements and any other similar rights of the Company arising under, or in connection with, the Tariff and/or any of the Agreements, however created or evidenced, whether now existing or hereafter owned, acquired, created, used or arising, including all products and proceeds of the foregoing, any and all renewals, extensions, replacements, modifications, additions, and substitutions of the foregoing and all rights, remedies, claims and demands under or in connection with each of the foregoing (the “Collateral”).

(3) The Company hereby represents and warrants to Transmission Provider that: all Collateral is lawfully owned by the Company, free and clear of any prior security interest, pledge, sale, assignment, transfer or other encumbrance other than any recoupment, setoff or other rights of Transmission Provider in and to such Collateral; the Company has the unencumbered right to pledge, sell, assign or transfer the Collateral subject to any recoupment, setoff or other right of Transmission Provider in and to such Collateral and subject to the security interest granted in favor of Transmission Provider herein; no financing statement covering all or a portion of the Collateral is on file in any public office other than in favor of Transmission Provider; and the security interest herein constitutes a legal and valid, first priority security interest in the Collateral.

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Transmission Provider Security Agreement

(4) The Company represents and warrants to Transmission Provider that the exact corporate name of the Company is correctly stated in the preamble to this Security Agreement and the Company is organized and validly existing under the laws of the State of \_\_\_\_\_. The Company has provided Transmission Provider with a true, accurate and complete list of all previous legal names of the Company (and its predecessors) and all past and present assumed (or fictitious) names and trade names of the Company (and its predecessors) for the past six (6) years. The Company's chief executive office and taxpayer identification number are accurately set forth in the preamble to this Security Agreement. Company shall provide a certificate of existence (or good standing, as the case may be) from the Secretary of State of the state in which Company was organized, such certificate to be dated within ten (10) days of the date of this Security Agreement.

(5) All Collateral held or controlled by the Transmission Provider after the date of this Security Agreement shall be free of any lien, security interest or encumbrance, granted or arising by, through or under the Company except for liens, security interests or encumbrances in favor of Transmission Provider, and the Company agrees not to grant any security interest or permit any lien or encumbrance to arise by, through or under the Company in any of the Collateral except for security interests, liens and encumbrances in favor of Transmission Provider without the prior written consent of Transmission Provider.



(6) The Company shall provide prior written notice of any change in its jurisdiction of organization, which notice must be received at least thirty (30) days before such change becomes effective.

(7) Upon the Transmission Provider's request, the Company agrees to do such reasonable acts and things and deliver or cause to be delivered such other documents as Transmission Provider may reasonably deem necessary to establish and maintain a valid first priority perfected security interest in the Collateral (free of all other liens and claims except those of Transmission Provider) to secure the payment and performance of the Liabilities, and to defend title to the Collateral against any person claiming any interest therein adverse to Transmission Provider (unless such adverse interest arises by, through or under the Transmission Provider). The Company authorizes Transmission Provider to file a financing statement or statements in those public offices deemed advisable or necessary by Transmission Provider to protect the security interest herein granted by the Company. If permitted by law, the Company agrees that a carbon, photographic or other reproduction of this Security Agreement or of a financing statement may be filed as a financing statement.

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Transmission Provider Security Agreement

(8) The Company agrees that all checks and other instruments received by Transmission Provider after the occurrence and during the continuance of any Default (as that term is defined in the Tariff) as products or proceeds of Collateral will be credited upon receipt to the Liabilities by the Transmission Provider in an order and manner consistent with the Tariff, subject to final payment.

(9) Subject to the Tariff, if a Default occurs and is continuing, Transmission Provider shall have all rights and remedies available at law or in equity including, without limitation, the rights and remedies of a secured party under the Indiana Uniform Commercial Code, as in effect from time to time, including, without limitation, the right to take possession of the Collateral. Subject to the Tariff, Transmission Provider may in its discretion transfer any property constituting Collateral into its own name or that of its nominee, and receive the income thereon and hold such income as security for the Liabilities or apply it on amounts due on Liabilities. Any and all deposit accounts, deposits or other sums at any time credited by or due from Transmission Provider to the Company shall at all times constitute security for any and all Liabilities, and Transmission Provider may apply or set off such deposits or other sums against Liabilities at any time in Default (or as otherwise permitted by the Tariff) whether or not the Liabilities are then due or other collateral is considered by Transmission Provider to be adequate.

(10) To the extent permitted by applicable law and for the sole purpose of exercising the Transmission Provider's rights under this Security Agreement from and during the occurrence of a Default, the Company hereby constitutes and appoints Transmission Provider, through any of

its officers, as its true and lawful attorney-in-fact, with full power of substitution and authority in the place and stead of the Company and in the name of the Company or in its own name, from time to time, to take any and all appropriate action and to execute any and all documents and instruments which may be necessary or desirable to exercise the Transmission Provider's rights under this Security Agreement from and during the occurrence of a Default. To the extent permitted by applicable law, such power of attorney is coupled with an interest and shall be irrevocable until such time as all of the Liabilities are fully and finally and irrevocably paid and performed. To the extent permitted by applicable law, the Company hereby ratifies and approves all acts of such attorneys that are taken within the authority granted to such attorneys pursuant to this Security Agreement and in a manner consistent with this Security Agreement and the Tariff; provided, however, this sentence shall not be deemed to be a waiver of any rights of the Company under this Security Agreement, any other agreement or the Tariff with respect to any breach of this Security Agreement by the Transmission Provider. Neither Transmission Provider nor any attorney will be liable for any acts or omissions nor for any error of judgment or mistake of fact or law, absent gross negligence or intentional misconduct and subject to the limitations on liability set forth in the Tariff.

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#### Transmission Provider Security Agreement

(11) Until such time as Transmission Provider exercises its remedies upon a Default, all income, earnings and profits with respect to the Collateral are property of the Company and shall be reported for state and federal income tax purposes as attributable to the Company and not Transmission Provider; and the Company hereby instructs Transmission Provider (and any other person authorized to report taxable income distributions) to issue, or cause to be issued, as legally required, IRS Form 1099 indicating the Company as the recipient of such income, earnings and profits.

(12) Whenever possible, each provision of this Security Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Security Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition without invalidating the remainder of such provision or the remaining provisions of this Security Agreement. The Company recognizes that Transmission Provider has relied on this Security Agreement in extending credit to the Company and agrees that such reliance by Transmission Provider shall be sufficient consideration for this Security Agreement.

(13) To the extent there is any conflict between this Security Agreement, as it may be amended, and the Tariff (including, without limitation, the Credit Policy), the Tariff controls. The Collateral shall be held in accordance with Section 7.12 of the Tariff, as such Section may be amended from time to time.

(14) The Company maintains any and all rights under Section 206 of the Federal Power Act it may have with regard to this Security Agreement or its implementation.

(15) This Agreement and all rights and obligations hereunder, including matters of construction, validity and performance, shall be governed by the Uniform Commercial Code and other applicable laws of the State of Indiana, without regard to conflict of law principles. Capitalized terms used herein and not specifically herein defined shall have the meanings ascribed to them in the Tariff.

(16) The Company acknowledges receipt of a copy of the financing statement to be filed in the appropriate jurisdiction.

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Transmission Provider Security Agreement

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Company Name

---

Authorized Signature

---

Print Name

---

Title

State of \_\_\_\_\_ )

) SS:

County of \_\_\_\_\_ )

Before me, a Notary Public in and for said County and State, personally appeared [Name],  
known to me to be the [Title] of the [Company], and acknowledged the execution of the  
foregoing for and on behalf of said company.

Witness my hand and Notarial Seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

My Commission Expires:

\_\_\_\_\_

Signature

\_\_\_\_\_

\_\_\_\_\_

Residing in \_\_\_\_\_ County, \_\_\_\_\_

Printed, Notary Public

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Transmission Provider Security Agreement

**EXHIBIT V**  
**CREDIT AND SECURITY AGREEMENT**

This Credit and Security Agreement is effective as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_ (the “Company”) and Midcontinent Independent System Operator, Inc. (“Transmission Provider”).

WHEREAS, Transmission Provider offers certain transmission, energy market and other services under the Transmission Provider’s Open Access Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission (“Commission”) as it may be amended and supplemented from time to time (the “Tariff”);

WHEREAS, Transmission Provider maintains a Credit Policy (which is Attachment L to the Tariff, as the same may be amended from time to time in accordance with applicable law) in order to determine, on a case-by-case basis, the level of unsecured credit available to each person who takes services under Transmission Provider’s Tariff and the form and amount of financial assurance to be required by each person, if any;

WHEREAS, as of the date hereof, Transmission Provider has made a determination as to the unsecured credit limit and financial assurance accommodations, if any, required of the Company to assure prompt payment of all amounts due under, in connection with, or pursuant to the Tariff; and

WHEREAS, in the event the Company provides financial assurance to the Transmission Provider in the form of a letter of credit, the Transmission Provider requires the Company, in accordance with the terms of the Transmission Provider’s Credit Policy on file with the



Commission, to execute this Credit and Security Agreement in order to perfect Transmission Provider's security interest in the Collateral (as hereinafter defined);

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by each of the parties hereto, the Company and the Transmission Provider hereby agree to, and accept, all of the following:

(1) The "Liabilities" as that term is used in this Credit and Security Agreement means all of the payment obligations (including, without limitation, reasonable attorneys' fees) of the Company in favor of the Transmission Provider or any ITC (as defined in the Tariff) (whether for the Transmission Provider's or ITC's own account or for the account of any other person) under the Tariff and any and all other agreements to which Transmission Provider and the Company are parties (collectively, the "Agreements").

(2) As security for the payment and performance of the Liabilities, Transmission Provider shall have, and the Company hereby grants to Transmission Provider, a continuing security interest in the following collateral (the "Collateral"): all of the Company's right, title, and interest in any and all cash, cash collateral, cash deposits and deposit accounts of the Company held or controlled by Transmission Provider that are or contain proceeds from any draw upon any letter(s) of credit naming Transmission Provider as beneficiary, however created or evidenced, whether now existing or hereafter owned, acquired, created, used or arising, including all products and proceeds of the foregoing, any and all renewals, extensions, replacements, modifications, additions, and substitutions of the foregoing and all rights, remedies, claims and demands under or in connection with each of the foregoing. Notwithstanding anything in this Credit and Security Agreement to the contrary, the Collateral shall not include any cash

deposited or advanced by the Company in connection with the Company's transmission system enhancement obligations under the Tariff.

(3) The Company hereby represents and warrants to Transmission Provider that: all Collateral is lawfully owned by the Company, free and clear of any prior security interest, pledge, sale, assignment, transfer or other encumbrance other than any recoupment, setoff or other rights of Transmission Provider in and to such Collateral; the Company has the unencumbered right to pledge, sell, assign or transfer the Collateral subject to any recoupment, setoff or other right of Transmission Provider in and to such Collateral and subject to the security interest granted in favor of Transmission Provider herein; no financing statement covering all or a portion of the Collateral is on file in any public office other than in favor of Transmission Provider; and the security interest herein constitutes a legal and valid, first priority security interest in the Collateral.

(4) The Company represents and warrants to Transmission Provider that the exact corporate name of the Company is correctly stated in the preamble to this Credit and Security Agreement and the Company is organized and validly existing under the laws of the State of \_\_\_\_\_. The Company has provided Transmission Provider with a true, accurate and complete list of all previous legal names of the Company (and its predecessors) and all past and present assumed (or fictitious) names and trade names of the Company (and its predecessors) for the past six (6) years.

(5) All Collateral held or controlled by the Transmission Provider after the date of this Credit and Security Agreement shall be free of any lien, security interest or encumbrance, granted or arising by, through or under the Company except for liens, security interests or encumbrances in favor

of Transmission Provider, and the Company agrees not to grant any security interest or permit any lien or encumbrance to arise by, through or under the Company in any of the Collateral except for security interests, liens and encumbrances in favor of Transmission Provider without the prior written consent of Transmission Provider.

(6) The Company shall provide prior written notice of any change in its jurisdiction of organization, which notice must be received at least thirty (30) days before such change becomes effective.

(7) Upon the Transmission Provider's request, the Company agrees to do such reasonable acts and things and deliver or cause to be delivered such other documents as Transmission Provider may reasonably deem necessary to establish and maintain a valid perfected security interest in the Collateral (free of all other liens and claims except those of Transmission Provider) to secure the payment and performance of the Liabilities, and to defend title to the Collateral against any person claiming any interest therein adverse to Transmission Provider (unless such adverse interest arises by, through or under the Transmission Provider). The Company authorizes Transmission Provider to file a financing statement or statements in those public offices deemed advisable or necessary by Transmission Provider to protect the security interest herein granted by the Company. If permitted by law, the Company agrees that a carbon, photographic or other reproduction of this Credit and Security Agreement or of a financing statement may be filed as a financing statement.

(8) The Company agrees that all checks and other instruments received by Transmission Provider after the occurrence and during the continuance of any Default (as that term is defined in the Tariff) or any default under the Tariff as products or proceeds of Collateral will be credited

upon receipt to the Liabilities by the Transmission Provider in an order and manner consistent with the Tariff, subject to final payment.

(9) Subject to the Tariff, if a Default occurs and is continuing (including any default under the OATT), Transmission Provider shall have all rights and remedies available at law or in equity including, without limitation, the rights and remedies of a secured party under the Indiana Uniform Commercial Code, as in effect from time to time, including, without limitation, the right to take possession of the Collateral.

Subject to the Tariff, Transmission Provider may in its discretion transfer any property constituting Collateral into its own name or that of its nominee, and receive the income thereon and hold such income as security for the Liabilities or apply it on amounts due on Liabilities.

(10) To the extent permitted by applicable law and for the sole purpose of exercising the Transmission Provider's rights under this Credit and Security Agreement from and during the occurrence of a Default (including any default under the Tariff), the Company hereby constitutes and appoints Transmission Provider, through any of its officers, as its true and lawful attorney-in-fact, with full power of substitution and authority in the place and stead of the Company and in the name of the Company or in its own name, from time to time, to take any and all appropriate action and to execute any and all documents and instruments which may be necessary or desirable to exercise the Transmission Provider's rights under this Credit and Security Agreement from and during the occurrence of a Default (including any default under the Tariff). To the extent permitted by applicable law, such power of attorney is coupled with an interest and shall be irrevocable until such time as all of the Liabilities are fully and finally and

irrevocably paid and performed. To the extent permitted by applicable law, the Company hereby ratifies and approves all acts of such attorneys that are taken within the authority granted to such attorneys pursuant to this Credit and Security Agreement and in a manner consistent with this Credit and Security Agreement and the Tariff; provided, however, this sentence shall not be deemed to be a waiver of any rights of the Company under this Credit and Security Agreement, any other agreement or the Tariff with respect to any breach of this Credit and Security Agreement by the Transmission Provider. Neither Transmission Provider nor any attorney will be liable for any acts or omissions nor for any error of judgment or mistake of fact or law, absent gross negligence or intentional misconduct and subject to the limitations on liability set forth in the Tariff.

(11) Until such time as Transmission Provider exercises its remedies upon a Default (including any default under the Tariff), all income, earnings and profits with respect to the Collateral are property of the Company and shall be reported for state and federal income tax purposes as attributable to the Company and not Transmission Provider; and the Company hereby instructs Transmission Provider (and any other person authorized to report taxable income distributions) to issue, or cause to be issued, as legally required, IRS Form 1099 indicating the Company as the recipient of such income, earnings and profits.

(12) Whenever possible, each provision of this Credit and Security Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Credit and Security Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition without invalidating the remainder of such provision or the remaining provisions of this Credit and

Security Agreement. The Company recognizes that Transmission Provider has relied on this Credit and Security Agreement in extending credit to the Company and agrees that such reliance by Transmission Provider shall be sufficient consideration for this Credit and Security Agreement.

(13) To the extent there is any conflict between this Credit and Security Agreement, as it may be amended, and the Tariff (including, without limitation, the Credit Policy), the Tariff controls.

The Collateral shall be held in accordance with Section 7.15 of the Tariff, as such Section may be amended from time to time.

(14) The Company maintains any and all rights under Section 206 of the Federal Power Act it may have with regard to this Credit and Security Agreement or its implementation.

This Credit and Security Agreement shall be construed and enforced in accordance with, and governed by, the laws of the State of Indiana (without giving effect to the principles of conflicts of laws thereof).

Company Name \_\_\_\_\_

Authorized Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Before me, a Notary Public in and for said County and State, personally appeared [Name],  
known to me to be the [Title] of the [Company], and acknowledged the execution of the  
foregoing for and on behalf of said company.

Witness my hand and Notarial Seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

My Commission Expires: \_\_\_\_\_

Signature

Residing in \_\_\_\_\_ County, \_\_\_\_\_

Printed, Notary Public

MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.

Authorized Signature

\_\_\_\_\_

Authorized Signatory

State of \_\_\_\_\_ )

) SS:

County of \_\_\_\_\_ )

Before me, a Notary Public in and for said County and State, personally appeared

\_\_\_\_\_, known to me to be the

\_\_\_\_\_ of the Midcontinent Independent System Operator,

Inc, and acknowledged the execution of the foregoing for and on behalf of said company.

Witness my hand and Notarial Seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My Commission Expires: \_\_\_\_\_

Signature

Residing in \_\_\_\_\_ County, \_\_\_\_\_

Printed, Notary Public



**EXHIBIT VI**

**MISO MINIMUM PARTICIPATION CRITERIA**

**ANNUAL CERTIFICATION FORM**

I, \_\_\_\_\_, a duly authorized officer of  
\_\_\_\_\_ (“Tariff Customer”), understanding that  
the Midcontinent Independent System Operator, Inc. (“MISO”) is relying on this  
certification as evidence supporting MISO determination that Tariff Customer meets the  
minimum participation requirements as set forth in Attachment L to MISO’s Open Access  
Transmission, Energy and Operating Reserve Markets Tariff (“Tariff”), hereby certify that  
I have full authority to certify and represent on behalf of Participant and further certify and  
represent as follows:

1. Training. Employees or agents transacting, or planning to transact, in markets or  
services provided pursuant to the MISO Tariff on behalf of the Tariff Customer or  
Applicant have received or will receive applicable training<sup>1</sup> with regards to their  
participation under the MISO Tariff as a condition of being authorized to transact  
on behalf of Tariff Customer.
2. Risk Management. Tariff Customer, Applicant or their agents maintain current  
written risk management policies and procedures that address those risks that could  
materially affect Tariff Customer’s ability to pay its MISO invoices when due,  
including, but not limited to credit risks, liquidity risks and market risks.

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<sup>1</sup> As used in this representation, training is deemed ‘applicable’ where it is commensurate and proportional in  
sophistication, scope and frequency to the volume of transactions and the nature and extent of the risk taken by  
the participant.

3. Operational Capabilities. Applicant or Tariff Customer has available appropriate personnel resources, operating procedures and technical abilities to promptly and effectively respond to MISO communications and directions related to, but not limited to, Settlements, billing, credit requirements, and other financial matters.
4. Capitalization. Applicant or Tariff Customer will maintain the minimum capitalization or alternative capitalization requirements applicable to the level of service Applicant or Tariff Customer transacts or plans to transact, as detailed in Section III of Attachment L to the Tariff. Minimum capitalization may be satisfied by either: (a) submitting audited financial statements for the most recent fiscal year that demonstrate a minimum tangible net worth or minimum total assets relative to the services transacting; or (b) providing alternative capitalization in the form of Financial Security.
5. Appropriate Person. Applicant or Tariff Customer is now and in good faith will seek to remain an “appropriate person” per Section 4(c)(3) of the Commodity Exchange Act<sup>2</sup> (“CEA”). Under 4(c)(3)(K) this “appropriate person” definition includes “Eligible Contract Participants” as defined in Section 1a(18)<sup>3</sup> of the CEA, and persons in the business of: (1) generating, transmitting, or distributing electric energy, or (2) providing electric energy services that are necessary to support the reliable operation of the transmission system. If, at any time, a Tariff Customer cannot meet the eligibility

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<sup>2</sup> 7 USC § 6(c)(3)

<sup>3</sup> 7 USC § 1a(18)

requirements set forth above, it shall immediately notify Transmission Provider and immediately cease conducting transactions in MISO markets.

If the minimum participation requirements detailed in Section III of the Credit Policy are not met, Applicant or Tariff Customer certification may be denied or suspended, as appropriate.

Are you aware of any individual who will be participating in trading activity on behalf of Applicant or Tariff Customer who is subject to a prohibition against trading in electric energy markets?

☐ Yes ☐ No

Has the Applicant, Tariff Customer, or an affiliate financially defaulted in an energy market within the last five years?

☐ Yes ☐ No

If yes, provide:

1. The market where default occurred
2. Date of default
3. If/when the default was cured
4. If uncured, the magnitude of loss to the market

If any of the following events have occurred within the last five years provide a summary:

1. Bankruptcy
2. Dissolution
3. Merger or acquisition that led to a Material Change for the Tariff Customer

Unless prohibited by law, list any past or ongoing investigations, of which Applicant is aware and has not previously disclosed to the Transmission Provider, and that have occurred within the last five years against the applicant, Tariff Customer, or affiliates of Tariff Customer by FERC, SEC, CFTC, any exchange monitored by the National Futures Association, or any entity responsible for regulating activity in energy markets. The applicant must take reasonable efforts to obtain permission to disclose information related to a non-public investigation.

Information provided herein shall be treated as Confidential Information pursuant to the Transmission Provider's Tariff.

*Date:* \_\_\_\_\_

\_\_\_\_\_  
(Signature)

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

## EXHIBIT VII

### MISO MINIMUM PARTICIPATION CRITERIA

#### APPROPRIATE PERSON VERIFICATION

Applicant or Tariff Customer Name: \_\_\_\_\_

**Instructions:** Your submission is required within seven (7) calendar days of written request from MISO for “appropriate person” verification. Your completed form should provide MISO with clear guidance explaining how your Applicant or Tariff Customer meets the Commodity Futures Trading Commission’s (“CFTC”) definition of “appropriate person” per Section 4(c)(3) of the Commodity Exchange Act<sup>4</sup> (“CEA”). This is necessary to satisfy the minimum requirements for participation in Section III.B of Attachment L of MISO’s Tariff. Submit this completed form along with evidence which demonstrates Applicant or Tariff Customer is an “appropriate person” to [MISOcredit@misoenergy.org](mailto:MISOcredit@misoenergy.org) or overnight to MISO Credit, 720 City Center Dr., Carmel, IN 46032.

**4(c)(3)** “For purposes of this subsection, the term “appropriate person” shall be limited to the following persons or classes thereof:”

- (A) A bank or trust company (acting in an individual or fiduciary capacity).
- (B) A savings association.
- (C) An insurance company.

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<sup>4</sup> 7 USC § 6(c)(3)

**(D)** An investment company subject to regulation under the Investment Company Act of 1940 (15 U.S.C. 80a–1 et seq.).

**(E)** A commodity pool formed or operated by a person subject to regulation under this chapter.

**(F)** A corporation, partnership, proprietorship, organization, trust, or other business entity with a net worth exceeding \$1,000,000 or total assets exceeding \$5,000,000, or the obligations of which under the agreement, contract or transaction are guaranteed or otherwise supported by a letter of credit or keepwell, support, or other agreement by any such entity or by an entity referred to in subparagraph (A), (B), (C), (H), (I), or (K) of this paragraph.

**(G)** An employee benefit plan with assets exceeding \$1,000,000, or whose investment decisions are made by a bank, trust company, insurance company, investment adviser registered under the Investment Advisers Act of 1940 [15 U.S.C. 80b–1 et seq.], or a commodity trading advisor subject to regulation under this chapter.

**(H)** Any governmental entity (including the United States, any state, or any foreign government) or political subdivision thereof, or any multinational or supranational entity or any instrumentality, agency, or department of any of the foregoing.

**(I)** A broker-dealer subject to regulation under the Securities Exchange Act of 1934 (15 U.S.C. 78a et seq.) acting on its own behalf or on behalf of another appropriate person.

**(J)** A futures commission merchant, floor broker, or floor trader subject to regulation under this chapter acting on its own behalf or on behalf of another appropriate person.

**(K)** Such other persons that the Commission determines to be appropriate in light of their financial or other qualifications, or the applicability of appropriate regulatory protections. The

Final Order of the CFTC at 77 FR 30596 states that under 4(c)(3)(K) the definition of “appropriate person” includes “eligible contract participants” as defined in Section 1a(18) of the CEA<sup>5</sup> and persons in the business of: (1) generating, transmitting, or distributing electric energy, or (2) providing electric energy services that are necessary to support the reliable operation of the transmission system.

Applicant or Tariff Customer must qualify under at least one of the above provisions of the definition of an “appropriate person”. Please reference the applicable sections (A-K) and provide a short description below. If submitting unaudited financials as evidence to support (F) above the Transmission Provider will require an accompanying memo attesting to the accuracy of the financials which is executed by an Officer of the Applicant or Tariff Customer.

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Date: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
<sup>5</sup> 7 USC § 1a(18)

MISO  
FERC Electric Tariff  
ATTACHMENTS

ATTACHMENT L  
Credit Policy  
~~56.0.0~~, 57.0.0

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_



## EXHIBIT VIII

### MISO MINIMUM PARTICIPATION CRITERIA

#### ANNUAL DISCLOSURE

Applicants and Tariff Customers are required to provide information about their affiliation with other MISO Applicants, Tariff Customers or Members in compliance with Sections I.A.5), I.B.5) and II.C of Attachment L to MISO's Energy and Operating Reserve Markets Tariff. An Affiliate is any individual, corporation, partnership, firm, joint venture, association, joint stock company, trust or unincorporated organization, directly or indirectly controlling, controlled by, or under common control with the Tariff Customer or Applicant. The term "control" means the possession, directly or indirectly, of the power to direct the management or policies of a person or an entity. A voting interest of ten percent or more creates a rebuttable presumption of control.

<b><u>Legal Name of Applicant or Tariff Customer</u></b>	<b><u>Entity Code</u></b>

<b><u>Legal Name of Affiliated Applicant, Tariff Customer or Member</u></b>	<b><u>Entity Code or member sector</u></b>

Information regarding the issuance of securities by Applicants, Tariff Customers, Members and their Affiliates is required to preserve the independence of MISO's Directors, Officers and staff in accordance with MISO's Standards of Conduct. For the purposes of this form, securities include publicly-traded bonds, stocks, debentures, notes and options available to retail investors.

Please complete the table below by providing information about securities issued by the Applicant, Tariff Customer, or any Affiliate where such entity (a) has a North American Industry Classification System code within the "Electric Power Generation, Transmission, and Distribution" industry group (*i.e.*, beginning with 2211) or that owns or operates facilities subject to the jurisdiction of the Federal Energy Regulatory Commission under Part II of the Federal Power Act, (b) is a Qualified Transmission Developer, or (c) has engaged in activities or transactions under the MISO Tariff or any associated rate schedule in the current or prior calendar year.

<u><b>Legal Name of Applicant or Tariff Customer</b></u>	<u><b>Exchange &amp; Stock Symbol (if applicable)</b></u>	<u><b>At Least One Debt Security CUSIP # (if applicable)</b></u>	<u><b>DUNS Number (if applicable)</b></u>	<u><b>Entity Code</b></u>
<u><b>Corporate Parent(s) of Applicant or Tariff Customer</b></u>	<u><b>Exchange &amp; Stock Symbol (if applicable)</b></u>	<u><b>At Least One Debt Security CUSIP # (if applicable)</b></u>	<u><b>DUNS Number (if applicable)</b></u>	<u><b>MISO Tariff Customer or Member?</b></u>
<u><b>Other Affiliates (as defined above) that issue securities</b></u>	<u><b>Exchange &amp; Stock Symbol (if applicable)</b></u>	<u><b>At Least One Debt Security CUSIP # (if applicable)</b></u>	<u><b>DUNS Number (if applicable)</b></u>	<u><b>MISO Tariff Customer or Member?</b></u>

Please use additional sheets as necessary.

The submitted information is correct and complete to the best of my knowledge.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed name and title

\_\_\_\_\_  
Date

Tab B

**Demand Response Resources:**

1. Demand Response Resources - Type I and DRR - Type II are eligible to qualify as Capacity Resources by a Market Participant that possesses ownership or equivalent contractual rights in the DRR by registering such resources as Capacity Resources with the Transmission Provider as documented in the BPM for Market Registration. A DRR - Type-I or a DRR - Type-II that interrupts or controls Demand registering for the PRA shall demonstrate capability and availability to reduce demand in response to instructions from the Transmission Provider for each applicable Season and shall submit such data to the Transmission Provider, as established in Section 69A.3.5.j. A Market Participant that wants to qualify a DRR - Type II that is a behind the meter generation facility as a Capacity Resource shall: (i) demonstrate GVTC capability for each Season in the Planning Year as established in the BPM for Resource Adequacy; (ii) submit GVTC results to the Transmission Provider no later than October 31 prior to such Planning Year for existing Capacity Resources unless the Transmission Provider has granted an extension pursuant to Section 69A.3.1.b.4; and (iii) submit generator availability data (including, but not limited to, NERC Generation Availability Data System information) into a database provided by the Transmission Provider. A Market Participant that wants to qualify a new DRR or an existing DRR that has an increased installed capacity that is a behind the meter generator as a Capacity Resource shall submit GVTC data to the Transmission Provider prior to qualification, but no later than March 1 prior to the PRA, as established in the BPM for Resource Adequacy.

2. Installed Capacity (ICAP) Deferral

If a Market Participant for a DRR has not completed GVTC testing by the deadlines provided in 69A.3.1.b.1, is not expected to demonstrate deliverability, or is otherwise not expected to demonstrate commercial operation prior to March 1, ZRCs from such capacity may be used in the PRA, in a FRAP (including through bilateral ZRC transactions), or in an RBDC Opt Out (including through bilateral ZRC transactions) subject to the notification, credit, and non-compliance provisions of Section 69A.7.9.

3. Reporting generator availability data based on GVTC is not required for a DRR behind the meter generation facility of less than 10 MW if the Market Participant has never provided such data for such behind the meter generation facility. A Market Participant that begins reporting generator availability data for a behind the meter generation facility that is less than 10 MW based on GVTC must continue to report such data. A Demand Response Resource that has provisional Interconnection Service does not qualify as a Capacity Resource. In accordance with the qualification provisions in the BPM for Resource Adequacy, the Transmission Provider will qualify a Demand Response Resource for the applicable Season in the upcoming Planning Year.

4. A Market Participant for a DRR required to submit GVTC results must use Reasonable Efforts to submit GVTC by October 31 prior to the upcoming Planning Year. If circumstances prevent the Market Participant from submitting the GVTC results for the DRR by October 31, the Market Participant must notify the Transmission Provider no later than five (5) Business Days after October 31 and request an extension. The extension request must include a reasonable explanation and justification for missing the

deadline and an expected completion date prior to the upcoming Planning Year. The Transmission Provider will review each extension request on a case by case basis to determine whether or not to approve or deny the request to extend the GVTC deadline. Denial of an extension will not preclude the Market Participant for the DRR from utilizing the ICAP Deferral process as described in Section 69A.7.9.

### **Demand Resource Eligibility**

A Market Participant that possesses ownership or equivalent contractual rights in a Demand Resource can request accreditation for a Demand Resource as an LMR by registering such resource with the Transmission Provider as documented in the BPM for Resource Adequacy and by meeting the following requirements:

- a. The Demand Resource must be equal to or greater than 100 kW (a grouping of smaller resources aggregated together that can reduce an LSE's Coincident Peak Demand for the applicable Season may qualify in meeting this standard).
- b. A Demand Resource must have a notification time requirement less than or equal to six (6) hours to receive credit as a Planning Resource in the applicable Seasons.
- c. Once Scheduling Instructions are given by the Transmission Provider that require a Demand reduction, the Demand Resource must be capable of ramping down to meet the targeted Demand reduction amount or to achieve the firm service level by the Hour designated by the Transmission Provider's Scheduling Instructions.
- d. Once the targeted amount of Demand reduction or firm service level is achieved, the Demand Resource must be able to maintain the targeted amount of Demand reduction or firm service level for at least four (4) continuous Hours.
- e. A Demand Resource must have a notification time equal to or less than six (6) hours and be capable of being interrupted for: (i) at least the first five (5) times requested in the Summer Season; (ii) at least the first five (5) times requested in the Winter Season; (iii) at least the first three (3) times requested in the Spring Season; and (iv) at least the first three (3) times requested in the Fall Season,

based on their physical availability when called upon by the Transmission Provider for an Emergency during any applicable Season in the Planning Year for which the Demand Resource receives credit as a Planning Resource. These obligations only apply to Seasons in which a Demand Resource clears the Planning Resource Auction.

Limitations due to applicable regulatory restrictions that are more restrictive than the physical limitations of the Demand Resource will supersede the physical availability of the Demand Resource.

- f. Unless the Demand Resource is unavailable as a result of maintenance requirements or for reasons of Force Majeure, when a Demand reduction is requested by the Transmission Provider for an Emergency, the resultant reduction must be a reduction that would not have otherwise occurred within the next twenty four (24) hour period. There shall be no penalties assessed to a Market Participant representing the entity that has offered ZRCs from the LMR if the Demand Resource is unavailable for interruption as a result of maintenance requirements in accordance with Good Utility Practice, or for reasons of Force Majeure, or in the event that the specified Demand reduction had already been accomplished for other reasons (*e.g.*, economic considerations, operating one's own Demand Resource at or above the credited level of Demand Resource, or local reliability concerns in accordance with instructions from the Local Balancing Authority).



- g. A Demand Resource for which curtailment is not an obligation during Emergency events declared by the Transmission Provider pursuant to the Transmission Provider emergency operating procedures, will not qualify as an LMR.
- h. A Market Participant shall be prohibited from registering a Demand Resource for which credit is already being taken by a Market Participant.
- i. Demand Resources that are offered into the Day-Ahead and/or Real-Time Energy and Operating Reserve Markets as price sensitive Bids are obligated to be interrupted during an Emergency pursuant to the Transmission Provider emergency operating procedures regardless of the projected or actual Real-Time Energy Market LMP.
- j. A Market Participant must demonstrate Demand reduction capability for each Planning Year on an annual basis through the performance of a real power test using the defined baselines for the Measurement and Verification of the test, as described below in this subsection. A Demand Resource for which a real power test is conducted will receive credit as one (1) of the minimum deployments or interruptions required for such resource for the applicable Season of the Planning Year in which such a test occurs.  
  
Alternatively, a Demand Resource may provide operational data and documentation, by which the demand reduction capability can be demonstrated without requiring an actual demand reduction if a real power test is precluded or waived due to one of the conditions as specified below:

- 1) Such a real power test is either explicitly precluded or explicitly waived under a retail program approved by any applicable regulatory authority, the Market Participant registering the Demand Resource is participating in such retail program with the same resource being registered with the Transmission Provider, and documentation of such preclusion or waiver is provided during registration for the Planning Resource Auction.
- 2) For the 2026 / 2027 Planning Year, a Market Participant registering a Demand Resource with the Transmission Provider for the Planning Resource Auction, where such resource is also participating in a retail program overseen by a regulatory authority, may waive the obligation to conduct a real power test by notifying the Transmission Provider during DR registration into the PRA and accepting a penalty equal to three (3) times the Hourly Real-Time Ex Post LMP at the Load CPNode described in and distributed pursuant to Section 69A.3.9. A Demand Resource providing such notice must satisfy the documentation requirements described in the Business Practices Manual for Resource Adequacy and credit requirements by March 1 prior to the Planning Year totaling the ICAP value registered, but not tested, multiplied by \$12,000/MW, where \$12,000 is the product of  $3 * 4 * \$1,000$  to account for the three (3) times energy penalty assumed under the waiver, the four (4) hours of LMR requirements, and a \$1,000 LMP as a proxy for pricing under Emergency conditions.

3) A Market Participant may request waiver of the obligation to conduct a real power test of a Demand Resource provided the Demand Resource being registered meets the following conditions during the three-year period beginning on January 1st of the Year that is three years prior to the start of the applicable Planning Year:

- a) The resource has responded to at least one Scheduling Instruction, has fully met the performance requirements of all Scheduling Instructions issued, and has met the requirements of Section 69A.3.5.e; and
- b) The resource has not experienced a significant change in its operations or any change in the composition of the underlying non-residential components of the aggregation from the Planning Year prior to the Planning Year for which the resource is being registered. Aggregations comprised entirely of residential components satisfy this requirement unless they request a change in the total accredited amount of the program. The requirements of this subsection shall be further defined in the Business Practices Manual for Resources Adequacy.

Demand Resources not using a firm service level baseline.

For a resource that is not using the firm service level baseline Measurement and Verification procedure, the test must demonstrate 100% of the registered capacity value, subject to the requirements specified in the Business Practices Manual for

Resource Adequacy. A weather adjustment may be applied to all such resources that have a temperature dependency. In no case will the weather adjustment increase the registered capacity value of the Demand Resource by more than 25% of the tested value. Each component of an aggregation of assets using the calculated baseline technique must provide the results of separate tests for each component of the aggregation and these tests must be performed simultaneously. The baseline used for the performance of a real power test is the actual hourly use in the Hour the test begins.

Demand Resource using a firm service level baseline.

An asset using the firm service level baseline must provide a real power test under one of the following two conditions:

1. A test demonstrating the ability to reduce Demand when starting from a point at the beginning of the test that is at least 80% of the maximum Hourly metered Demand and ending at a point at or below the firm service level.

When determining the maximum hourly Demand consumed to verify the real power test data submitted by a Market Participant, the Transmission Provider will exclude Hours with Demand that is at least two (2) standard deviations above the mean Demand consumed in a Season.; or

2. A test demonstrating the ability to reduce Demand when starting from a point at least as great as the maximum Demand consumed during expected

Resource Adequacy Hours, as set forth in the Resource Adequacy Business

Practices Manual, and ending at a point at or below the firm service level.

A test must be performed to satisfy the requirements for each Season for the most recent period spanning September 1 through August 31. A single annual test that satisfies the criteria for each Season shall satisfy this requirement.

Demand Resource using a custom baseline.

A resource using a custom baseline will be subject to the appropriate testing criteria determined by the Transmission Provider using the most appropriate baseline methodology set forth above.

All existing accredited Demand Resources that neither conduct a real power test nor meet Scheduling Instructions issued by the Transmission Provider during the prior Planning Year must participate in training provided by the Transmission Provider on the deployment of LMRs during the prior Planning Year. Any existing accredited Demand Resource must submit (1) the real power test results, (2) reference performance of Scheduling Instructions for demand reduction when called upon during the calendar year prior to the upcoming Planning Year, (3) relevant data and a reference of training participation to the Transmission Provider, or (4) a Demand Resource Deferral Notice pursuant to 69A.3.5(m) and a reference of training participation to the Transmission Provider no later than February 1 prior to such Planning Year for existing accredited DR. For new

Demand Resources, (1) a real power test must be conducted and results submitted to the Transmission Provider or (2) a Demand Resource Deferral Notice must be submitted prior to qualifying as a Demand Resource, but no later than March 1 prior to the PRA in accordance with the BPM for Resource Adequacy.

k. Data submission requirements

A Market Participant must provide hourly meter data for each Demand Resource being registered as detailed in the Business Practices Manual for Resource Adequacy. A Market Participant electing to use the Demand Response Deferral Notice must provide all available hourly meter data demonstrating the Demand increase justifying the Demand Response Deferral Notice at the time of the real power test required under Section 69A.3.5.m.

l. Market Participants providing physical, regulatory, or contractual limitations of the notice times and availability of Demand Resources must provide appropriate documentation to the Transmission Provider in accordance with the BPM for Resource Adequacy.

m. A Market Participant may defer the obligation to conduct a real power test, as set forth in section 69A.3.5(j), by providing a Demand Resource Deferral Notice to the Transmission Provider in writing and signed by an officer of the company no later than February 1<sup>st</sup> prior to the Planning Year. During a transition period that shall apply only to the 2021-2022 Planning Year, Market Participants may submit a Demand Resource Deferral Notice no later than March 31, 2021 for existing accredited Demand Resource, and Market Participants may submit a Demand

Resource Deferral Notice no later than March 31, 2021 prior to initially qualifying as a Demand Resource. The Demand Resource Deferral Notice shall contain: (1) the expected Demand Resource test value (in megawatts) from such Demand Resource and if the Demand Resource is new, the LBA or external BA where it is represented; and (2) appropriate information validating that real power test results will be submitted to the Transmission Provider by the last Business Day of May prior to the Planning Year. A Market Participant that provides a Demand Resource Deferral Notice must satisfy credit requirements by March 1 prior to the Planning Year totaling the amount of Demand Resource test value provided in the Demand Resource Deferral Notice multiplied by \$12,000/MW, where \$12,000 is the product of  $3 \times 4 \times \$1,000$  to account for the three (3) times energy penalty assumed under the deferral, the four (4) hours of LMR requirements, and a \$1,000 LMP as a proxy for pricing under emergency conditions. During a transition period that shall apply only to the 2021-2022 Planning Year, Market Participants that have elected to submit a Demand Resource Deferral Notice must satisfy credit requirements by March 31, 2021. If the Market Participant submits the real power test results on or before the last Business Day of May prior to the Planning Year that are equal to or greater than the expected Demand Resource test value, then the Transmission Provider will adjust the Market Participant's credit requirement to account for these changes within twenty (20) Business Days after that real power test is submitted. In the event ZRCs associated with a Planning Resource for which Demand Resource

testing has been successfully deferred are unconverted in accordance with section 69A.7.3, the Market Participant may provide notice to the Transmission Provider that it wishes to forfeit the deferred Demand Resource value, in which case the Transmission Provider will adjust the Market Participant's Demand Resource value and credit requirement within twenty (20) Business Days. A Market Participant that provides a Demand Resource Deferral Notice and that either (1) has not submitted any real power test result for such Demand Resource by the last Business Day of May prior to the Planning Year, or (2) has submitted a real power test result by the last Business Day of May prior to the Planning Year that demonstrates fewer megawatts are available than the expected Demand Resource test value submitted in the Demand Resource Deferral Notice, shall be subject to a penalty equal to three (3) times the Hourly Real-Time Ex Post LMP at the Load CPNode for any such deficiency described in and distributed pursuant to Section 69A.3.9. In addition, such Market Participant shall not have their credit released until a real power test result demonstrating the availability of all megawatts submitted in the Demand Resource Deferral Notice is submitted and verified by the Transmission Provider, or the end of the Planning Year, whichever is earlier.



### **Seasonal Accredited Capacity of Demand Resources**

The Transmission Provider will determine the appropriate Seasonal Accredited Capacity value for Demand Resources that qualify as a Planning Resource as established in the BPM for Resource Adequacy.

For the 2026 / 2027 and 2027 / 2028 Planning Years, a Market Participant may request an initial Seasonal Accredited Capacity of a Demand Resource not using the firm service level baseline up to the registered capacity value as set forth in Section 69A.3.5.j for Demand Resources performing a real power test, or as set forth in the Business Practices Manual for Resource Adequacy if waiving the requirement to perform a real power test. For a Demand Resource that is using the firm service level baseline, the Seasonal Accredited Capacity will be equal to the Demand Resource's contribution to the Coincident Peak Demand of the appropriate LSE/EDC less the firm service level as set forth in the Business Practices Manual for Resource Adequacy.

## **ATTACHMENT L**

### **CREDIT POLICY**

#### **POLICY STATEMENT:**

It is the policy of the Transmission Provider that prior to an entity (“Applicant”) taking any service under this Tariff, holding any FTR or becoming a Transmission Customer or Market Participant, the Applicant must demonstrate its ability to meet the Transmission Provider’s credit requirements.

Prior to becoming a Transmission Customer, Market Participant or Coordination Customer (together “Tariff Customer”), of the Transmission Provider, each Applicant must have an approved credit application and establish a Total Credit Limit with the Transmission Provider for services under this Tariff, including, without limitation, Transmission Service and Market Activities. Because all Transmission Service transactions are subject to congestion costs and marginal losses, every Transmission Customer of the Transmission Provider must either apply to be a Market Participant or be represented by a duly authorized Market Participant in good standing pursuant to the terms and conditions of this Credit Policy and the Agreements. In addition to completing a credit application, each Applicant and/or Tariff Customer will be subject to a complete credit evaluation that will include, but not be limited to, a review of financial statements, Rating Agency reports, and other pertinent indicators of financial strength and creditworthiness. An existing Transmission Customer who is applying to become a Market Participant need not provide the information required in Section I.A of this Credit Policy as such information is already on file with Transmission Provider.

**POLICY INTENT:**

This Credit Policy describes requirements for: (1) the establishment and maintenance of credit by Market Participants, Transmission Customers, and Applicants pursuant to one or more Credit and Security Agreement(s) in the form attached to this Credit Policy as Exhibit V, and (2) forms of security that will be deemed acceptable (hereinafter the “Financial Security”) to cover its FTR Obligations and in the event the Applicant and/or Tariff Customer does not satisfy the financial requirements to establish Unsecured Credit to cover its Non-FTR Potential Exposure.

This policy also sets forth: (i) the basis for establishing the individual Total Credit Limit that will be imposed on an Applicant and/or Tariff Customer in order to minimize the possibility of failure of payment for services rendered pursuant to the Agreements and (ii) various obligations and requirements the violation of which will result in a Default pursuant to this policy, this Tariff and the Agreements.

The Transmission Provider shall administer and implement the terms of this Credit Policy.

**APPLICABILITY:**

This policy applies to all Applicants and Tariff Customers who take Transmission Service under this Tariff, utilize services or participate in the Energy and Operating Reserve Markets, hold FTRs, ARRs or otherwise participate in Market Activities under Module C of this Tariff or RAR activities. This policy also applies to Reliability Coordination Customers, and Congestion Management Customers that take service under Module F of this Tariff.

**NOTICE:**

All written notifications by the Transmission Provider under this policy shall be in accordance with Section 7.18 of this Tariff. Notifications to Applicants and/or Tariff Customers will be sent to their credit contact(s).

**IMPLEMENTATION:**

**I. CREDIT EVALUATION**

Each Applicant will be subject to a complete credit evaluation in order for the Transmission Provider to determine financial strength and creditworthiness and to establish an Unsecured Credit Allowance, if appropriate. Any Unsecured Credit Allowance will only be applicable to non-FTR credit requirements. The Transmission Provider will identify any necessary Financial Security requirements and establish a Total Credit Limit for each Applicant and/or Tariff Customer. All FTR credit requirements must be satisfied with Financial Security. In addition, the Transmission Provider will perform follow-up credit evaluations on at least an annual basis. *See* Section I.B of this Credit Policy entitled “Ongoing Credit Evaluation” for further information.

If a Corporate Guaranty is being utilized to establish credit for an Applicant and/or Tariff Customer, the Guarantor will be evaluated and the Unsecured Credit Allowance granted, if any, based on the financial strength and creditworthiness of the Guarantor. Any utilization of a Corporate Guaranty will only be applicable to non-FTR credit requirements and will not be applicable to cover FTR credit requirements.

**A. Initial Credit Evaluation**

In completing the initial credit evaluation, the Transmission Provider will consider:

**1) Rating Agency Reports**

In evaluating financial strength and creditworthiness, the Transmission Provider will review Rating Agency reports. The focus of the review will be on an entity's unsecured, senior long-term debt ratings. If unsecured, senior long-term debt ratings are not available the Transmission Provider may consider Issuer Ratings. The Transmission Provider will also evaluate financial strength and creditworthiness based on financial statements and other information as described below. The same quantitative and qualitative factors will be used to evaluate entities whether or not they have rated debt.

**2) Financial Statements and Related Information**

Applicants must submit audited financial statements for the three (3) fiscal years most recently ended, or the period of existence of the Applicant, if shorter. If requested by Transmission Provider, Applicants must submit financial statements for each completed fiscal quarter of the current fiscal year.

The information should include, but not be limited to, the following:

- a.** If publicly traded:

- i. Annual Reports on Form 10-K for the three (3) fiscal years most recently ended, together with any amendments thereto;
  - ii. If requested by Transmission Provider, Quarterly Reports on Form 10-Q for each completed fiscal quarter of the then current fiscal year, together with any amendments thereto; and
  - iii. Form 8-K reports, if any have been filed since the most recent Form 10-K.
- b. If privately held, for each of the three (3) fiscal years most recently ended and, if requested by Transmission Provider, each completed fiscal quarter of the then current fiscal year:
  - i. Report of Independent Accountants for each fiscal year;
  - ii. Financial Statements, including:
    - Balance Sheet
    - Income Statement
    - Statement of Cash Flows
    - Statement of Stockholder's Equity;
  - iii. Notes to Financial Statements; and
  - iv. Management's Discussion & Analysis (if available)

If the above information is available through the Internet, the Applicant may provide a letter stating where such information can be located and retrieved by the Transmission Provider. If an Applicant files Form 10-K, Form 10-Q or Form 8-K with the SEC, then the Applicant has satisfied the requirement of indicating to the Transmission Provider where the information in this Section I.A.2(a) can be located through the Internet. For certain Applicants, some of the above financial submittals may not be applicable, and alternate requirements may be specified by the Transmission Provider.

In the credit evaluation of cooperatives, government agencies and municipalities, the Transmission Provider may request additional information as part of the overall financial review process and will consider other relevant factors in determining financial strength and creditworthiness.

**3) References**

If deemed necessary by Transmission Provider, each Applicant is to provide at least one (1) bank and three (3) Significant Trade References.

**4) Litigation, Commitments and Contingencies**

Each Applicant is also required to identify and provide information as to any known pending or, to the knowledge of any such Applicant's directors, officers or general counsel, threatened litigation, arbitrations, investigations, proceedings, commitments, contingencies, or liabilities that is Material or would be Material if adversely determined, as well as any prior bankruptcy declarations or petitions by or against the Applicant, its

predecessors, subsidiaries or Affiliates, or any Material defalcations or fraud by or involving the Applicant, its predecessors, subsidiaries or Affiliates, or any of their respective assets, if any. These disclosures shall be made by Applicant upon application, and promptly upon any initiation or change with respect to any of the above matters. The Applicant shall resubmit and update such information at least annually thereafter, or as requested by the Transmission Provider.

**5) Other Disclosures**

Each Applicant is required to disclose any Affiliates that are Tariff Customers and/or Applicants of the Transmission Provider. Each Applicant is also required to disclose the existence of any ongoing investigations by the SEC, the Commission, or any other governing, regulatory, or standards body. These disclosures shall be made by all Applicants upon application, and promptly upon any initiation or change with respect to any of the above matters. The Applicant shall resubmit and update such information at least annually thereafter, or as requested by the Transmission Provider.

**6) Public Sector Adjustments to the Unsecured Credit Allowance**

**Calculation and Municipality Security Interest in Accounts**

**Receivable Exemption to Qualify as a Category A Tariff Customer**

- a) Municipality or Joint Action Agency:** A municipality or Joint Action Agency requesting (i) its suggested Unsecured Credit



Allowance calculation reflect as equity the outstanding balance of Revenue Bonds issued by the Applicant when such Revenue Bonds are issued solely in support of the Applicant's role as power supply agent for not-for-profit electric distribution utilities, and/or (ii) an exemption for granting a first priority security interest a Receivable Security Interest for the purpose of qualifying as a Category A Tariff Customer, as defined in Section II.G of this Credit Policy, must provide the Transmission Provider with the following information:

Management representation letter stating:

- (i) Principal amount, in dollars, of Revenue Bonds outstanding;
- (ii) Prior to default and after default, debt service on the Revenue Bonds is payable only after operating expenses are paid;
- (iii) Amounts payable to the Transmission Provider for transmission and energy and ancillary services under this Tariff are operating expenses for purposes of the Revenue Bonds; and
- (iv) The trustee for the Revenue Bonds has a valid and binding security interest in the revenues or net revenues from the power supply contracts to secure payment of the Revenue

Bonds and the Applicant has not granted any lien thereon prior to the lien of the bond resolution.

Opinion of counsel stating:

- (i) The power supply contracts are binding obligations of the Applicant enforceable in accordance with their terms;
- (ii) The trustee of the Revenue Bonds has a valid and binding security interest in, or assignment and pledge of, the revenues or net revenues from the power supply contracts to secure payment of the Revenue Bonds;
- (iii) The resolution or other document creating the security interest or pledge and providing for the priority of payment is enforceable in accordance with its terms;
- (iv) Prior to default and after default, debt service on the Revenue Bonds is payable only after operating expenses are paid; and
- (v) Amounts payable to the Transmission Provider for transmission and energy and ancillary services under this Tariff are operating expenses for purposes of the Revenue Bonds.
- (vi) All Rating Agency ratings on Revenue Bond(s).

The opinion of counsel referenced above shall be provided to the Transmission Provider together with copies of the most recent written

opinions of counsel, if any, for each member of the Applicant that relate to the enforceability of the power supply contract(s).

**b) Electric Generation and Transmission Cooperatives:**

An Electric Generation and Transmission Cooperative (Coop) with a Composite Credit Score between 1.00 and 3.99 as determined by the Transmission Provider's credit scoring model requesting its suggested Unsecured Credit Allowance calculation reflect as equity fifteen percent (15%) of its long-term debt as stated on its most recently audited year-end financial statement must provide the Transmission Provider with a Sample Membership Agreement and a:

Management representation letter stating:

- (i) The Sample Membership Agreement is the document which establishes the rights and obligations between the Coop and its members. The Sample Membership Agreement is the same agreement executed by the Coop and each of its members;
- (ii) The duration of the membership agreement(s) equals or exceeds the duration of the Coop's long-term debt obligations;
- (iii) The Coop and each of its members are in compliance with all of their respective debt covenants;

- (iv) The consolidated Tangible Net Worth of all of the Coop's members;
- (v) The Coop has the ability to set rates or has a formula driven rate tariff in place;
- (vi) The Coop's purchases from the Transmission Provider are covered by the fuel adjustment and/or purchased power clauses contained within the executed membership agreements and are included in the calculation of the Coop's rate structure; and
- (vii) The Sample Membership Agreement covers all operating, finance and capital expenditures incurred by the Coop.

**7) Initial value of the Total Potential Exposure for credit monitoring purposes.**

The initial value for an Applicant's or Tariff Customer's Total Potential Exposure shall be determined in accordance with the formulas in this Section I.A.7. Additionally, Transmission Provider may request and consider supplemental information in determining an Applicant's initial value of Total Potential Exposure.

**a) Estimated Peak Load Data Requirement**

Each Applicant will present to Transmission Provider staff its estimated annual peak load for Network Integration Transmission

Service by Point of Delivery and its estimated amount of reserved Capacity for Point-To-Point Transmission Service by Point of Delivery.

**b) Initial Value of Total Potential Exposure Associated with Transmission Service and Schedule 26-A Charges**

A calculation using the information provided and applicable Transmission Service rates for each month of service creates the initial value of Total Potential Exposure component associated with Transmission Service needed for credit monitoring purposes. For the initial value of Total Potential Exposure associated with Schedule 26-A charges the Applicant's estimated peak Monthly Net Actual Energy Withdrawal (excluding those Monthly Net Actual Energy Withdrawals provided under GFAs), and Export Schedules and Through Schedules be applied to the current year's indicative MVP Usage Rate (\$/MWh).

**c) Initial Value of Total Potential Exposure Associated with Energy and Operating Reserve purchases and Energy and Operating Reserve supply**

The following calculations will be used to determine the initial value of the Total Potential Exposure component associated with Energy and Operating Reserve purchases and Energy and Operating Reserve supply needed for credit monitoring purposes:

- (i) For Energy and Operating Reserve purchase exposure, the formula is:

The estimated peak load (MWh purchase requirement for a given hour) x 600 hours x the average historical Day-Ahead price for the preceding three (3) month period.

- (ii) (A) For Energy and Operating Reserve supply exposure for all entities other than ARCs, the formula is:

The maximum MWh capacity of generating unit(s) x 600 hours x the average historical Day-Ahead price for the preceding three (3) months x five percent (5%).

(B) For Energy and Operating Reserve supply exposure for ARCs the formula is:

The maximum MWh capacity of demand resource(s) x 304 hours x the average historical Day-Ahead price for the preceding three (3) months x five percent (5%).

For both (A) and (B) a value of \$26.00 per MWh will be used as the value for the historical Day-Ahead price until changed. A new value will be calculated and made effective September 1, 2009, and every three (3) months thereafter.

**d) Initial Value of Total Potential Exposure Associated with Virtual Transactions**

Each Applicant that intends to participate in any Virtual Transactions will notify the Transmission Provider staff of its desired Virtual MWh Limit. The desired Virtual MWh Limit will be used to determine the initial value of Total Potential Exposure component associated with Virtual Transactions.

**e) FTR Auction Designation**

Each Applicant that intends to submit FTR Offers or FTR Bids in an FTR Auction will notify the Transmission Provider staff of its desired FTR Auction Credit Allocation. The desired FTR Auction Credit Allocation will be considered when calculating the initial value of FTR Obligations. As with all other FTR-related credit requirements, the FTR Auction Credit Allocation *must* be covered by Financial Security. The amount of Financial Security to be allocated to support participation in the FTR Auction is addressed in Section IV.B of this Credit Policy.

**f) Initial Value of Total Potential Exposure Associated with RAR charges**

Each Applicant that intends to participate in the Planning Resource Auction will notify Transmission Provider staff of the ZRCs it intends to procure in the auction. The intended level of ZRCs may be used to determine the initial value of Total Potential Exposure component associated with RAR.

**g) Other Information**

Each Applicant will submit such additional information requested by the Transmission Provider necessary to calculate the Applicant's Total Potential Exposure.

**8) Unreasonable Credit Risk**

The Transmission Provider may require additional Financial Security, or reject an application, if the Applicant is determined by the Transmission Provider to present an unreasonable credit risk.

Unreasonable credit risk may be identified based on, but not limited to, the material provided in the customer's application including responses to Exhibit VI. Additional Financial Security will reflect the proportional increase in credit risk to MISO administered markets.

An example of unreasonable credit risk may be determined by but not limited to market manipulation, a history of market manipulation, a material financial default, or a history of material financial defaults. The Transmission Provider will work with the Tariff Customer when determining unreasonable credit risk.

**9) Re-entry of Defaulting Tariff Customer**

In addition to the provisions for curing a Tariff Customer default contained elsewhere in the Tariff, a Tariff Customer whose previous default resulted in a loss to the MISO administered market must cure such default by payment to the Transmission Provider of all outstanding and unpaid obligations, as well as meet



all Tariff Customer requirements for market participation. The Transmission Provider will evaluate relevant factors to determine if an entity seeking to participate in the MISO administered markets under a different name, affiliation, or organization, should be treated as the same Tariff Customer that experienced the previous default under this provision. Such factors may include, but are not limited to, the interconnectedness of the business relationships, overlap in relevant personnel, similarity of business activities, overlap of customer base, and the business engaged in prior to the attempted re-entry.

**B. Ongoing Credit Evaluation**

On at least an annual basis, the Transmission Provider will perform follow-up credit evaluations on each Tariff Customer. In completing the credit evaluation, the Transmission Provider will consider:

**1) Rating Agency Reports**

In evaluating financial strength and creditworthiness, the Transmission Provider will review Rating Agency reports. The focus of the review will be on an entity's unsecured, senior long-term debt ratings. If unsecured, senior long-term debt ratings are not available the Transmission Provider may consider Issuer Ratings. The Transmission Provider will also evaluate financial strength and creditworthiness based on financial statements and other information as described below. The same

quantitative and qualitative factors will be used to evaluate entities whether or not they have rated debt.

**2) Financial Statements and Related Information**

Each Tariff Customer with an Unsecured Credit Allowance, each Guarantor under a Corporate Guaranty accepted by the Transmission Provider for the benefit of the Tariff Customer, and each Affiliate of each Guarantor for whose benefit such Guarantor provided a Corporate Guaranty accepted by the Transmission Provider (“Guaranteed Affiliate”) must submit, or cause to be submitted, the following:

- a.** Audited annual financial statements by June 30<sup>th</sup> of each year or no later than one hundred twenty (120) days after such entity’s fiscal year end; and
- b.** If requested by Transmission Provider, quarterly financial statements promptly upon their issuance, but no later than sixty (60) days after the end of each fiscal quarter of such entity.

The information should include, but not be limited to, the following:

- a.** If publicly traded:
  - i.** Annual reports on Form 10-K, together with any amendments thereto;
  - ii.** If requested by Transmission Provider, quarterly reports on Form 10-Q, together with any amendments thereto; and

- - 
  - iii.** Form 8-K reports, if any have been filed since the most recent Form 10-K;
- b.** If privately held, for each fiscal year and, if requested by Transmission Provider each fiscal quarter:
  - i.** Report of Independent Accountants for each fiscal year;
  - ii.** Financial Statements, including:
    - (i) Balance Sheet
    - (ii) Income Statement
    - (iii) Statement of Cash Flows
    - (iv) Statement of Stockholder's Equity;
  - iii.** Notes to Financial Statements; and
  - iv.** Management's Discussion & Analysis (if available).

If the above information is available through the Internet, the Tariff Customer, Guarantor or Guaranteed Affiliate may provide a letter stating where such statements can be located and retrieved by the Transmission Provider. If a Tariff Customer, Guarantor or Guaranteed Affiliate files Form 10-K, Form 10-Q or Form 8-K with the SEC, then the entity has satisfied the requirement of indicating to the Transmission Provider where the information in this Section I.B.2 (a) can be located through the Internet. For certain Tariff Customers, Guarantors or Guaranteed Affiliates some of the above financial submittals may not be applicable and alternate requirements may be specified by the Transmission Provider.

In the credit evaluation of cooperatives, government agencies and municipalities, the Transmission Provider may request additional information as part of the ongoing financial review process and will consider other relevant factors in determining financial strength and creditworthiness.

**3) Material Changes**

Each Tariff Customer is responsible for informing the Transmission Provider, in writing, of any Material Change in its financial condition (or the financial condition of its Guarantor or any Guaranteed Affiliates) within five (5) Business Days of the occurrence of the Material Change. If a Tariff Customer, Guarantor or Guaranteed Affiliate files Form 10-K, Form 10-Q or Form 8-K with the SEC, then the entity has satisfied the requirement to inform the Transmission Provider in writing of any Material Change described in such filing.

For the purpose of this policy, a Material Change in financial condition includes, but is not limited to, the following:

- a. A downgrade of any debt rating or Issuer Rating;
- b. A change in the outlook of any debt rating or Issuer Rating;
- c. Being placed on a credit watch with negative implication by a Rating Agency;
- d. A bankruptcy filing;
- e. Insolvency;

- f. The filing of a lawsuit or initiation of an arbitration, investigation or other proceeding which could have a Material adverse effect on any current or future financial results or financial condition;
- g. Any changes in financial condition which, individually, or in the aggregate, are Material;
- h. Any adverse changes, events or occurrences which, individually or in the aggregate, could affect the ability of the entity to pay its debts as they become due or could have a Material adverse effect on any current or future financial results or financial condition;
- i. Disclosure of conflict of interest issues;
- j. Resignation or removal of a key officer or director;
- k. A significant increase in credit default swap (CDS) spread; or
- l. A significant decrease in market capitalization.

Upon identification of a Material Change, the financial strength and creditworthiness of the Tariff Customer may be reevaluated by the Transmission Provider. Such reevaluation may result in a requirement for the Tariff Customer to provide Financial Security or additional Financial Security, as the case may be. If applicable, the Transmission Provider will notify the Tariff Customer in writing upon completion of the reevaluation of the need for Financial Security, if any. The Tariff Customer will have two (2) Business Days from receipt of written notification to provide the required Financial Security, in an amount and form approved by the Transmission Provider.

#### **4) Litigation, Commitments, and Contingencies**

Each Tariff Customer is required to identify and provide information as to any known pending or, to the knowledge of any of such Tariff Customer's directors, officers or general counsel, threatened litigation, arbitrations, investigations, proceedings, commitments, contingencies or liabilities with respect to the Tariff Customer, the Guarantor, the Guaranteed Affiliates, their respective predecessors, subsidiaries or Affiliates that is Material or would be Material if adversely determined, as well as any prior bankruptcy declarations or petitions by or against the Tariff Customer, the Guarantor, the Guaranteed Affiliates or their respective predecessors, subsidiaries or Affiliates, or any Material defalcations or fraud by or involving any assets of the Tariff Customer, the Guarantor, the Guaranteed Affiliates, or their respective predecessors, subsidiaries or Affiliates, if any. These disclosures shall be made promptly upon any initiation or change with respect to any of the above matters. If a Tariff Customer, Guarantor or Guaranteed Affiliate files Form 10-K, Form 10-Q or Form 8-K with the SEC, then the entity has satisfied the requirement to inform Transmission Provider in writing of any such information disclosed in such filing. The Tariff Customer shall resubmit and update such information at least annually, or as requested by the Transmission Provider.

#### **5) Other Disclosures**

Each Tariff Customer is required to disclose any Affiliates that are currently Tariff Customers or are applying to be Tariff Customer. Each Tariff Customer is

also required to disclose the existence of any ongoing investigations of Tariff Customer, Guarantor or any Guaranteed Affiliate by the SEC, the Commission, or any other governing, regulatory, or standards body. These disclosures shall be made promptly upon any initiation or change with respect to any of the above matters. If a Tariff Customer, Guarantor or Guaranteed Affiliate files Form 10-K, Form 10-Q or Form 8-K with the SEC, then the entity has satisfied the requirement to inform the Transmission Provider in writing of any investigation disclosed in such filing. The Tariff Customer shall resubmit and update such information at least annually, or as requested by the Transmission Provider.

**6) Public Sector Adjustments to the Unsecured Credit Allowance Calculation**

**Municipality or Joint Action Agency:**

A Tariff Customer that initially qualified to have its suggested Unsecured Credit Allowance calculation reflect as equity the outstanding balance of Revenue Bonds issued by the Tariff Customer and/or qualified for an exemption to provide a Receivable Security Interest for the purpose of qualifying as a Category A Tariff Customer, and is requesting to continue to have its suggested Unsecured Credit Allowance calculation reflect as equity the outstanding balance of Revenue Bonds issued by the Tariff Customer when such Revenue Bonds are issued solely in support of the Tariff Customer's role as power supply agent for not-for-profit electric distribution utilities and/or requesting to qualify for an exemption to provide a Receivable Security Interest for the purpose of qualifying as a Category

A Tariff Customer, must at all times comply with the following information reporting requirements:

- (a) The Tariff Customer must advise the Transmission Provider of the principal amount of Revenue Bonds outstanding on an annual basis;
- (b) The Tariff Customer must advise the Transmission Provider within ten (10) days if the principal amount of the Revenue Bonds outstanding is reduced by more than twenty percent (20%) from the amount last certified by the Tariff Customer;
- (c) The Tariff Customer must advise the Transmission Provider immediately if the security interest of the trustee is released or the Tariff Customer grants any lien prior to the lien of the bond resolution; and
- (d) The Tariff Customer must advise the Transmission Provider within ten (10) days of any downgrade of any of the Tariff Customer's Revenue Bond ratings issued by a Rating Agency.

**7) Electric Generation and Transmission Cooperatives:**

A Coop with a current Composite Credit Score between 1.00 and 3.99 as determined by the Transmission Provider's credit scoring model that is requesting to continue to have its suggested Unsecured Credit Allowance calculation reflect as equity fifteen percent (15%) of its long-term debt as stated on its current year-end audited financial statement, must at all times comply with the following information reporting requirements, by stating the following:



- (a) The Sample Membership Agreement initially provided to the Transmission Provider in connection with its request for an Unsecured Credit Allowance continues to be the document which establishes the rights and obligations between the Coop and its members;
- (b) In the alternative, the Coop will advise the Transmission Provider of any changes to the Sample Membership Agreement previously provided and provide a redlined copy of the Sample Membership Agreement highlighting the changes;
- (c) The duration of the Sample Membership Agreement(s) equals or exceeds the duration of all of the Coop's long term debt obligations;
- (d) The Coop and each of its members are in compliance with all of their respective debt covenants;
- (e) The consolidated Tangible Net Worth of all of the Coop's members;
- (f) The Coop has the ability to set rates or has a formula driven rate tariff in place;
- (g) The Coop's purchases from the Transmission Provider are covered by the fuel adjustment and/or purchased power clauses and included in the Coop's rate structure; and
- (h) The Sample Membership Agreement covers all operating, finance and capital expenditures incurred by the Coop.

**8) Unreasonable Credit Risk:**

The Transmission Provider may require additional Financial Security, or suspend the Tariff Customer, if the Tariff Customer is determined by the Transmission Provider to present an unreasonable credit risk. Unreasonable credit risk may be identified based on, but not limited to, the material provided in the customer's ongoing credit evaluation including responses to Exhibit VI. A Tariff Customer may be suspended, in accordance with Sections 7.16(a)(1)(ii) and 7.16(a)(2) of the Tariff, from participating in the Transmission Provider's Energy and Operating Reserve Markets and from requesting any future Markets and Services unless and until Tariff Customer is determined not to present unreasonable credit risk. Additional Financial Security will reflect the proportional increase in credit risk to MISO administered markets.

An example of unreasonable credit risk may be determined by but not limited to market manipulation, a history of market manipulation, a material financial default, or a history of material financial defaults.

The Transmission Provider will work with the Tariff Customer when determining unreasonable credit risk.

## **II. CREDITWORTHINESS AND TOTAL CREDIT LIMIT**

### **A. Evaluation of Creditworthiness**

A Composite Credit Score will be generated from the Transmission Provider's review and analysis of the information obtained through the initial and ongoing credit evaluation process described in Section I of this Credit Policy. Key factors in the scoring process include, but are not limited to, Rating Agency ratings, financial

statements, if deemed necessary, and Significant Trade References. The Transmission Provider will consistently apply the credit scoring process described in Section II.A of this Credit Policy in determining Composite Credit Scores.

### **1) Composite Credit Score – Public Power Sector**

The Public Power Sector analysis will be comprised of a Quantitative and Qualitative analysis. Each analysis is then weighted as shown below to build a total composite score.

<b>Analysis</b>	<b>Weight</b>
Quantitative Score	40%
Qualitative Score	60%

#### **Quantitative Score (40%)**

The Quantitative Score is developed by evaluating and weighting the seven (7) financial metrics listed in the table below.

<b>Public Power Financial Metric</b>	<b>Weight</b>
Days Cash/SGA + Interest Expense	20%
Debt Service Coverage	15%
Equity/Total Assets	15%
Times Interest Earned	15%
Cash/Current Liabilities	15%
CFFO/Total Debt	10%
Capex/Sales	10%

The calculated measures are compared to a set of industry benchmarks appropriate for Public Power Market Participants to assign a score within six distinct quality levels ranging from 1.00 to 6.99. These scores are then assigned a weighting to calculate a total Quantitative Score.

A score of 1.00 indicates that the Tariff Customer has strong financial health with regard to the relevant measure, while a score of 6.99 indicates poor financial health with regard to the relevant measure.

Note: There are 100 basis points within each scoring range. The one (1) range represents scores from 1.00 to 1.99 while the six (6) range represents scores from 6.00 to 6.99.

Within each quality level, fractional scores are computed linearly from the defined boundaries. For example, a Times Interest Earned value of 1.85 (refer to the Public Power Financial Benchmarks table below) would result in a score of 1.67 because it is between the low and high ends of the 1.00 to 1.99 quality level range.

#### **Public Power Ratios**

***Days Cash / Selling General & Administrative Expense (SGA) + Interest Expense*** = (Cash + Cash Equivalents + Short Term Investments) \* 360 days / (SGA + Operating + Maintenance + R&D Expenses + Interest Expense)

***Debt Service Coverage*** = (Operating Income (Loss) + Depreciation + Amortization) / (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Interest Expense)

***Equity / Total Assets*** = Net Worth / Total Assets

***Times Interest Earned*** = (Net Income (Loss) + Interest Expense + Income Taxes) / Interest Expense

***Cash / Current Liabilities*** = (Cash + Cash Equivalents + Short Term Investments) / Current Liabilities

***Cash Flow from Operations (CFFO) / Total Debt*** = Net Cash Provided from Operations / (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans)

***Capital Expenditures (Capex)/ Sales*** = Capital Expenditures / Total Revenue

***Tangible Net Worth*** = Total Equity – Restricted Cash – Intangible Assets – Goodwill – Investment in High Risk Affiliates – Receivables from High Risk Affiliates – Net Value of Long Term Trading Book – Nuclear Decommissioning Fund.

### **Public Power Financial Benchmarks**

Days Cash/SGA + Financial Expense			Cash/Current Liabilities		
From	To	Rank	From	To	Rank
677	730	1.00 to 1.99	94.16	143.89	1.00 to 1.99
328	676	2.00 to 2.99	54.08	94.15	2.00 to 2.99
194	327	3.00 to 3.99	42.15	54.07	3.00 to 3.99
108	193	4.00 to 4.99	26.75	42.14	4.00 to 4.99
19	107	5.00 to 5.99	4.70	26.74	5.00 to 5.99
0	18	6.00 to 6.99	0.01	4.69	6.00 to 6.99
Debt Service Coverage			CFFO/Total Debt		
From	To	Rank	From	To	Rank
1.51	1.80	1.00 to 1.99	0.24	0.35	1.00 to 1.99
1.21x	1.50	2.00 to 2.99	0.13	0.23	2.00 to 2.99
0.91	1.20	3.00 to 3.99	0.10	0.12	3.00 to 3.99
0.61	0.90	4.00 to 4.99	0.07	0.09	4.00 to 4.99
0.31	0.60	5.00 to 5.99	0.04	0.6	5.00 to 5.99
0.01	0.30	6.00 to 6.99	0.01	0.03	6.00 to 6.99
Equity/Total Assets			Capex/Sales		
From	To	Rank	From	To	Rank
0.55	0.83	1.00 to 1.99	42.68	66.36	1.00 to 1.99
0.37	0.54	2.00 to 2.99	16.11	42.67	2.00 to 2.99
0.21	0.36	3.00 to 3.99	9.14	16.10	3.00 to 3.99
0.17	0.20	4.00 to 4.99	6.92	9.13	4.00 to 4.99
0.13	0.16	5.00 to 5.99	2.06	6.91	5.00 to 5.99
0.01	0.12	6.00 to 6.99	0.01	2.05	6.00 to 6.99

### **Times Int Earned**

From	To	Rank
1.56	2.00	1.00 to 1.99
1.26	1.55	2.00 to 2.99
0.96	1.25	3.00 to 3.99
0.66	0.95	4.00 to 4.99

0.36	0.65	5.00 to 5.99
0.01	0.35	6.00 to 6.99

### Qualitative (60%)

The qualitative score will assess all non-financial measure information about a Tariff Customer's financial health. The qualitative analysis will take into account a variety of information, but at a minimum will include the assessment of the following characteristics of each Public Power Tariff Customer:

- (i) the ability to set rates without seeking regulatory approval;
- (ii) the financial protections afforded unsecured creditors contained in the contracts and other legal documents related to the formation and governance of public power entities;
- (iii) the number and composition of members or customers of the entity;
- (iv) the exposure to energy price risk for Load served by the entity;
- (v) Rating Agency ratings assigned to unsecured debt; and
- (vi) other non-financial measures of creditworthiness.

To illustrate, assume the following for a Public Power Tariff Customer:

**Public Power Qualitative Score = 2.0**

### Quantitative Metrics:

Metrics	Value	Rank	Weight	Score
Days Cash / SGA + Financial Expense	184	4.10	20%	0.82
Debt Service Coverage	6.22	1.00	15%	0.15
Equity / Total Assets	0.13	5.99	15%	0.90
Times Int. Earned	1.85	1.67	15%	0.25
Cash / Current Liabilities	90.70	2.08	15%	0.31
CFFO / Total Debt	0.30	1.46	10%	0.15
Capex / Sales	3.34	5.73	10%	0.57

**Quantitative Score** 3.15

Public Power Composite Score = (60% x 2.0) + (40% x 3.15) = 2.46

## 2) Composite Credit Score – Non-Public Power Sector

A Non-Public Power Composite Score shall be derived for each Tariff Customer that does not meet the definition of Public Power as defined in Module A. The Non-Public Power Analysis will be comprised of a Quantitative and Qualitative analysis. Each analysis is then weighted as shown below to build a total composite score.

Analysis	Weight
Quantitative Score	60%
Qualitative Score	40%

#### **Quantitative Score (60%)**

There are twelve (12) financial metrics used in developing the Composite Credit Score for Non-Public Power companies. These individual metrics are grouped into one of three main analytical components. The weighted scores for the individual metrics form the score for each of the three major components reviewed.

The component scores are then weighted to develop the total Quantitative score. The three major components and the weightings assigned to their respective scores are as follows:

**Liquidity:** 30%

**Leverage:** 20%

**Performance:** 50%

The individual metrics reviewed to develop each of the component scores are detailed in the table below.

Metric	Weight
EBITDA / Interest Exp	25%
Cash Earnings / Debt Service	35%
Free Cash Flow / Total Debt	30%
Quick Ratio	10%

<b>Leverage (20%)</b>	
Metric	Weight
Debt / Total Capitalization	35%
Short Term Debt / Total Debt	15%
Debt / Net Fixed Assets	25%
Debt / TNW	25%
<b>Performance (50%)</b>	
Metric	Weight
Return on Sales %	25%
Return on Assets %	25%
Operating Margin %	25%
Return on Equity %	25%

The calculated measures are compared to a set of industry benchmarks appropriate for Non-Public Power Tariff Customers to assign a score within six distinct quality levels ranging from 1.00 to 6.99.

A score of 1.00 indicates that the Tariff Customer has strong financial health with regard to the relevant measure, while a score of 6.99 indicates poor financial health with regard to the relevant measure.

Note: There are 100 basis points within each scoring range. The one (1) range represents scores from 1.00 to 1.99 while the six (6) range represents scores from 6.00 to 6.99.

Within each quality level, fractional scores are computed linearly from the defined boundaries.

For example, an Operating Margin of 13.10 % (refer to the Non-Public Power Financial Benchmarks table below) would result in a score of 3.41 because it is between the low and high end of the 3.00 to 3.99 quality level range.



Non-Public Power Financial Benchmarks

**EBITDA / Interest Expense**

From	To	Rank
7.00	9.00	1.00 to 1.99
5.00	6.99	2.00 to 2.99
3.00	4.99	3.00 to 3.99
2.00	2.99	4.00 to 4.99
1.00	1.99	5.00 to 5.99
0.00	0.99	6.00 to 6.99

**Debt / Net Fixed Assets**

From	To	Rank
0.29	0.01	1.00 to 1.99
0.50	0.30	2.00 to 2.99
0.70	0.51	3.00 to 3.99
0.89	0.71	4.00 to 4.99
0.99	0.90	5.00 to 5.99
2.00	1.00	6.00 to 6.99

**Cash Earnings / Debt Service**

From	To	Rank
6.00	8.00.0	1.00 to 1.99
4.00	5.99	2.00 to 2.99
1.01	3.99	3.00 to 3.99
0.70	1.00	4.00 to 4.99
0.31	0.69	5.00 to 5.99
0.00	0.30	6.00 to 6.99

**Debt / Tangible Net Worth**

From	To	Rank
0.50	0.01	1.00 to 1.99
0.99	0.51	2.00 to 2.99
1.99	1.00	3.00 to 3.99
3.99	2.00	4.00 to 4.99
6.99	4.00	5.00 to 5.99
12.99	7.00	6.00 to 6.99

**Free Cash Flow / Total Debt**

From	To	Rank
0.33	0.50	1.00 to 1.99
0.12	0.32	2.00 to 2.99
0.08	0.11	3.00 to 3.99
0.05	0.07	4.00 to 4.99
0.03	0.04	5.00 to 5.99
0.00	0.02	6.00 to 6.99

**Return on Sales (%)**

From	To	Rank
12.01	16.00	1.00 to 1.99
8.00	12.00	2.00 to 2.99
5.00	7.99	3.00 to 3.99
3.00	4.99	4.00 to 4.99
2.00	2.99	5.00 to 5.99
0.01	1.99	6.00 to 6.99

**Quick Ratio**

From	To	Rank
1.00	1.25	1.00 to 1.99
0.60	0.99	2.00 to 2.99
0.53	0.59	3.00 to 3.99
0.40	0.52	4.00 to 4.99
0.28	0.39	5.00 to 5.99
0.00	0.27	6.00 to 6.99

**Return on Assets (%)**

From	To	Rank
5.00	6.00	1.00 to 1.99
4.00	4.99	2.00 to 2.99
3.00	3.99	3.00 to 3.99
2.00	2.99	4.00 to 4.99
1.00	1.99	5.00 to 5.99
0.01	0.99	6.00 to 6.99

**Debt / Total Capitalization**

From	To	Rank
0.42	0.01	1.00 to 1.99
0.48	0.43	2.00 to 2.99
0.53	0.49	3.00 to 3.99
0.56	0.54	4.00 to 4.99
0.61	0.57	5.00 to 5.99
0.70	0.62	6.00 to 6.99

**Operating Margin (%)**

From	To	Rank
23.01	30.00	1.00 to 1.99
16.00	23.00	2.00 to 2.99
9.00	15.99	3.00 to 3.99
5.00	8.99	4.00 to 4.99
1.00	4.99	5.00 to 5.99
0.01	0.99	6.00 to 6.99

**Short Term Debt / Total Debt**

From	To	Rank
0.04	0.01	1.00 to 1.99
0.09	0.05	2.00 to 2.99
0.24	0.10	3.00 to 3.99
0.49	0.25	4.00 to 4.99
0.74	0.50	5.00 to 5.99
1.00	0.75	6.00 to 6.99

**Return on Equity (%)**

From	To	Rank
10.00	15.00	1.00 to 1.99
5.00	9.99	2.00 to 2.99
3.00	4.99	3.00 to 3.99
2.00	2.99	4.00 to 4.99
1.00	1.99	5.00 to 5.99
Below	0.99	6.00 to 6.99

### Non-Public Power Ratios

***EBITDA / Interest Expense*** = (Operating Income + Depreciation + Amortization) / Interest Expense.

***Cash Earnings / Debt Service*** (Net Income (Loss) + Depreciation + Amortization + Other Non Cash P&L Items (such as: Loan Loss Provision, Other Operating Cash Flows, Investment Securities (Gain/Loss), Loans (Gains/Losses), Deferred Taxes, Accounting Changes, Discontinued Operations, Extraordinary & Unusual Items, Purchased R&D, Equity in Net Earnings of Ventures) + Financial Expense - Cash Dividends Paid) / (Short Term Debt + Current Portion of Long Term Debt & Capital Leases + Financial Expense)

***Free Cash Flow (FCF) / Total Debt*** = (Net Cash Provided by Operations + Capital Expenditures + Cash Dividends Paid) / (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock).

***Quick Ratio*** = (Cash + Cash Equivalents + Short Term investments + Total Receivables (Net) + Marketable Securities + Certificate of Deposits + Trading Account Assets) / Current Liabilities

***Debt / Total Cap*** = (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock) / (Net Worth + Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock).

***Short Term Debt / Total Debt*** = (Short Term Debt + Current Portion of Long Term Debt and Capital Leases) / (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock)

***Debt / Net Fixed Assets*** = (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock) / (Fixed Assets + Property, Plant & Equipment)

***Tangible Net Worth*** = Total Equity – Restricted Cash – Intangible Assets – Goodwill – Investment in High Risk Affiliates – Receivables from High Risk Affiliates – Net Value of Long Term Trading Book – Nuclear Decommissioning Fund.

***Debt / TNW*** = (Short Term Debt + Current Portion of Long Term Debt and Capital Leases + Long Term Debt and Capital Leases + Subordinated Loans + Mandatory Redeemable Preferred Stock) / Tangible Net Worth

***Return on Sales (%)*** = Net Income or Loss / Total Revenues times 100

***Return on Assets (%)*** = Net Income or Loss / Total Assets times 100

***Operating Margin (%)*** = Operating Income or Loss / Total Revenues times 100

***Return on Equity (%)*** = Net Income or Loss / Net Worth times 100

**Qualitative (40%)**

The qualitative score will assess all non-financial measure information about a Tariff Customer's financial health. The qualitative analysis will take into account a variety of information, but at a minimum will include the assessment of the following characteristics of each Non-Public Tariff Customer:

- (i) the ability to set rates without seeking regulatory approval;

- (ii) the financial protections afforded unsecured creditors contained in the contracts and other legal documents related to the formation and governance of non-public power entities;
- (iii) the number and composition of members or customers of the entity;
- (iv) the exposure to energy price risk for load served by the entity and/or obligations to provide power to other parties;
- (v) Rating Agency ratings assigned to unsecured debt; and
- (iv) other non-financial measures of creditworthiness

To illustrate, assume the following for a Non-Public Tariff Customer:

Non-Public Power Qualitative Score = 2.5

**Quantitative Metrics:**

**Liquidity (30%)**

Metric	Value	Rank	Weight	Score
EBITDA / Interest Exp	4.70	3.14	25%	0.79
Cash Earnings / Debt Service	1.93	3.69	35%	1.29
Free Cash Flow / Total Debt	0.10	3.66	30%	1.10
Quick Ratio	0.30	5.72	10%	0.57
				3.75

**Leverage (20%)**

Metric	Value	Rank	Weight	Score
Debt / Total Capitalization	0.54	4.00	35%	1.40
Short Term Debt / Total Debt	0.11	3.07	15%	0.46
Debt / Net Fixed Assets	0.47	2.84	25%	0.71
Debt / Tangible Net Worth	1.21	3.21	25%	0.80
				3.37

**Performance (50%)**

Metric	Value	Rank	Weight	Score
Return on Sales %	5.74	3.75	25%	0.94
Return on Assets %	1.82	5.16	25%	1.29
Operating Margin %	13.10	3.41	25%	0.85
Return on Equity %	5.78	2.84	25%	0.71
				3.79

	Weight	Indicator Score	Group Score
Liquidity	30%	3.75	1.13
Leverage	20%	3.37	0.67

Performance	50%	3.79	1.90
		Financial Score	3.70

Non-Public Power Composite Score =  $(40\% \times 2.5) + (60\% \times 3.70) = 3.22$

## B. Unsecured Credit Allowance

The credit scoring model converts the Composite Credit Score to a suggested

Unsecured Credit Allowance through a three step process:

STEP ONE:

Convert the Tariff Customer's Composite Credit Score to a percentage value:

Table 1 below contains a matrix which converts the Composite Credit Score to a percentage value. The Tariff Customer's Tangible Net Worth (as adjusted for Revenue Bonds and the 15% Debt Adder if applicable) is then multiplied by this percentage value to determine an initial Unsecured Credit Allowance.

**Table 1**  
**Percent of Tangible Net**

<b>Composite Credit Score</b>	<b>Non-Public Power</b>	<b>Public Power</b>
1.00 to 1.66	10.0%	12.0%
1.67 to 2.00	9.0%	11.0%
2.01 to 2.33	8.0%	10.0%
2.34 to 2.66	7.0%	9.0%
2.67 to 3.00	6.0%	8.0%
3.01 to 3.33	5.0%	7.0%
3.34 to 3.66	4.0%	6.0%
3.67 to 4.00	3.0%	5.0%
4.01 to 4.33	2.0%	3.5%
4.34 to 4.66	1.0%	2.0%
4.67 to 5.00	0.5%	1.0%
5.01 to 6.00	0.0%	0.0%

STEP TWO: Compare the Tariff Customer's Composite Credit Score to the values contained in Table 2 (the Credit Cap Table) to determine the credit cap amount.

**Table 2: Credit Cap Table**

Composite Score Range		Unsecured Credit Cap
0.01	4.39	\$50,000,000
4.40	4.79	\$37,500,000
4.80	6.99	\$0

STEP THREE: Determine whether the final Unsecured Credit Allowance determined in Step 1 is capped at the amount determined in Step 2. The final suggested Unsecured Credit Allowance for a Tariff Customer is the lesser of:

the amount determined by applying the percentage value from Table 1 to the Tariff Customer's adjusted Tangible Net Worth (as determined in Step 1)

OR

the amount determined by applying the Tariff Customer's Composite Credit Score to Table 2 (the Credit Cap Table) detailed above (as determined in Step 2).

**EXAMPLE FOR A PUBLIC POWER MARKET PARTICIPANT:**

To illustrate, a Public Power Tariff Customer with a Composite Credit Score of 3.05 and Tangible Net Worth (as adjusted for Revenue Bonds and the 15% Debt Adder if applicable) of \$998,229,111 would have a suggested Unsecured Credit Allowance computed as follows:

Step 1: Unsecured Credit Allowance = Table 1 Percentage  $f$  (Composite Credit Score) x adjusted Tangible Net Worth

$$= 7.0\% \times \$998,229,111$$

$$= \$69,876,037 \text{ (subject to credit limit cap below)}$$

Step 2: Since the Composite Credit Score of 3.05 falls in the 0.01 – 4.39 range, the Tariff Customer's suggested Unsecured Credit Allowance would be capped at \$50,000,000 as determined using Table 2.

Step 3: The final step is to take the lower of the amount determined by applying the percentage value from Table 1 to the Tariff Customer's adjusted Tangible Net Worth or the amount determined by Table 2 (the Credit Cap Table). The lower of the two amounts is 50,000,000 based on Table 2. Accordingly, the Unsecured Credit Allowance would be capped at \$50,000,000.

**EXAMPLE FOR A NON-PUBLIC POWER MARKET PARTICIPANT:**

To further illustrate, a Non-Public Tariff Customer with a Composite Credit Score of 2.58 and an adjusted Tangible Net Worth of \$4.354 billion would have a suggested Unsecured Credit Allowance computed as follows:

Step 1: Unsecured Credit Allowance = Table 1 Percentage  $f$  (Credit Score) x Tangible Net Worth

$$= 7\% \times \$4,354,000,000$$

$$= \$304,780,000$$

Step 2: The maximum Unsecured Credit Allowance based on Table 2 is \$50,000,000 (2.58 falls in the 0.01 to 4.39 range).

Step 3: Take the lower of amounts in Step 1 and Step 2. The Unsecured Credit Allowance in this example is capped at \$50,000,000.

In the event that the Tariff Customer provides a Corporate Guaranty, the Unsecured Credit Allowance is based on the financial review conducted by the Transmission Provider of the entity providing the Corporate Guaranty, with a \$50 million maximum Unsecured Credit Allowance permitted (*see* Section VI entitled “Corporate Guaranty and Forms of Financial Security” for more information).

**1) Minimum Unsecured Credit Allowance**

For Public Power entities, the Unsecured Credit Floor for creditworthy entities is \$250,000. For any Public Power entity for whom the product of the applicable percentage from Table 1 multiplied by the Tangible Net Worth for the Public Power entity yields an Unsecured Credit Allowance of less than \$250,000 the Unsecured Credit Floor value shall be substituted as the authorized Unsecured Credit Allowance.

**2) Revenue Bond Adjustment to Tangible Net Worth Value for Power Supply Agents**

For Public Power entities that issue Revenue Bonds solely in support of their role as power supply agent for not-for-profit electric distribution utilities and meet: (a) the disclosure requirements in: (i) Section I.A.6 of this Credit Policy and (ii) Section I.B.6 of this Credit Policy; and (b) have a Revenue Bond rating or



Revenue Bond ratings equal to Baa1 or higher by Moody's Investor Services or BBB+ or higher by Standard & Poor's, the calculation of the suggested Unsecured Credit Allowance shall be based on an adjusted value for Tangible Net Worth. The adjusted value for Tangible Net Worth shall include the outstanding balance of Revenue Bonds as of the date of the calculation.

To illustrate, if the Public Power entity met all of the disclosure requirements for power supply agents, had Tangible Net Worth of \$1,000,000, and had \$10,000,000 principal amount of Revenue Bonds outstanding, the adjusted Tangible Net Worth to be used in computing the suggested Unsecured Credit Allowance would be \$11,000,000 (the sum of the adjusted Tangible Net Worth and the principal amount of Revenue Bonds outstanding as of the date of the calculation).

**3) Long Term Debt Adjustment to the Tangible Net Worth Value for Electric Generation and Transmission Cooperatives**

For Coops that have a Composite Credit Score between 1.0 and 3.99 as determined by the Transmission Provider's credit scoring model and meet the disclosure requirements in Sections I.A. 6 and I.B.6 of this Credit Policy, the calculation of the Unsecured Credit Allowance shall reflect as equity 15% of the Coop's long term debt as stated on its current audited financial statements.

To illustrate, if the Coop met all of the disclosure requirements, had Tangible Net Worth of \$8,000,000, and had \$100,000,000 principal amount of stated long term debt on its most current audited financial statements, the adjusted Tangible Net

Worth to be used in computing the suggested Unsecured Credit Allowance would be \$23,000,000 [the sum of the Tangible Net Worth (\$8,000,000) plus 15% of long term debt outstanding (\$15,000,000)]

**4) Revisions to Unsecured Credit Allowance**

The Transmission Provider has the right at any time to modify any Unsecured Credit Allowance and/or require additional Financial Security as may be reasonably necessary to support the Tariff Customer's ability to pay for market services provided under this Tariff and other Agreements. If the modification results in a reduction or revocation of Unsecured Credit Allowance and the reduction or revocation results in the need to provide Financial Security, the Transmission Provider will promptly notify the Tariff Customer in writing of the requirement to provide Financial Security as a result of the reduction or revocation of the previously granted amount of Unsecured Credit Allowance. The Tariff Customer shall have two (2) Business Days from receipt of written notification to provide the Financial Security required to replace the reduced or revoked amount of Unsecured Credit in an amount and form acceptable to the Transmission Provider.

**C. Credit Limit Setting for Affiliates**

In the case of affiliated Applicants or affiliated Tariff Customers the \$50 million maximum Unsecured Credit Allowance shall apply to the combined activity of the affiliated Applicants or affiliated Tariff Customers. *See* Section II.B of this Credit Policy. Thus, the sum of the individual Unsecured Credit Allowances for affiliated

Applicants or affiliated Tariff Customers shall not exceed \$50 million under any circumstances.

**D. Total Credit Limit and Allocation Requirement**

The Total Credit Limit for a Tariff Customer is the sum of its Unsecured Credit Allowance and the Financial Security provided less any Financial Security restricted for alternative capitalization purposes, if any. FTR Obligations (*i.e.*, FTR Potential Exposure plus FTR Auction Credit Allocation) must be covered by Financial Security. The Non-FTR Credit Limit is the sum of its Unsecured Credit Allowance and any Available Non-FTR Financial Security (*i.e.*, Financial Security provided in excess of its FTR Obligations). A portion of the Tariff Customer's Financial Security must be allocated to the FTR Auctions if the Tariff Customer wishes to engage in this activity.

The amount of credit to be allocated to support participation in the FTR Auction activity is addressed in Section IV.B of this Credit Policy.

**E. Monitoring of Activity Relative to Total Credit Limit**

The Transmission Provider will monitor each Tariff Customer's use of services and associated financial obligations on a regular basis. A Tariff Customer's cumulative financial obligation is its Total Potential Exposure. For credit monitoring purposes, Total Potential Exposure is broken down into two components, FTR Potential Exposure and Non-FTR Potential Exposure. Should a Tariff Customer's FTR Potential Exposure equal or exceed ninety percent (90%) of its total Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit

Allocation) the Transmission Provider shall promptly notify the Tariff Customer in writing of this fact. Likewise, should a Tariff Customer's Non-FTR Potential Exposure equal or exceed ninety percent (90%) of its Non-FTR Credit Limit the Transmission Provider shall promptly notify the Tariff Customer in writing of this fact. The Tariff Customer shall maintain its FTR Potential Exposure to a value less than its total Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) at all times. Additionally, the Tariff Customer shall maintain its Non-FTR Potential Exposure at a value less than its Non-FTR Credit Limit at all times.

**F. Requirement to Provide Financial Security**

Should a Tariff Customer's FTR Potential Exposure equal or exceed its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) and/or should its Non-FTR Potential Exposure equal or exceed its Non-FTR Credit Limit, the Transmission Provider shall promptly notify the Tariff Customer in writing of the need to (i) pay invoiced amounts to reduce the Tariff Customer's FTR Potential Exposure and/or its Non-FTR Potential Exposure, whichever applicable, and/or (ii) provide Financial Security in an amount sufficient to increase the Tariff Customer's Total Credit Limit, and/or (iii) lower FTR Auction Credit Allocation or Virtual MWh Limit such that after making such payments, providing such Financial Security, and/or lowering FTR Auction Allocation or Virtual MWh limit, the Tariff Customer's FTR Potential Exposure will not equal or exceed its Financial Security (less its alternative capitalization restrictions, if any, and

FTR Auction Credit Allocation) and/or its Non-FTR Potential Exposure will not equal or exceed its Non-FTR Credit Limit. The amount paid by Tariff Customer to Transmission Provider for the above-items (ii) and (iii) (i.e., Financial Security, and lower FTR Auction Credit Allocation or Virtual MWh Limit) will be rounded up to the nearest integral multiple of \$10,000 for any such items valued less than \$500,000. The Tariff Customer shall have two (2) Business Days from receipt of written notification to reduce its FTR Potential Exposure below its total Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) and/or its Non-FTR Potential Exposure below its Non-FTR Credit Limit.

**G. Security Interest in Accounts Receivable**

Each Tariff Customer will have an option of granting a continuing first-priority security interest to the Transmission Provider in all right, title and interest in any and all accounts receivable and other rights of payment of the Tariff Customer for goods and services provided under, or otherwise arising under, pursuant to or in connection with, the Tariff and/or any of the Agreements (the Receivable Security Interest).

Non-FTR Potential Exposure will be calculated differently for those Tariff Customers who grant a Receivable Security Interest (Category A Tariff Customer) as opposed to those who do not grant a Receivable Security Interest (Category B Tariff Customer).

See Section V of this Credit Policy for information on the Non-FTR Potential Exposure calculation to be used for each category of Tariff Customer. In the event the Tariff Customer grants the Transmission Provider a Receivable Security Interest, the Tariff Customer shall execute and deliver the Security Interest Agreement in the

form attached to this Credit Policy as Exhibit IV. A Category A Tariff Customer also includes a municipality or joint action agency that has qualified for an exemption of the requirement to grant a Receivable Security Interest under this Attachment L.

### **III. MINIMUM PARTICIPATION REQUIREMENTS**

#### **A. Annual Certification**

Prior to certification, Applicants shall provide to Transmission Provider an executed Annual Certification as set forth in Exhibit VI to this Attachment L. All existing Tariff Customers shall provide to Transmission Provider an executed Annual Certification as set forth in Exhibit VI to this Attachment L by January 31, 2012. Subsequent Annual Certifications must be executed and submitted by Tariff Customers to the Transmission Provider in acceptable form by April 30<sup>th</sup> of each year or five (5) Business Days in advance of submitting any Bids or Offers in the annual FTR Auction, whichever occurs first. Failure to provide an executed Annual Certification in a form acceptable to the Transmission Provider and by the specified deadlines may result in a Default under the Tariff. The Annual Certification shall include a certification that the Applicant or Tariff Customer is an “appropriate person” per section 4(c)(3) of the Commodity Exchange Act “CEA”. The Final Order of the Commodity Futures Trading Commission at 77 FR 30596 states that under section 4(c)(3)(K) the definition of “appropriate person” includes “eligible contract participants” as defined in section 1a(18) of the CEA, and persons in the business of: (1) generating, transmitting, or distributing electric energy, or (2) providing electric energy services that are necessary to support the reliable operation

of the transmission system. If, at any time, a Tariff Customer cannot meet the eligibility requirements set forth above, it shall immediately notify Transmission Provider and immediately cease conducting transactions in MISO Markets.

Applicants or Tariff Customers shall submit to Transmission Provider, upon request, any information or documentation required to confirm Applicant's or Tariff Customer's compliance with the Tariff or the Annual Certification.

**B. Demonstration of Appropriate Person Status**

Transmission Provider may conduct periodic verification that Applicants and Tariff Customers can demonstrate that they meet the definition of "appropriate person" to further ensure minimum criteria are in place. Such demonstration will consist of the submission of evidence and an executed Appropriate Person Verification as set forth in Exhibit VII to this Attachment L in a form acceptable to Transmission Provider. If a Tariff Customer does not provide sufficient evidence for verification to Transmission Provider within seven (7) calendar days of written request then such Tariff Customer shall be subject to Default under this Tariff. Demonstration of "appropriate person" status and support of other certifications on the Annual Certification is one part of the minimum participation requirements for the MISO Markets and does not obviate the need to meet the other minimum participation requirements such as those for minimum capitalization and risk management in Sections III.C and III.D below. One of the ways an Applicant or Tariff Customer can demonstrate "appropriate person" status is by meeting the language in 4(c)(3)(F) of the CEA. The following provisions apply for such demonstrations:

- **Demonstrating “appropriate person” status with financial statements**

An Applicant or Tariff Customer can demonstrate “appropriate person” status by submitting financial statements which show they have a net worth exceeding \$1 million or total assets exceeding \$5 million. If unaudited financial statements are submitted as evidence then they need to be accompanied by a memo signed by an officer of the Applicant or Tariff Customer which attests to the accuracy of the financial statements.

- **Demonstrating “appropriate person” status by posting Cash Deposit**

An Applicant or Tariff Customer can demonstrate “appropriate person” status by posting a Cash Deposit exceeding \$5 million with the Transmission Provider in accordance with Section VI.B.1. Cash Deposit relied upon for the demonstration of “appropriate person” status can be used to cover FTR and Non-FTR Potential Exposure and FTR Auction Credit Allocation if not set aside as unavailable Financial Security per Section III.C.

- **Demonstrating “appropriate person” status with a Corporate Guaranty**

If an Applicant or Tariff Customer is relying on a Corporate Guaranty to meet the “appropriate person” requirement then such Corporate Guaranty must be acceptable to Transmission Provider per the requirements in Section VI.A and must be from a Guarantor that has demonstrated it is an “appropriate person”. The Corporate Guaranty must be issued for an unlimited amount or in an amount sufficient to cover the sum of positive exposure from both FTR Potential Exposure and Non-FTR Potential Exposure of the Applicant or Tariff Customer.



If multiple Applicants or Tariff Customers are being covered by the same Guarantor then the Guarantor providing the Corporate Guaranty must exceed \$5 million in total assets or \$1 million in net worth for each Applicant or Tariff Customer being covered by the Corporate Guaranty. For example, if a Guarantor is covering three Tariff Customers with a Corporate Guaranty then it must exceed \$15 million in total assets or \$3 million in net worth.

- **Demonstrating “appropriate person” status with an Irrevocable Letter of Credit**

If an Applicant or Tariff Customer is relying on an Irrevocable Letter of Credit to meet the “appropriate person” requirement then the issuer must at all times qualify as an “appropriate person.” In addition, such Irrevocable Letter of Credit must be acceptable to Transmission Provider per the requirements in Section VI.B.2 and must cover the sum of positive exposure from both FTR and Non-FTR Potential Exposure.

### **C. Demonstration of Minimum Capitalization**

In advance of certification, Applicants shall meet the minimum capitalization requirements below. Existing Tariff Customers shall satisfy the initial minimum capitalization requirements by December 31, 2011 and on an annual basis thereafter. Applicants or Tariff Customers may satisfy the minimum capitalization requirements by either demonstrating minimum tangible net worth or total assets as detailed in this Section III.C.1, or by providing alternative capitalization as detailed below in Section III.C.2.

**1) Minimum Tangible Net Worth or Total Assets**

Minimum capitalization may be met by demonstrating minimum levels of tangible net worth or total assets. Applicants or Tariff Customers seeking authorization to participate in any or all service categories must provide sufficient evidence to demonstrate a minimum tangible net worth of \$1 million or minimum total assets of \$10 million. Applicants or Tariff Customers seeking authorization to participate in any or all service categories with the exception of FTR markets must demonstrate a minimum tangible net worth of \$500,000 or minimum total assets of \$5 million.

- i. Demonstration of minimum tangible net worth or total assets must be presented in the form of audited financial statements for the Applicant's, Tariff Customer's, or Guarantor's most recent fiscal year.
- ii. Consideration of tangible net worth shall exclude assets (net of any matching liabilities, assuming the result is a positive value) which Transmission Provider reasonably believes to be restricted, highly risky, or potentially unavailable to settle a claim in the event of a default. Examples include, but are not limited to, restricted assets and Affiliate assets, derivative assets, goodwill, and any other intangible assets.
- iii. The audited financial statements of Applicant's or Tariff Customer's approved Guarantor may be submitted as demonstration of minimum tangible net worth or minimum total assets. If the Guarantor is not deemed creditworthy based on the creditworthiness assessment requirements detailed in Section II of this

Credit Policy (or if the Applicant or Tariff Customer declines a creditworthiness assessment), the Applicant or Tariff Customer may still use an approved guaranty to satisfy the minimum capitalization requirements in which case, the approved guaranty must be executed with a minimum face-value of either (a) \$500,000 for an Applicant or Tariff Customer not seeking access to the FTR markets or (b) \$1,000,000 for an Applicant or Tariff Customer seeking access to the FTR markets. A Guarantor will be deemed not creditworthy if the creditworthiness assessment detailed in Section II yields a result below \$500,000 or \$1,000,000 as applicable. Where a Guarantor is not deemed sufficiently creditworthy, the guaranty value will not be considered when calculating the Applicant's or Tariff Customer's Non-FTR Credit Limit.

Additionally, Guarantor must have, in aggregate, sufficient tangible net worth or total assets to meet the minimum capitalization requirements for each Market Participant seeking qualification by using Guarantor's audited financial statements. For example, if three (3) Market Participants are seeking approval to transact in all service categories using a common Guarantor's audited financial statements, the Guarantor must have a minimum of \$1 million of tangible net worth or \$10 million of total assets for each Market Participant it guaranties. In this example, the Guarantor must demonstrate a minimum of \$3 million of tangible net worth or \$30 million in total assets.

- iv. Audited annual financial statements must be submitted by June 30<sup>th</sup> of each year or no later than one hundred twenty (120) days after such entity's fiscal year end
- v. If Tariff Customer or Guarantor files Form 10-K with the SEC, then the Tariff Customer or Guarantor has satisfied the requirement of indicating to the Transmission Provider where the information can be located.

If the audited financial statements provided do not demonstrate sufficient evidence of adequate tangible net worth or total assets relative to the level of service Tariff Customer is transacting, as determined by the Transmission Provider, notice may be provided to Tariff Customer that, in order to maintain such level of participation, additional evidence must be provided or alternative capitalization, as detailed in Section III.C.2, must be provided within two (2) Business Days of request from Transmission Provider.

Applicants or Tariff Customers shall provide written notice to Transmission Provider of any event that has occurred since the date of Applicant's, Tariff Customer's, or Guarantor's most recent annual audited financial statements that could adversely affect compliance with the minimum capitalization criteria.

## **2) Alternative Capitalization**

If an Applicant or Tariff Customer does not qualify for minimum capitalization as described in Section III.C.1, it may qualify for participation by providing alternative capitalization in the form of Financial Security. Approval of the

Financial Security provided to satisfy the alternative capitalization requirements is subject to the terms and conditions set forth in this Credit Policy.

The two levels of alternative capitalization and the service category rights associated with those levels are summarized below:

<b>Level of Service Tariff Customer or Applicant is Seeking Authorization</b>	<b>Minimum Financial Security Required</b>
For Applicants or Tariff Customers seeking authorization to participate in any or all service categories	\$500,000
For Applicants or Tariff Customers seeking authorization to participate in any or all service categories except for any FTR(s) with a term beyond the next calendar month	\$200,000

- i. Financial Security provided by the Applicant or Tariff Customer to satisfy the alternative capitalization requirement must be provided and maintained until all obligations associated with such level of participation have expired and in advance of entering into any additional obligations.
- ii. 50% of the applicable Financial Security related to alternative capitalization shall be set aside and unavailable for Tariff Customer to use for participation in any service category, while 50% will be available for Tariff Customer to use for participation in the service categories Tariff Customer is authorized to participate.

Financial Security that is provided in connection with alternative capitalization does not solely apply to the alternative capitalization requirements, but instead secures all payment obligations of the Tariff Customer under this Tariff and/or the other Agreements. Regardless of the alternative capitalization amount, any

Financial Security that is provided by or on behalf of Tariff Customer may be pursued in the event of a Default to satisfy any amount owed by the Tariff Customer under this Tariff and/or the other Agreements.

#### **D. Risk Management**

Applicant, Tariff Customer or their applicable agents must maintain current written risk management policies, procedures or controls to address those risks that could materially affect the ability to pay MISO invoices when due. Transmission Provider shall conduct periodic verification of such risk management policies, procedures or controls for Applicants and Tariff Customers in which planned or known FTR positions for any calendar month are at least 1,000 megawatts greater than their obligations to serve load or rights to generate electricity in the MISO Markets. Transmission Provider may conduct periodic verification of risk management policies, procedures or controls for Applicants and Tariff Customers on a random basis to ensure minimum criteria are in place. If random verification is successful, Applicant or Tariff Customer shall be excluded from random verification for a period of two (2) years.

Applicant's or Tariff Customer's risk management policies, procedures and controls pertaining to its activities in the MISO Markets will be assessed against the following standards:

- i. The risk management framework is documented in a risk policy addressing market, credit, and liquidity risks that has been approved by Tariff Customer's risk management function which includes a third party or appropriate corporate

persons or bodies that are independent of Tariff Customer's trading functions, such as a risk management committee, a designated risk officer, Tariff Customer's board or board committee, or, if applicable, a board or committee of Tariff Customer's parent company;

- ii. Tariff Customer or Applicant maintains an organizational structure with clearly defined roles and responsibilities that clearly segregates trading and risk management functions;
- iii. Delegations of authority specify the transactions into which traders are allowed to enter;
- iv. Tariff Customer or Applicant has requirements that traders have adequate training relative to their authority in the systems and MISO Markets in which they transact;
- v. As appropriate, risk limits are in place to control risk exposures;
- vi. Reporting is in place to ensure risks are adequately communicated throughout the organization;
- vii. Processes are in place for qualified independent review of trading activities; and
- viii. As appropriate, there is periodic valuation or mark-to-market of risk positions.

Applicants subject to verification must demonstrate that they have implemented prudent risk management policies and procedures in order to be authorized to participate in MISO Markets. Tariff Customers subject to verification must demonstrate on no more than an annual basis that they have implemented prudent risk management policies and procedures in order to continue to participate in MISO

Markets. Upon written request, Tariff Customer will have fourteen (14) calendar days to provide current governing risk management policies, procedures, or controls applicable to Tariff Customer's MISO Market activities and shall also include written guidance referencing the procedures and controls in their governing risk management policies that satisfy the standards listed above. Tariff Customers shall also provide such further information or documentation pertaining to Tariff Customer's activities in the MISO Markets as reasonably requested in writing by Transmission Provider. In the event Tariff Customer fails to submit such documentation to Transmission Provider within fourteen (14) calendar days, such Tariff Customer may be subject to Default under this Tariff.

If Transmission Provider is unable to successfully complete the verification process based on Tariff Customer's submitted documentation, Transmission Provider shall send written notice explaining the deficiencies preventing successful verification. Tariff Customer shall have fourteen (14) calendar days to provide sufficient evidence for verification. If Tariff Customer does not provide sufficient evidence for verification to Transmission Provider within the required cure period, such Tariff Customer may be subject to Default under this Tariff. If, prior to the expiration of such fourteen (14) calendar days, Tariff Customer demonstrates to Transmission Provider that it has filed with the Commission an appeal of Transmission Provider's risk management verification determination, Tariff Customer shall retain its transaction rights pending the Commission's determination on Tariff Customer's appeal.



#### **E. Disclosures Regarding Affiliates and Issued Securities**

Prior to certification, Applicants shall provide to Transmission Provider an executed Annual Disclosure as set forth in Exhibit VIII to this Attachment L. All existing Tariff Customers shall provide to Transmission Provider an executed Annual Disclosure as set forth in Exhibit VIII to this Attachment L by April 30<sup>th</sup> of each year. Failure to provide an executed Annual Disclosure acceptable to the Transmission Provider by the specified deadline may result in a Default under the Tariff. Applicants or Tariff Customers shall submit to Transmission Provider, upon request, any information or documentation required to confirm Applicant's or Tariff Customer's compliance with the Tariff.

#### **IV. ALLOCATION OF CREDIT LIMIT TO VIRTUAL TRANSACTION ACTIVITY AND FTR AUCTION ACTIVITY**

Tariff Customer participation in Virtual Transactions requires designation of the Virtual MWh Limit as defined in this Tariff. A portion of the Tariff Customer's Financial Security must be allocated to support FTR Auction activity as specified in Section IV.B of this Credit Policy.

##### **A. Virtual Transactions MWh Limit**

To be eligible to submit Virtual Bids or Virtual Supply Offers, a Tariff Customer must designate its Virtual MWh Limit as defined in this Tariff.

##### **1) Establishing a Virtual MWh Limit**

A Tariff Customer shall submit its proposed Virtual MWh Limit via the Market Portal to the Transmission Provider by 7 PM Eastern Prevailing Time. It is the

sole responsibility of the Tariff Customer to maintain a listing of the Tariff Customer's personnel authorized to conduct such Market Portal transactions specific to Attachment L of this Tariff.

The Transmission Provider will evaluate the Tariff Customer's submission, including the impact of the requested Virtual MWh Limit on the amount of the remaining Non-FTR Total Credit Limit relative to the Tariff Customer's Non-FTR Potential Exposure. If the requested Virtual MWh Limit will cause the Non-FTR Potential Exposure to equal or exceed the Non-FTR Total Credit Limit, the Virtual MWh Limit will be rejected. A Tariff Customer's Virtual MWh Limit must be approved by the Transmission Provider before a Tariff Customer can participate in any Virtual Transaction. The Transmission Provider shall process submissions of proposed Virtual MWh Limit one (1) Business Day following the day on which the Transmission Provider receives such submission via the Market Portal, provided the submission is received by 7 PM Eastern Prevailing Time. An approved Virtual MWh Limit takes effect within two (2) Calendar Days following the day it is approved by the Transmission Provider.

## **2) Modifying the Virtual MWh Limit**

Modifications to a Tariff Customer's Virtual MWh Limit may be requested via the Market Portal. The Transmission Provider shall process Virtual MWh Limit submission via the Market Portal one (1) Business Day following the day on which such submission was received by the Transmission Provider, provided the submission is received by 7 PM Eastern Prevailing Time. The Transmission

Provider must approve any proposed modification to a Tariff Customer's Virtual MWh Limit before the modification becomes effective. A decrease to a Tariff Customer's Virtual MWh Limit will decrease its Virtual Transactions credit requirement at most nine (9) calendar Days after the new Virtual MWh Limit is approved, depending on the quantity of outstanding Virtual Bids and/or Virtual Supply Offers at the time such request is made.

In evaluating a request to increase a Tariff Customer's Virtual MWh Limit, the Transmission Provider will evaluate the impact of the requested change on the amount of the remaining Non-FTR Credit Limit relative to the Tariff Customer's Non-FTR Potential Exposure. If the requested change causes the Tariff Customer's Non-FTR Potential Exposure to exceed its Non-FTR Credit Limit, the request will be denied.

### **3) Periodic Reassessment of the MPD in Calculating the Virtual Transactions Credit Requirement**

Each Tariff Customer's Virtual Transactions credit requirement will be recalculated in accordance with the periodic re-assessment of the value for variable MPD by the Transmission Provider. The Transmission Provider may require Tariff Customers to: (a) reduce their Virtual MWh Limit or (b) provide additional Financial Security within two (2) Business Days from receipt of written notification, if there is an increase in the MPD.

### **4) Enforcing the Virtual MWh Limit**

The sum of the absolute value of Virtual Bid MWhs and the absolute value of Virtual Supply Offer MWhs submitted by a Tariff Customer for a given Operating Day may not exceed its Virtual MWh Limit. If both a Virtual Bid and a Virtual Supply Offer are submitted for a given Node, then the absolute value of the greater of the Virtual Supply Offer MWhs or the Virtual Bid MWhs at that Node will be counted when evaluating the sum of the absolute value of all Virtual Bid MWhs and Virtual Supply Offer MWhs relative to the Virtual MWh Limit. The Transmission Provider shall have the right to reject Virtual Bids and/or Virtual Supply Offers that cause the sum of Virtual Bids and/or Virtual Supply Offers submitted for a given Operating Day to exceed the Tariff Customer's Virtual MWh Limit.

**B. Allocation of Credit Limit to FTR Auction Activity**

To be eligible to submit FTR Offers, or FTR Bids, in an FTR Auction, the FTR Auction Participant must satisfy the requirements set forth in this policy.

**1) Credit Limit Allocation Requirement for Participation in FTR Auctions**

FTR Auction Participants must allocate a portion of their total Financial Security in order to participate in FTR Auctions. An FTR Auction Participant's FTR Auction Credit Exposure must not equal or exceed the FTR Auction Participant's FTR Auction Credit Allocation. The FTR Auction Participant's FTR Potential Exposure must not equal or exceed the FTR Auction Participant's total Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation).

## **2) Establishing an FTR Auction Credit Allocation**

FTR Auction Participants shall establish their FTR Auction Credit Allocation by submitting such information via the Market Portal. The Transmission Provider shall process the FTR Auction Market Portal submission one (1) Business Day following the day on which the submission is received, provided it is received by 4 PM Eastern Prevailing Time. The Transmission Provider must approve FTR Auction Participant's FTR Auction Credit Allocation before the FTR Auction Participant may participate in the relevant FTR Auction. The new FTR Auction Credit Allocation takes effect within two (2) Calendar Days following the day it is approved by the Transmission Provider.

Financial Security required in connection with an FTR Auction Participant's FTR Auction Credit Allocation must be received by the Transmission Provider no later than five (5) Business Days prior to the start of the Bid window for the relevant FTR Auction. Therefore, the Transmission Provider recommends that FTR Auction Participants submit their requests to establish FTR Auction Credit Allocations at least fifteen (15) Business Days prior to the start of the Bid window for the relevant FTR Auction. The Transmission Provider may delay commencing its review of any request to establish an FTR Auction Credit Allocation that is submitted after 4 PM Eastern Prevailing Time on the fifth (5<sup>th</sup>) Business Day prior to the start of an FTR Auction Bid window until after such Bid window closes.

## **3) Modifying the FTR Auction Credit Allocation**

Modifications to an FTR Auction Participant's FTR Auction Credit Allocation may be requested by submitting such modifications via the Market Portal. The Transmission Provider shall process the FTR Auction Credit Allocation modification submission one (1) Business Day following the day on which the submission is received, provided the submission is received by 4 PM Eastern Prevailing Time. The Transmission Provider must approve any proposed modification to an FTR Auction Participant's FTR Auction Credit Allocation before the modification becomes effective. The new approved FTR Auction Credit Allocation takes effect within two (2) Calendar Days following the Day it is approved by the Transmission Provider.

#### **4) Enforcing the FTR Auction Credit Requirement**

The Transmission Provider shall have the right to reject FTR Bids and/or FTR Offers that cause the FTR Auction Credit Exposure (as determined by the formula in Section IV.B.5 below) to exceed the FTR Auction Participant's FTR Auction Credit Allocation. For the purpose of evaluating FTR Bids during the auction process, the Transmission Provider shall use the greater of the FTR Minimum Bid Requirement or the actual amount of a FTR Auction Participant's FTR Bids to determine if the FTR Auction Participant is in compliance with the requirement for the FTR Auction Participant's FTR Auction Credit Exposure to at all times be less than the FTR Auction Participant's FTR Auction Credit Allocation.

The FTR Auction Credit Exposure is calculated using the formula below:

#### **5) FTR Auction Credit Exposure**

FTR Auction Credit Exposure is calculated per the formula below:

$$\sum_{p \in P} \text{Max}(\text{MPB}_p, \text{MMB}_p * \text{MDM}_p) + \sum_{k \in K} \text{MMB}_k * \text{MDM}_k + \sum_{g \in G} |\text{MNO}|_g$$

Where:

MPB = The maximum of all price points specified for a given positive FTR Bid,  
calculated as the MW value specified for the price-point, times the dollar  
value per megawatt specified for the price-point

MMB = The maximum MW point specified for a given FTR Bid

MDM = The Minimum Bid Price (dollar per MW) for positive FTR Bids as  
specified in Section IV.C.1 of Attachment L or the Minimum Bid Price  
(dollar per MW) for zero or negative FTR Bids as specified in Section  
IV.C.2 below

MNO = The minimum of all price points specified for a given negative FTR  
Offer, calculated as the MW value specified for the price-point, times the  
dollar value per megawatt specified for the price-point

P = Set of all positive Bids to be submitted by a given FTR Auction  
Participant during an open FTR Bid window.

K = Set of all zero and negative Bids to be submitted by a given FTR Auction  
Participant during an open FTR Bid window

G = Set of all negative FTR Offers to be submitted by a given FTR Auction  
Participant during an open FTR Bid window.

**6) Submission of Financial Security for FTR Auction Credit Requirement**

Financial Security required to meet the Total Credit Limit, as impacted by the FTR Auction Credit Allocation, must meet the requirements set forth for Financial Security defined in this Tariff. Such Financial Security must be in place at least five (5) Business Days prior to the start of a given FTR Auction bid window.

Any Financial Security provided as required in this Section IV.B will be included as part of the FTR Auction Participant's Total Credit Limit. Financial Security that is provided in connection with an FTR Auction Credit Allocation does not solely secure the FTR Auction Participant's FTR Auction payment obligations, but instead secures all payment obligations of the FTR Auction Participant under this Tariff and/or the other Agreements. Regardless of the FTR Auction Credit Allocation, any Financial Security that is provided by or on behalf of an FTR Auction Participant may be pursued in the event of a Default to satisfy any amount owed by the FTR Auction Participant under this Tariff and/or the other Agreements.

FTR Auction Participants may request that their FTR Auction Credit Allocation be reduced one (1) Business Day after the close of the bid window for a given FTR Auction. The amount of the reduction may not exceed the difference between the FTR Auction Credit Allocation minus the FTR Auction Credit Exposure as determined by Section V.B.5 of this Attachment L.



FTR Auction Participants may request that their FTR Auction Credit Allocation be reduced two (2) Business Days after a given FTR Auction clears.

All requests to reduce an FTR Auction Credit Allocation are subject to approval by the Transmission Provider.

**7) Impact of a Violating Allocation to FTR Auctions**

An FTR Auction Participant may have its access to submit FTR Bids and/or FTR Offers suspended by Transmission Provider if the FTR Auction Participant violates its FTR Auction Credit Allocation as defined in Module A of this Tariff.

**C. Minimum Bid Price for FTR Auction Activity**

**1) Minimum Bid Price for FTR Bids on Positive FTRs**

The Minimum Bid Price for Bids to acquire positive FTRs shall be a function of the duration of the FTR Auction as follows:

- Seasonal component of annual auction = \$100 per MW
- Monthly auction = \$100 per MW x (# days in month / # days in season)

The Transmission Provider shall use the greater of the Minimum Bid Requirement for positive FTRs or the value for the variable MPB defined in Section V.B.5 of Attachment L for determining the FTR Auction Credit Exposure for such bids.

**2) Minimum Bid Price for FTR Bids of Zero or Negative Value**

The Minimum Bid Price for FTR Bids that are zero or negative in value shall be a function of the duration of the FTR Auction as follows:

- Summer Season of annual auction = \$375 per MW
- Winter Season of annual auction = \$300 per MW
- Fall and Spring Season of annual auction = \$200 per MW
- Monthly Auction = seasonal value x (# days in month / # days in season)

The Transmission Provider shall use the absolute value of the Minimum Bid Requirement for FTR Bids that are zero or negative in value in determining the FTR Auction Credit Exposure for such bids.

**V. Potential Exposure to Non-Payment and Total Potential Exposure**

Potential exposure to non-payment is calculated separately for each category of Markets and Services. The information in Section V of this Credit Policy addresses the calculation and use of the value for Non-FTR Potential Exposure and FTR Potential Exposure by Market Participant, Reliability Coordination Customer, or Congestion Management Customer.

**A. Non-FTR Potential Exposure**

For credit purposes, the following service categories, as calculated per the formulas in Section V of this Credit Policy, shall be used to calculate Non-FTR Potential Exposure:

1. Real-Time Energy and Operating Reserve Markets Potential Exposure
  - Including all charge types associated with Congestion Management Service under Part II of Module F
  - During an Extreme Event, the Transmission Provider reserves the right to

use best-available information to calculate PEEE. Best-available information will be used when the use of the existing calculation will result in potential exposure calculations impacted by Extreme Events that far exceed the expected actual exposure of such entities. When the Transmission Provider implements the use of best-available information: (i) notification will be given to the market; (ii) the use of best-available information will be used to address a recognized problem; (iii) the time frame for the use of best-available information will be specified in the notice provided to the market; and (iv) the Transmission Provider will continue to ensure sufficient collateralization of its markets.

2. Day-Ahead Energy and Operating Reserve Markets Potential Exposure

- Including all charge types associated with Congestion Management Service under Part II of Module F
- During an Extreme Event, the Transmission Provider reserves the right to use best-available information to calculate DAEE. Best-available information will be used when the use of the existing calculation will result in potential exposure calculations impacted by Extreme Events that far exceed the expected actual exposure of such entities. When the Transmission Provider implements the use of best-available information: (i) notification will be given to the market; (ii) the use of best-available information will be used to address a recognized problem; (iii) the time frame for the use of best-available information will be specified in the

notice provided to the market; and (iv) the Transmission Provider will continue to ensure sufficient collateralization of its markets.

3. Virtual Transactions Potential Exposure

4. Congestion and Losses Potential Exposure

- During an Extreme Event, the Transmission Provider reserves the right to use best-available information to calculate CLEE. Best-available information will be used when the use of the existing calculation will result in potential exposure calculations impacted by Extreme Events that far exceed the expected actual exposure of such entities. When the Transmission Provider implements the use of best-available information: (i) notification will be given to the market; (ii) the use of best-available information will be used to address a recognized problem; (iii) the time frame for the use of best-available information will be specified in the notice provided to the market; and (iv) the Transmission Provider will continue to ensure sufficient collateralization of its markets.

5. Transmission Service Potential Exposure

- Including Schedule 31 charges associated with Reliability Coordination Service under Part I of Module F
- Including all charges associated with providing HVDC Service
- Including Schedule 26-A charges associated with Multi-Value Projects

6. RAR Potential Exposure

- Including all charge types under RAR

In the event no FTRs are owned by the Tariff Customer, ARR Settled Exposure and/or FTR and ARR Transactions Cleared But Not Yet Settled Exposure may be included in the Non-FTR Potential Exposure calculation and may be covered by Tariff Customer's Non-FTR Credit Limit, accordingly.

In general, the calculation of potential exposure to non-payment within each service category is based on one or more of the following exposure components:

1. Invoiced but not paid;
2. Measured but not invoiced, where measured means the Transmission Provider's Settlement systems have computed the charges and credits for all transactions for a given Operating Day; and
3. Estimated for future Operating Days based on known and/or potential activity.

With respect to a Category A Tariff Customer, Non-FTR Potential Exposure shall be the sum of all charges and credits for all service categories as calculated per the formulas in Section V of this Attachment L.

With respect to a Category B Tariff Customer, the calculation of Non-FTR Potential Exposure will be the sum of all charges and credits for all service categories, with the exception of Transmission Service Potential Exposure. If the result of summing these categories is a net credit amount, where a net credit amount is the amount of funds owed to the Tariff Customer from the Transmission Provider, then the result will be moved to zero and the Non-FTR Potential Exposure will consist of only Transmission Service Potential Exposure. If the result of summing these categories is a net charge amount, where a net charge amount represents funds owed to the Transmission

Provider from the Tariff Customer, then this value will be added to the Transmission Service Potential Exposure to determine Non-FTR Potential Exposure.

As a result, for Category B Tariff Customers, all Non-FTR Potential Exposure service categories are eligible to be netted against one another with the exception of Transmission Service Potential Exposure.

In the event a Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit on three (3) consecutive Business Days, then for the next ten (10) days the Tariff Customer's Non-FTR Potential Exposure shall be equal to the sum of: (i) the amount calculated per the formulas in this Section V; plus (ii) a factor of up to ten (10) times the average amount of the excess exposure over the three (3) consecutive Business Days, if the Transmission Provider determines, after consultation with the Tariff Customer, that such additional collateral is necessary to reflect the potential exposure associated with the Tariff Customer's expected market activity.

On the same day the third consecutive margin call is made, the Transmission Provider will initiate the consultation process by notifying the Tariff Customer of the additional collateral requirement based on the maximum amount permitted under the formula above and by requesting the Tariff Customer to supply any information that would permit the Transmission Provider to set the additional collateral requirement at a level lower than the maximum. Such information shall include, but is not limited to: (i) the Tariff Customer's estimated exposure, (ii) explanations for any recent change in the Tariff Customer's market activity, (iii) any relevant new load or unit

Outage information; or (iv) any default or supply contract expiration, termination or suspension. The Tariff Customer shall have one (1) Business Day to respond to the Transmission Provider's request. If the requested information is provided in full to the Transmission Provider's satisfaction during said period, the additional collateral requirement shall reflect the Tariff Customer's anticipated exposure based on the information provided. If the Tariff Customer fails to provide the requested information in full during said period, the additional collateral requirement shall equal the maximum amount permitted under the formula set forth above. In both cases, the additional collateral shall be provided by Tariff Customer by close of the second Business Day following the day on which the third consecutive margin call was made, upon confirmation from the Transmission Provider.

To illustrate, assume a Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit on day one by \$100,000. The Transmission Provider would issue a margin call for financial assurances pursuant to Section II.F of this Attachment L. Next, assume that on day two a Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit by \$200,000, the Transmission Provider issues another margin call, and the excess is in addition to any financial assurances the Tariff Customer provided for the exposure on day one. Finally, assume on day three the Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit by an additional \$200,000. Again the Transmission Provider would issue a margin call.

The average amount of the excess exposure over these three days is \$166,667.

Therefore, for ten (10) days after the third consecutive margin call, the Tariff Customer's Non-FTR Potential Exposure value would be that calculated per the existing formulae plus the addition of up to \$1,666,670. On the eleventh day (the fourteenth day after the first margin call), assuming the Tariff Customer's Non-FTR Potential Exposure did not continue to exceed its Non-FTR Credit Limit, the Non-FTR Potential Exposure value would be calculated per the existing formulae without the adder for the most recent three days multiplied by a factor of up to ten (10) times the average amount of the excess exposure.

If the Tariff Customer's Non-FTR Potential Exposure exceeds its Non-FTR Credit Limit for more than three (3) consecutive Business Days, then the three (3) day average will be calculated on a rolling basis and the highest calculation for the days following will apply. Using the example above, assume the Tariff Customer's Non-FTR Potential Exposure exceeded its Non-FTR Credit Limit on days four, five and six by \$200,000, \$100,000 and \$50,000, respectively. Beginning on day five and continuing through the fourteenth day after the first margin call, up to \$200,000 would be added to the existing formulae (days two, three and four are each \$200,000 for an average of \$200,000, ten times of which is \$2,000,000). For the sixteenth day after the first margin call, the number would be reduced to \$1,166,666 (ten times the average of days four, five and six). Finally, assuming the Tariff Customer's Non-FTR Potential Exposure did not continue to exceed its Non-FTR Credit Limit after day six, the Non-FTR Potential Exposure value would be calculated per the existing



formulae without the adder beginning on the seventeenth day after the first margin call.

**1) Real-Time Energy and Operating Reserve Markets Potential Exposure**

Potential exposure to non-payment associated with Real-Time Energy and Operating Reserve Markets transactions is calculated per the formula below:

$$\sum_{c \in C} PEIE_c + \sum_{d \in D} PEME_d + PEEE$$

Where:

PEIE = the values of the Real-Time Energy and Operating Reserve Charges/Credits that have been invoiced, but not yet paid.

C = the set of all Real-Time Energy and Operating Reserve Charge Types that have been invoiced but not yet paid.

PEME= the values of the Real-Time Energy and Operating Reserve Charges/Credits that have been settled and/or calculated, but not yet invoiced.

D = the set of all Real-Time Energy and Operating Reserve Charge Types that have been settled and/or calculated, but not yet invoiced

PEEE (Real-Time Energy and Operating Reserve Estimated Exposure)

*PEEE will be the greater of:*

(1) The seven day rolling average of daily Real-Time Energy and Operating Reserve Charges/Credits from previously approved initial Settlements times six (6).

*OR*

(2) The three hundred sixty five (365) day rolling average of daily Real-Time Energy and Operating Reserve Charges/Credits from previously approved S7 Settlements times six (6).

However, expected credits from Financial Schedules will not be netted against Non-FTR potential exposure.

## **2) Day-Ahead Energy and Operating Reserve Markets Potential Exposure**

Potential exposure to non-payment associated with Day-Ahead Energy and Operating Reserve Market transactions is calculated per the formula below:

$$\sum_{g \in G} DAIE_g + \sum_{h \in H} DAME_h + DAEE$$

Where:

DAIE= The value of the Day-Ahead Energy and Operating Reserve Charges/Credits that have been invoiced but not yet paid.

G = The set of all Day-Ahead Energy and Operating Reserve Charge Types that have been invoiced but not yet paid.

DAME = The values of the Day-Ahead Energy and Operating Reserve

Charges/Credits that have been settled and/or calculated, but not yet invoiced, including charge types for Operating Reserve from the Energy and Operating Reserve Markets.

H = The set of all Day-Ahead Energy and Operating Reserve Charge Types that have been settled and/or calculated, but not yet invoiced.

DAEE (Day-Ahead Energy and Operating Reserve Estimated Exposure)

*DAEE will be the greater of:*

- (1) The seven day rolling average of daily Day Ahead Energy and Operating Reserve Charges/Credits from previously approved initial Settlements times six (6).

*OR*

- (2) The three hundred sixty five (365) day rolling average of daily Day Ahead Energy and Operating Reserve Charges/Credits from previously approved S7 Settlements times six (6).

However, expected credits from Financial Schedules will not be netted against Non-FTR potential exposure.

### **3) Virtual Transaction Potential Exposure**

Potential exposure to non-payment associated with Virtual Transactions is calculated per the formula below:

$$\sum_{g \in G} VIE_g + \sum_{h \in H} VME_h + (DMWhL \times MPD \times VMEW)$$

Where:

VIE (Virtual Invoiced Exposure) = the value of a given Virtual Energy Charge/Credit that has been invoiced, but not yet paid.

G = the set of all Virtual Energy Charge Types that have been invoiced but not yet paid.

VME (Virtual Energy Measured Exposure) = the value of a given Virtual Energy Charge/Credit that has been settled and/or calculated, but not yet invoiced.

H = the set of all Virtual Energy Charge Types that have been settled and/or calculated, but not yet invoiced.

DMWhL = the Market Participant's daily Virtual MWh Limit

MPD = The greater of the highest differential between the Day-Ahead and Real-Time Locational Marginal Prices at the 50<sup>th</sup> percentile over the previous twelve (12) months, assessed during the month of April and implemented May 1 of that Year and annually thereafter, or the Minimum MPD Value.

The MPD that will be applied for April 2006 through April 2007 using the prior twelve (12) months data is \$13.33 per MWh.

The Minimum MPD Value to be used in determining MPD is \$12.00 per MWh.

The Transmission Provider may re-evaluate and re-establish the Minimum MPD Value as market conditions dictate.

VMEW = the number of days in the Virtual Transactions Estimated Exposure Window (2 Days).

#### 4) Congestion and Losses Potential Exposure

Potential exposure to non-payment associated with Congestion and Losses is calculated per the formula below:

$$\sum_{k \in K} CLIE_k + \sum_{l \in L} CLME_l + CLEE$$

Where:

CLIE (Congestion and Losses Invoiced Exposure) = the value of a given Congestion and Losses Charge/Credit that has been invoiced, but not yet paid.

K = the set of all Congestion and Losses Charge Types that have been invoiced but not yet paid.

CLME (Congestion and Losses Measured Exposure) = the value of a given Congestion and Losses Charge/Credit that has been settled and/or calculated, but not yet invoiced.

L = the set of all Congestion and Losses Charge Types that have been settled and/or calculated, but not yet invoiced.

CLEE (Congestion and Losses Estimated Exposure):

*CLEE will be the greater of:*

(1) The seven day rolling average of daily Congestion and Losses

Charges/Credits from previously approved initial Settlements times six

(6).

*OR*

(2) The three hundred sixty five (365) day rolling average of daily

Congestion and Losses Charges/Credits from previously approved S7

Settlements times six (6).

## **5) Transmission Service Potential Exposure**

Transmission Service Potential Exposure is calculated per the formula below:

$$\sum \text{TIE} + \sum \text{RCIE} + \sum \text{HVDCIE} + \sum \text{MVPIE} + \sum \text{TME} + \sum \text{RCME} + \sum \text{HVDCME} + \sum \text{MVPME}$$

Where:

TIE (Transmission Invoiced Exposure) = all transmission service charges associated with confirmed Transmission Service reservations from the number of days in the previous month which have been calculated or invoiced but not yet paid.

RCIE (Reliability Coordination Invoiced Exposure) = all Schedule 31 charges associated with Reliability Coordination Service under Part I of Module F that have been invoiced but not yet paid.

HVDCIE (HVDC Service Invoiced Exposure) = all charges associated with HVDC Service that have been invoiced but not yet paid.

MVPIE (Multi-Value Project Invoiced Exposure) = all Schedule 26-A charges from the number of days in the previous month which have been calculated or invoiced but not yet paid.

TME (Transmission Measured Exposure) = all transmission service charges associated with confirmed Transmission Service reservations for:

A. The number of days of the current month which when added to the number of days in the previous month equals 50 Calendar Days if the TIE has not been paid.

OR

B. The number of days in the current month plus the required number of days in the subsequent month to equal 50 Calendar Days if the TIE has been paid.

RCME (Reliability Coordination Measured Exposure) = all Schedule 31 charges associated with Reliability Coordination Service under Part I of Module F that have been measured but not yet paid.

HVDCME (HVDC Service Measured Exposure) = all charges associated with HVDC Service that have been measured but not yet paid.

MVPME (Multi-Value Project Measured Exposure) = all Schedule 26-A charges calculated for:

A. The number of days of the current month which when added to the number of days in the previous month equals 50 Calendar Days if the MVPIE has not been paid.

OR

B. The number of days in the current month plus the required number of days in the subsequent month to equal 50 Calendar Days if the MVPIE has been paid.

## 6) RAR Potential Exposure

Potential exposure to non-payment associated with RAR transactions is calculated per the formula below:

$$\sum_{c \in C} RARIEc + \sum_{d \in D} RARMEd + \sum RAREE$$

Where:



RARIE (RAR Invoiced Exposure) = the value of a given RAR Charge/Credit that has been invoiced, but not yet paid.

C = the set of RAR Charges/Credits that have been invoiced but not yet paid.

RARME (RAR Measured Exposure) = the value of a given RAR Charge/Credit that has been settled and/or calculated, but not yet invoiced.

D = the set of RAR Charges/Credits that have been settled and/or calculated, but not yet invoiced

RAREE = The seven day rolling average of daily RAR Charges/Credits from previously approved initial Settlements times six (6). Additional exposure will be included in this calculation of RAREE for Tariff Customers subject to the ICAP Deferral, Demand Resource Deferral Notice, or DR testing waiver credit requirements in Module E-1. For ICAP Deferral, such exposure will be the product of the ICAP value provided in the ICAP Deferral Notice multiplied by ninety (90) days of daily CONE values (i.e.,  $90/365$  times CONE) for the LRZ where the Planning Resource is located. However, Capacity Deficiency Charges, Reliability Based Demand Curve Opt Out Deficiency Charges, and Capacity Replacement Non-Compliance Charges will be excluded from the RAREE calculation as they are settled all at once rather than daily. For the DR testing waiver or the Demand Resource Deferral Notice, the credit requirements will be the product of the ICAP value registered but not tested multiplied by \$12,000/MW, where \$12,000 is the product of  $3 \times 4 \times \$1,000$  to account for the three (3) times energy penalty assumed under the

waiver, the minimum four (4) hours of LMR response requirements, and the \$1,000 LMP as a proxy for pricing under emergency conditions.

## **B. FTR Potential Exposure**

For credit purposes, the following service categories, as calculated per the formulas in Section V of this Credit Policy, shall be used to calculate FTR Potential Exposure:

1. FTR Auction Settled Transactions Exposure
2. Auction Revenue Rights Settled Exposure
3. FTR and ARR Transactions Cleared But Not Yet Settled Exposure
4. FTR Portfolio Potential Exposure

In the event no FTRs are owned by the Tariff Customer, ARR Settled Exposure and/or FTR and ARR Transactions Cleared But Not Yet Settled Exposure may be excluded from the FTR Potential Exposure calculation and may be covered by Tariff Customer's Non-FTR Credit Limit, accordingly.

In general, the calculation of potential exposure to non-payment within each service category is based on one or more of the following exposure components:

1. Invoiced but not paid;
2. Measured but not invoiced, where measured means the Transmission Provider's Settlement systems have computed the charges and credits for all transactions for a given Operating Day; and
3. Estimated for future Operating Days based on known and/or potential activity.

The service category "FTR and ARR Transactions Cleared But Not Yet Settled" (item 3 above) only has an estimated exposure component. The

estimated exposure is the sum of the net positive monthly values of all cleared but not yet settled FTRs and ARRs. A net negative monthly value of all cleared but not yet settled FTRs and ARRs is not included in the FTR Potential Exposure calculation. The FTRs included in this calculation reflect the values from an FTR Auction(s) which have been cleared but not yet settled. The ARR values included in this calculation reflect the clearing prices established as a result of the annual FTR Auction.

In the event a Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) on three (3) consecutive Business Days, then for the next ten (10) days the Tariff Customer's FTR Potential Exposure shall be equal to the sum of: (i) the amount calculated per the formulas in this Section V; plus (ii) a factor of up to ten (10) times the average amount of the excess exposure over the three (3) consecutive Business Days, if the Transmission Provider determines, after consultation with the Tariff Customer, that such additional collateral is necessary to reflect the potential exposure associated with the Tariff Customer's expected market activity.

On the same day the third consecutive margin call is made, the Transmission Provider will initiate the consultation process by notifying the Tariff Customer of the additional collateral requirement based on the maximum amount permitted under the formula above and by requesting the Tariff Customer to supply any information that would permit the Transmission Provider to set the additional collateral requirement at a level lower than the maximum. Such information shall include, but is not limited

to: (i) the Tariff Customer's estimated exposure, (ii) explanations for any recent change in the Tariff Customer's market activity, (iii) any relevant new load or unit Outage information; or (iv) any default or supply contract expiration, termination or suspension. The Tariff Customer shall have one (1) Business Day to respond to the Transmission Provider's request. If the requested information is provided in full to the Transmission Provider's satisfaction during said period, the additional collateral requirement shall reflect the Tariff Customer's anticipated exposure based on the information provided. If the Tariff Customer fails to provide the requested information in full during said period, the additional collateral requirement shall equal the maximum amount permitted under the formula set forth above. In both cases, the additional collateral shall be provided by the Tariff Customer by close of the second Business Day following the day on which the third consecutive margin call was made, upon confirmation from the Transmission Provider.

To illustrate, assume a Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) on day one by \$100,000. The Transmission Provider would issue a margin call for financial assurances pursuant to Section II.F of this Attachment L. Next, assume that on day two a Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) by \$200,000, the Transmission Provider issues another margin call, and the excess is in addition to any financial assurances the Tariff Customer provided for the exposure on day one. Finally, assume on day

three the Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) by an additional \$200,000. Again the Transmission Provider would issue a margin call.

The average amount of the excess exposure over these three days is \$166,667. Therefore, for ten (10) days after the third consecutive margin call, the Tariff Customer's FTR Potential Exposure value would be that calculated per the existing formulae plus the addition of up to \$1,666,670. On the eleventh day (the fourteenth day after the first margin call), assuming the Tariff Customer's FTR Potential Exposure did not continue to exceed its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation), the FTR Potential Exposure value would be calculated per the existing formulae without the adder for the most recent three days multiplied by a factor of up to ten (10) times the average amount of the excess exposure.

If the Tariff Customer's FTR Potential Exposure exceeds its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) for more than three (3) consecutive Business Days, then the three (3) day average will be calculated on a rolling basis and the highest calculation for the days following will apply. Using the example above, assume the Tariff Customer's FTR Potential Exposure exceeded its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) on days four, five and six by \$200,000, \$100,000 and \$50,000, respectively. Beginning on day five and continuing

through the fourteenth day after the first margin call, up to \$200,000 would be added to the existing formulae (days two, three and four are each \$200,000 for an average of \$200,000, ten times of which is \$2,000,000). For the sixteenth day after the first margin call, the number would be reduced to \$1,166,666 (ten times the average of days four, five and six). Finally, assuming the Tariff Customer's FTR Potential Exposure did not continue to exceed its Financial Security (less its alternative capitalization restrictions, if any, and FTR Auction Credit Allocation) after day six, the FTR Potential Exposure value would be calculated per the existing formulae without the adder beginning on the seventeenth day after the first margin call.

#### 1) FTR Auction Settled Transactions Exposure

Potential exposure to non-payment associated with settled FTR Auction transactions is calculated per the formula below:

$$\sum_{h \in H} \text{FTRTIE}_h + \sum_{i \in I} \text{FTRTME}_i$$

Where:

FTRTIE (FTR Transaction Invoiced Exposure) = the value of a given FTR Charge/Credit that has been invoiced, but not yet paid.

H = the set of all FTR Charge Types that have been invoiced but not yet paid.

FTRTME (FTR Transaction Measured Exposure) = the value of the given FTR Charge/Credit that has been settled and/or calculated, but not yet invoiced.

I = the set of all FTR Charge Types that have been settled and/or calculated, but not yet invoiced.

## 2) Auction Revenue Rights Settled Exposure

Potential exposure to non-payment associated with settled ARRs is calculated per the formula below:

$$\sum_{c \in C} \text{ARRIE}_c + \sum_{d \in D} \text{ARRME}_d$$

Where:

ARRIE (Auction Revenue Rights Invoiced Exposure) = the value of a given Auction Revenue Rights Charge/Credit that has been invoiced, but not yet paid.

C = the set of all Auction Revenue Rights Charge Types that have been invoiced, but not yet paid.

ARRME (Auction Revenue Rights Measured Exposure) = the value of a given Auction Revenue Rights Charge/Credit that has been settled and/or calculated, but not yet invoiced

D = the set of all Auction Revenue Rights Charge Types that have been settled and/or calculated, but not yet invoiced.

## 3) FTR and ARR Transactions Cleared But Not Yet Settled Exposure

The potential exposure to non-payment associated with the FTR and ARR

Transactions Cleared But Not Yet Settled is calculated per the formula below:

$$\sum_{a \in A} APEM_a = \sum_{r \in R} FTRTEE_r + \sum_{e \in E} ARREE_e$$

Where:

APEM (Auction Payable Exposure Month(s)) = any current or forward month where the sum of the FTRTEE and ARREE is calculated as a net payable exposure by a given Tariff Customer to the Transmission Provider.

A = the set of all current or forward months where the sum of the FTRTEE and ARREE is calculated as a net payable exposure by a given Tariff Customer to the Transmission Provider

FTRTEE (FTR Transaction Estimated Exposure) = the value of a given FTR Charge/Credit that has been cleared, but not yet settled.

R = the set of all FTR Charge Types by month that have been cleared, but not yet settled.

ARREE (Auction Revenue Rights Estimated Exposure) = the value of a given Auction Revenue Rights Charge/Credit that has been cleared, but not yet settled



E = the set of all Auction Revenue Rights Charge Types by month that have been cleared, but not yet settled

#### 4) FTR Portfolio Potential Exposure

Potential exposure to non-payment associated with FTRs registered in the name of the Tariff Customer is calculated per the formula below:

$$\sum_{a \in A} \text{FTRPIE}_a + \sum_{b \in B} \text{FTRPME}_b + \sum \text{FTRPEE}$$

Where:

FTRPIE (FTR Portfolio Invoiced Exposure) = the value of a given FTR Portfolio charge/credit that has been invoiced, but not yet paid.

A = the set of all FTR Portfolio Charge Types that have been invoiced, but not yet paid.

FTRPME = (FTR Portfolio Measured Exposure) = the value of a given FTR Portfolio Charge/Credit that has been settled and/or calculated, but not yet invoiced.

B = the set of all FTR Portfolio Charge Types that have been settled and/or calculated, but not yet invoiced.

FTRPEE = (FTR Portfolio Estimated Exposure) = any current or forward month where the value of the FTR Portfolio is calculated as a net payable exposure by a

given Tariff Customer to the Transmission Provider, which is the greater of the three calculations, FTRHCR, FTRMCR, and FTRMtA, per the following formula:

$$FTRPEE = \max(FTRHCR, FTRMCR, FTRMtA)$$

Where:

FTRHCR = Historical Collateral Requirement is calculated per the formula below:

$$\sum (FTRMW \times (\max(SRMCC_{P(50)} - SKMCC_{P(50)}, SRMCC_{P(75)} - SKMCC_{P(75)})) \times PR \times HUM)_m$$

$$m \in M$$

Where

FTRMW = the MW value of the given FTR.

$SRMCC_{P(50)}$  = the \$/MW/h Marginal Congestion Cost of the given FTR's

Source Commercial Pricing Node at the 50<sup>th</sup> Percentile. The 50<sup>th</sup>

Percentile Value (the P50 Value) for each Commercial Price Node will be

developed on a rolling twelve (12) month basis using the actual values

from the previous applicable twelve (12) months. These P50 values will

be the value used as the Monthly Proxy Value. A new Monthly Proxy

Value will be calculated each month using the actual values for the

previous twelve (12) months and will become effective as soon as practicable each month.

$SRMCC_{P(75)}$  = the \$/MW/h Marginal Congestion Cost of the given FTR's Source Commercial Pricing Node at the 75<sup>th</sup> Percentile. The 75<sup>th</sup> Percentile Value (the P75 Value) for each Commercial Price Node will be developed on a rolling twelve (12) month basis using the actual values from the previous applicable twelve (12) months. These P75 values will be the value used as the Monthly Proxy Value. A new Monthly Proxy Value will be calculated each month using the actual values for the previous twelve (12) months and will become effective as soon as practicable each month.

$SKMCC_{P(50)}$  = the \$/MW/h Marginal Congestion Cost of the given FTR's Sink Commercial Pricing Node at the 50<sup>th</sup> Percentile. The 50<sup>th</sup> Percentile value for each Commercial Price Node will be developed on a rolling twelve (12) month basis using the actual values from the previous applicable twelve (12) months. These P50 values will be the values used as the Monthly Proxy Value. A new Monthly Proxy Value will be calculated each month using the actual values for the previous twelve (12) months and will become effective as soon as practicable each month.

$SKMCC_{P(75)}$  = the \$/MW/h Marginal Congestion Cost of the given FTR's Sink Commercial Pricing Node at the 75<sup>th</sup> Percentile. The 75<sup>th</sup> Percentile

value for each Commercial Price Node will be developed on a rolling twelve (12) month basis using the actual values from the previous applicable twelve (12) months. These P75 values will be the values used as the Monthly Proxy Value. A new Monthly Proxy Value will be calculated each month using the actual values for the previous twelve (12) months and will become effective as soon as practicable each month.

PR (Peak Ratio) = the percentage of hours for peak and off-peak products. The peak percentage is 48% and the off-peak percentage is 52%.

HUM (Hours until Maturity) = the number of days remaining in the life of the FTR by month times 24 (to translate Days to Hours).

M = the set of all on-peak and off-peak FTRs owned by a given Market Participant.

FTRMCR = Minimum Collateral Requirement is calculated per the formula below:

$$\text{FTRMCR} = \sum (\text{FTRMW} \times \text{PR} \times \text{MCR} \times \text{HUM})_m$$

$$m \in M$$

Where:

FTRMW = the MW value of the given FTR

PR (Peak Ratio) = the percentage of hours for peak and off-

peak products. The peak percentage is 48% and the off-peak percentage is 52%.

MCR = Minimum per Collateral Requirement (set at \$0.05)

HUM (Hours until Maturity) = the number of days remaining in the life of the FTR by month, times 24 (to translate Days to Hours).

M = the set of all on-peak and off-peak FTRs owned by a given Market Participant.

FTRMtA = Mark-to-Auction Adjustment is calculated per the formula below:

$$\text{FTRMtA} = \sum (\text{FTRMW} \times \text{PR} \times \text{HUM} \times \text{FTRMtADiff})_m$$

$$m \in M$$

Where:

FTRMW = the MW value of the given FTR

PR (Peak Ratio) = the percentage of hours for peak and off-peak products. The peak percentage is 48% and the off-peak percentage is 52%.

HUM (Hours until Maturity) = the number of days remaining in the life of the FTR by month, times 24 (to translate Days to Hours).

$$\text{FTRMtADiff} = (\text{Purchase Price} - \text{Current Auction Price})$$

Purchase Price = The original acquisition price of  
the FTR for the appropriate time frame

Current Auction Price = The most recently cleared  
FTR auction price for the appropriate time frame

M = the set of all on-peak and off-peak FTRs owned by a given  
Market Participant.

### **C. Non-FTR Potential Exposure and/or FTR Potential Exposure Violations**

A Tariff Customer will be required to (i) make payments of invoiced but unpaid amounts to reduce its Non-FTR Potential Exposure and/or its FTR Potential Exposure and/or (ii) provide additional Financial Security to increase its Total Credit Limit when the following occurs:

- a. its Non-FTR Potential Exposure equals or exceeds its Non-FTR Credit Limit (i.e., a Non-FTR Potential Exposure Violation); or
- b. its FTR Potential Exposure plus the larger of the FTR Auction Credit Allocation or FTR Auction Credit Exposure exceeds its Financial Security less its alternative capitalization requirement (i.e., a FTR Potential Exposure Violation).

#### **1) Submission of Financial Security for Non-FTR Potential Exposure and/or FTR Potential Exposure Violations**

Financial Security submitted to increase a Tariff Customer's Total Credit Limit must meet the requirements set for Financial Security as defined in Section VI.B of this Credit Policy.

A Tariff Customer will have two (2) Business Days from receipt of written notification of a Non-FTR Potential Exposure Violation and/or FTR Potential Exposure Violation to remedy the situation in a manner deemed acceptable by the Transmission Provider.

**2) Suspension from Transmission Service and/or Market Services**

A Tariff Customer that fails to cure a Non-FTR Potential Exposure Violation or an FTR Potential Exposure Violation within the required cure period shall be suspended, in accordance with Sections 7.16(a)(1)(ii) and 7.16(a)(2) of the Tariff, from participating in the Transmission Provider's Energy and Operating Reserve Markets and from requesting any future Markets and Services unless and until Tariff Customer's Non-FTR Potential Exposure Violation and/or its FTR Potential Exposure Violation is cured.

**VI. CORPORATE GUARANTY AND FORMS OF FINANCIAL SECURITY**

Each and every Corporate Guaranty shall secure any and all non-FTR obligations of such Applicant and/or Tariff Customer under or in connection with this Tariff and/or other agreements. Any acceptable Financial Security provided by or on behalf of an Applicant and/or Tariff Customer shall secure any and all obligations of such Applicant and/or Tariff Customer under or in connection with this Tariff and/or the other Agreements. The Tariff and the other Agreements are subject to cross-default under Section 7.16.1 of

this Tariff, such that Default under any Agreement (including, without limitation, any Financial Security) shall be deemed a Default under all of the Agreements.

The Transmission Provider reserves the right to deny, reject, or terminate acceptance of any Foreign Guaranty at any time, including for material adverse circumstances or occurrences.

#### **A. Corporate Guaranty**

In those cases where an Applicant and/or Tariff Customer is an Affiliate of another entity and would like to utilize the consolidated financial statements and other relevant information of its parent company or another Affiliate for obtaining credit, a signed Corporate Guaranty is required. A Corporate Guaranty may be accepted from a Guarantor that is organized under the laws of a jurisdiction within the United States or Canada (a Non-Foreign Guarantor) or a Guarantor that is organized under the laws of a jurisdiction outside of the United States or Canada (Foreign Guarantor). Through this financial instrument the parent company or other Affiliate guarantees all the Non-FTR liabilities of the Applicant and/or Tariff Customer.

Applicants and/or Tariff Customers will have an opportunity to utilize a Corporate Guaranty if all of the following conditions are met:

- 1) This Credit Policy sets forth financial standards for Non-Foreign Guarantors or Foreign Guarantors. The Guarantor will be eligible to provide a Corporate Guaranty if the Guarantor is found to meet the creditworthiness criteria of the Transmission Provider for its respective category.



- 2) The form and substance of the Corporate Guaranty must be acceptable to the Transmission Provider. *See* Exhibit I of this policy for an acceptable form of Non-Foreign Guaranty and Exhibit I.A for an acceptable form of Foreign Guaranty. The Transmission Provider may amend the form of Non-Foreign Guaranty and the form of Foreign Guaranty from time to time, either generally or on a case-by-case basis. In general, the Corporate Guaranty should clearly state the identities of the “Guarantor,” “Beneficiary” (Transmission Provider), and the “Obligor” (Transmission Customer and/or Market Participant). Further, the Corporate Guaranty should specify the relationship between the “Guarantor” and the “Obligor.”
- 3) The Non-Foreign Guaranty must be duly authorized by the Guarantor and signed by an officer of the Guarantor. The Transmission Provider may require the Non-Foreign Guarantor to furnish to the Transmission Provider:
  - (i) a properly executed opinion of the Guarantor’s counsel with respect to the enforceability of the Corporate Guaranty, and/or
  - (ii) a certificate of Corporate Guaranty that includes a seal of corporation with the Resolution to the Board of Directors and the Secretary’s Certificate of Director’s Resolutions (both contained in Exhibit I of this Credit Policy) certifying that the execution,

delivery, and performance of the Corporate Guaranty has been  
duly authorized.

Adequate documentation regarding the signature authority of the person signing the  
Corporate Guaranty must be provided to the Transmission Provider.

The Guarantor will be subject to periodic financial reviews for the purpose of  
monitoring its creditworthiness, and the Corporate Guaranty will obligate the  
Guarantor to submit all information and documents required of Applicant(s) and/or  
Tariff Customer(s) under Section I of this Credit Policy including, without limitation,  
Rating Agency reports, current financial statements, and information on any Material  
Change in its financial condition.

Any breach of the Corporate Guaranty by the Guarantor or the requirements of the  
Guarantor under this policy shall be deemed a breach of this policy and a Default  
under this Tariff by the Guarantor and the respective Applicant(s) and/or Tariff  
Customer(s) for whose benefit the Corporate Guaranty was issued. A breach of this  
policy and a Default under this Tariff shall also occur if: (i) the Corporate Guaranty  
expires or terminates (other than in accordance with its terms or upon the written  
consent of the Transmission Provider); (ii) the Guarantor disaffirms, disclaims,  
repudiates or rejects or challenges the validity of all or any part of the Corporate  
Guaranty; or (iii) the Corporate Guaranty or any material provision of the Corporate  
Guaranty ceases to be in full force and effect (other than in accordance with its terms  
or upon the written consent of the Transmission Provider).

An Applicant and/or Tariff Customer or the Guarantor may request the withdrawal of its Corporate Guaranty by providing a written request to do so to Transmission Provider credit personnel. Notwithstanding any withdrawal request, a Corporate Guaranty may be withdrawn and/or terminated only upon approval by Transmission Provider. The Transmission Provider will not approve withdrawal or termination of a Corporate Guaranty unless and until:

- (i) alternate Financial Security acceptable to the Transmission Provider has been provided; or
- (ii) all financial obligations of Applicant and/or Tariff Customer under this Tariff and all other Agreements have been irrevocably satisfied in full and, if an Applicant, the Applicant has withdrawn its application to become a Market Participant, Transmission Customer or Coordination Customer and, if a Tariff Customer, the Tariff Customer is no longer a Market Participant, Transmission Customer or Coordination Customer.

If a Guarantor provides Corporate Guaranties for multiple Applicants and/or Tariff Customers and/or is also a Tariff Customer, the sum value of the Unsecured Credit Allowance of all such Applicants and/or Tariff Customer and the Guarantor shall not exceed the lesser of:

- (i) the approved Unsecured Credit Allowance for the Guarantor based on Transmission Provider's financial review of Guarantor; or
- (ii) \$50 million for Non-Foreign Guaranties and \$25 million for Foreign Guaranties.

If a Corporate Guaranty is utilized to establish an Unsecured Credit Allowance for an Applicant or Tariff Customer, the value of the Corporate Guaranty shall be the least of:

- (i) the limit imposed in the Corporate Guaranty; or
- (ii) the portion of the Unsecured Credit Allowance calculated for the Guarantor that is allocated to such Applicant and/or Tariff Customer in Transmission Provider's discretion; or
- (iii) \$50 million for Non-Foreign Guaranties and \$25 million for Foreign Guaranties.

*See Section II.B for further information on Unsecured Credit Allowance.*

#### **1. Non-Foreign Guaranties**

Applicants and/or Tariff Customers who request a Non-Foreign form of Guaranty may be extended unsecured credit equal to the least of:

- (i) the amount determined as a result of financial review of the Guarantor by the Transmission Provider;
- (ii) the amount guaranteed by the Guarantor if the Transmission Provider finds such amount appropriate; and
- (iii) \$50 Million or, the total of all unsecured credit where the Guarantor is also an Applicant and/or Tariff Customer or guarantees the obligations of more than one Applicant and/or Tariff Customer, the portion of the \$50 million

Unsecured Credit maximum that the Transmission Provider allocates to the Applicant and/or Tariff Customer, in the Transmission Provider's discretion.

Any shortfall between the Total Potential Exposure and the Unsecured Credit granted to the Applicant and/or Tariff Customer as a result of financial review of the Guarantor will require additional Financial Security.

## **2. Foreign Guaranties**

A Foreign Guaranty is a Corporate Guaranty that is provided by a Foreign Guarantor.

A Tariff Customer may provide a Foreign Guaranty in satisfaction of part of its credit obligations provided that all of the following conditions are met:

### **a. A Foreign Guaranty:**

- i. Must contain provisions equivalent to those contained in the Transmission Provider's standard form of Foreign Guaranty with any modifications subject to review and approval by the Transmission Provider's counsel.
- ii. Must be denominated in US currency.
- iii. Must be written and executed solely in English, including any duplicate originals.
- iv. Will not be accepted towards a Tariff Customer's Unsecured Credit Allowance for more than the following limits, depending on the Foreign Guarantor's credit rating and the sovereign rating of the country:

Rating of Foreign Guarantor	Maximum Accepted Guaranty if Country Rating is AA+ (in U.S. Dollars)
A- or above	\$25,000,000

BBB+	\$15,000,000
BBB	\$5,000,000
BBB- or below	\$0

- v. May not exceed 50% of the Tariff Customer's Unsecured Credit Allowance, if the Foreign Guarantor is rated less than BBB+ or equivalent.

**b. A Foreign Guarantor:**

i. Credit Requirements:

Must not only satisfy all provisions of the Transmission Provider's Credit Policy applicable to Non-Foreign Guarantors, but must also have a Senior Unsecured debt rating equal to BBB or greater (or the equivalent, in the Transmission Provider's sole discretion) by any and all Rating Agencies that provide rating coverage of the entity. The credit limit extended to a Foreign Guarantor will be based on the Transmission Provider's credit scoring model applicable to Domestic Guarantors; however, the maximum Unsecured Credit Allowance will be capped by the credit rating and the sovereign rating as detailed in the above table.

ii. Additional Requirements

- Must be an Affiliate of the Tariff Customer.
- Must provide audited financials in United States and/or Canadian GAAP format or International Financial Reporting Standards (IFRS) format with a clear representation of net worth, intangible assets, and any other information the Transmission Provider may

require in order to determine the entity's Unsecured Credit Allowance.

- Must maintain an agent for acceptance of service of process in the United States; such agent shall be situated in the State of Indiana
- Must provide a Secretary's Certificate certifying the adoption of Corporate Resolutions:
  1. Authorizing and approving the Guaranty; and
  2. Authorizing the Officers to execute and deliver the Guaranty on behalf of the Guarantor.
- Must be domiciled in a country with a minimum long-term sovereign (or equivalent) rating of AA+/Aa1, with the following conditions:
  1. Sovereign ratings must be available from at least two (2) Rating Agencies.
  2. Each Rating Agency's sovereign rating for the domicile will be considered to be the lowest of: country ceiling, senior unsecured government debt, long-term foreign currency sovereign rating, long-term local currency sovereign rating, or other equivalent measures, at the Transmission Provider's sole discretion.

3. If ratings are available from more than one Rating Agency, the lowest available rating will be used.
- Must be domiciled in a country that recognizes and enforces judgments of US courts.
  - Must demonstrate financial commitment to activity in the United States as evidenced by one of the following:
    1. American Depositary Receipts (ADR) are traded on the New York Stock Exchange, American Stock Exchange, or NASDAQ.
    2. Equity ownership worth over USD 100,000,000 in the wholly-owned or majority owned subsidiaries in the United States
  - Must satisfy all other applicable provisions of the Transmission Provider's Tariff and/or Market Participant Agreement, including this Credit Policy.
  - Must pay for all expenses incurred by the Transmission Provider related to reviewing and accepting Foreign Guaranty beyond nominal in-house credit and legal review.
  - Must, at its own cost, provide the Transmission Provider with an independent legal opinion from an attorney/solicitor of the Transmission Provider's choosing and licensed to practice law in



the United States and/or Guarantor's domicile, in form and substance acceptable to the Transmission Provider in its sole discretion, confirming the enforceability of the Foreign Guaranty, the Guarantor's legal authorization to grant the Guaranty, the conformance of the Guaranty, Guarantor, and Guarantor's domicile to all of these requirements, and such other matters as the Transmission Provider may require in its sole discretion.

**B. Acceptable Forms of Financial Security**

Applicants and/or Tariff Customers who provide Financial Security under the terms of this Credit Policy may submit Financial Security in the form of Cash Deposit or Irrevocable Letter of Credit. All of the above instruments may be submitted separately or in combinations to constitute the full amount of any required Financial Security. The Transmission Provider will instruct the Applicant and/or Tariff Customer as to the form of Financial Security most appropriate to its circumstances. The Applicant and/or Tariff Customer will be required to fulfill their obligations for Financial Security per the Transmission Provider's instructions.

Any breach of Financial Security by the person issuing the Financial Security under this policy shall be deemed a breach of this policy and a Default under this Tariff by the person issuing the Financial Security and the respective Applicant(s) and/or Tariff Customer(s) for whose benefit the Financial Security was issued. A breach of this policy and a Default under this Tariff shall also occur if: (i) the Financial Security expires or terminates (other than in accordance with its terms or upon the written

consent of the Transmission Provider); (ii) the person issuing the Financial Security disaffirms, disclaims, repudiates or rejects or challenges the validity of all or any part of the Financial Security; or (iii) the Financial Security or any material provision of the Financial Security ceases to be in full force and effect (other than in accordance with its terms or upon the written consent of the Transmission Provider).

### **1) Cash Deposits**

A Cash Deposit in an amount determined by the Transmission Provider may serve as a form of Financial Security. The initial Cash Deposit must be accompanied by execution and delivery of a Cash Collateral Agreement in the form attached to this Credit Policy as Exhibit III and, upon the request of the Transmission Provider, a “Control Agreement” in a form approved by the Transmission Provider. The Transmission Provider may amend the forms of agreement from time to time, either generally or on a case-by-case basis.

The Cash Deposit will be placed in a segregated account to be registered in Transmission Provider’s name and to be held within the complete control of the Transmission Provider to secure the payment of the Applicant’s and/or Tariff Customer’s obligations under or in connection with the Tariff and/or any of the other Agreements. Cash Deposits will be held in accordance with the Cash Collateral Agreement and will accrue interest at the Transmission Provider’s overnight bank rate. This interest will accrue to the benefit of the Applicant and/or Tariff Customer and be added to the balance of the segregated account. Accrued and unpaid interest that has not been applied to satisfy the Applicant’s

and/or Tariff Customer's obligations will be released and paid to the Applicant and/or Tariff Customer quarterly by the last business day in January, April, July, and October of each year; provided that the Transmission Provider shall not be obligated to pay any interest to the Applicant and/or Tariff Customer or release any amount from the segregated account after and during the continuation of a Default.

The Applicant and/or Tariff Customer shall be required in the Credit and Security Agreement and/or Cash Collateral Agreement to grant Transmission Provider a first priority security interest in and to any and all cash, cash collateral and deposit accounts held or controlled by the Transmission Provider then existing or thereafter opened and any and all proceeds of such collateral, including, without limitation, the cash and interest deposited therein. This security interest secures the prompt payment when due of any and all obligations of the Applicant and/or Tariff Customer under or in connection with this Tariff, and/or any and all other Agreements.

Should an Applicant and/or Tariff Customer fail to make a timely payment, the Applicant's and/or Tariff Customer's outstanding account balance will be satisfied using deposited funds. If any portion or all of the deposit is used to satisfy an Applicant's and/or Tariff Customer's obligation, the deposit must be promptly replenished within ten (10) Business Days.

At the Transmission Provider's discretion, an Applicant or Tariff Customer may replace Cash Deposits with other forms of Financial Security.

## 2) Irrevocable Letter of Credit

An Irrevocable Letter of Credit for the value of Financial Security required by the Transmission Provider may be submitted as a form of Financial Security. *See* Exhibit II of this Credit Policy for an acceptable form of Irrevocable Letter of Credit. The Transmission Provider may amend the form of Irrevocable Letter of Credit from time to time, generally or on a case-by-case basis.

The Irrevocable Letter of Credit should clearly specify the “Issuer,” the “Account Party” and “Beneficiary,” the initial term of one (1) year and the dollar amount available for drawing. It should also include a statement as to the instructions and terms for funds disbursement (*see* Exhibit II). At the time of issuance and at all times the Irrevocable Letter of Credit is outstanding, the financial institution issuing the Irrevocable Letter of Credit cannot have a Long Term rating lower than “A-” by Standard & Poor’s or lower than “A3” by Moody’s. Further, a non-domestic or non-Canadian financial institution issuing the Irrevocable Letter of Credit must issue the Irrevocable Letter of Credit from a domestic branch in addition to meeting the above mentioned minimum rating requirement. All costs associated with obtaining an Irrevocable Letter of Credit will be the sole responsibility of the Applicant and/or Tariff Customer. If Tariff Customer chooses to replace an Irrevocable Letter of Credit with a new Irrevocable Letter of Credit, the Transmission Provider will return the initial Irrevocable Letter of Credit when the replacement Irrevocable Letter of Credit is received by the

Transmission Provider in form and amount acceptable to the Transmission Provider.

Under the form of Irrevocable Letter of Credit, the Irrevocable Letter of Credit automatically renews each year unless the issuing financial institution provides a notice to the Transmission Provider at least one hundred twenty (120) days prior to its expiration date stating its decision not to renew the Irrevocable Letter of Credit. Regardless of whether the Irrevocable Letter of Credit automatically renews, if the Irrevocable Letter of Credit is not renewed, for at least an additional year, at least one hundred twenty (120) days prior to its stated expiration date (a “Non-Renewal Event”), the Applicant and/or Tariff Customer must submit another form of Financial Security acceptable to the Transmission Provider, in the Transmission Provider’s sole discretion, no later than one hundred ten (110) days prior to the stated expiration date.

Should the amount of the Irrevocable Letter of Credit fall below the required level due to a drawing, it must be promptly replenished or substituted by another form of Financial Security acceptable to the Transmission Provider within ten (10) Business Days.

If the issuing financial institution’s Long Term rating is lower than “A-” by Standard & Poor’s or lower than “A3” by Moody’s , the Transmission Provider may require the Applicant and/or Tariff Customer to submit another form of Financial Security acceptable to the Transmission Provider, in the Transmission

Provider's sole discretion, promptly (no later than ten (10) Business Days of such request) in place of the Irrevocable Letter of Credit.

If the Applicant and/or Tariff Customer fails to submit the required Financial Security within the required time period after a Non-Renewal Event or Rating Event, it may be a Default under this Credit Policy and the Tariff. In addition to any other remedies available to the Transmission Provider, the Transmission Provider may draw down the entire Irrevocable Letter of Credit and hold the proceeds in an unsegregated account and apply such proceeds to amounts owed by the Applicant and/or Tariff Customer under this Tariff, and/or any of the other Agreements. If the Applicant and/or Tariff Customer executes and delivers the documents required by the Transmission Provider, including, without limitation, a Cash Collateral Agreement in the form attached to this Credit Policy (or such other form acceptable to the Transmission Provider) or an amendment thereto, the Transmission Provider shall treat the amount obtained upon such draw and not previously applied to amounts owed by such Applicant and/or Tariff Customer as a Cash Deposit and transfer it to a segregated account.

By executing the Credit and Security Agreement in the form attached to this Credit Policy as Exhibit V, the Applicant and/or Tariff Customer grants the Transmission Provider a first priority security interest in and to any and all proceeds of any and all Letters of Credit then existing or thereafter issued with the Transmission Provider as Beneficiary and Applicant and/or Tariff Customer as Account Party, including, without limitation, the cash issued upon a draw thereon.

This security interest secures the prompt payment when due of any and all obligations of the Applicant and/or Tariff Customer under or in connection with the Tariff and any and all other Agreements.

Should an Applicant and/or Tariff Customer fail to make a timely payment, the Transmission Provider may use proceeds from the Irrevocable Letter of Credit to satisfy the Applicant's and/or Tariff Customer's outstanding account balance.

## **VII. REQUESTS TO CHANGE UNSECURED CREDIT OR FINANCIAL SECURITY**

If there is a positive Material Change in the financial condition of the Tariff Customer, a significant reduction in the Total Potential Exposure of the Tariff Customer, or any other change that the Tariff Customer believes may warrant an increase in the Tariff Customer's Unsecured Credit Allowance and/or a reduction in the Financial Security provided by the Tariff Customer, the Tariff Customer may make a written request to the Transmission Provider to reevaluate the Tariff Customer's Unsecured Credit Allowance and/or the Tariff Customer's level of Financial Security. The Transmission Provider will respond to such a request within a reasonable time after receiving all information that it requests in response to the Tariff Customer's request. The Transmission Provider anticipates that it will respond to the Tariff Customer's request within ten (10) Business Days of receiving all such information.

## **VIII. DEFAULTS**

Any violation of any provision of this Credit Policy as it may be amended from time to time, unless cured within any applicable cure period set forth herein, shall be a Default under this Credit Policy and this Tariff. Section 7.16.1 of this Tariff provides that any

Default under this Tariff (including, without limitation, this Credit Policy) and/or any other Agreements shall constitute a Default under the Tariff and all of the Agreements.



## EXHIBIT I

### CORPORATE GUARANTY

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, including, without limitation, the credit advance by the Midcontinent Independent System Operator, Inc. (“Transmission Provider”) to \_\_\_\_\_ (“Company”), the undersigned guarantor (“Guarantor”), hereby unconditionally and irrevocably guarantees the prompt and complete payment of all amounts that Company now or hereafter owes, and the performance of all other obligations of the Company, under the terms and conditions of the Transmission Provider’s Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission (“Commission”), as may be amended and supplemented from time to time, together with all schedules and attachments thereto and any replacements or substitutes (the “Tariff”), any agreements entered into by Company under, pursuant to, or in connection with the Tariff and/or any agreements to which Transmission Provider and Company are Parties, as may be amended or supplemented from time to time whether now existing or hereafter arising in accordance with their respective terms, together with costs of enforcement and collection, including attorneys’ fees (collectively, the “Liabilities”). The Tariff, any and all agreements entered into by Company under, pursuant to or in connection with the Tariff, and any and all agreements to which the Company and Transmission Provider are parties, each as it may be amended from time to time and whether it currently exists or is entered into at anytime in the future are collectively referred to herein as the “Agreements”. The Agreements include, without limitation, the Tariff,

the Service Agreement, dated \_\_\_\_\_, \_\_\_\_\_, and the Market Participant Agreement, dated \_\_\_\_\_, \_\_\_\_\_.

1. If Company does not perform each of its obligations in strict accordance with each respective Agreement, Guarantor shall immediately pay upon demand all amounts now or hereafter due under all of the Agreements (including, without limitation, all principal, interest and fees) and otherwise proceed to complete the same and satisfy all of the Liabilities, including Company's obligations under all of the Agreements. This Guaranty may be satisfied by Guarantor paying and/or performing (as appropriate) Company's Liabilities or by the Guarantor causing Company's Liabilities to be paid or performed; provided, however, that Guarantor shall at all times remain fully responsible and liable for its obligations hereunder notwithstanding any such payment or performance (or failure thereof) by any third party.
2. This Guaranty is an absolute, unconditional and continuing guaranty of the full and punctual payment and performance by Company of all of the Liabilities, including each of its obligations under each of the Agreements, and not of collectibility only, and is in no way conditioned upon any requirement that Transmission Provider (or any other person) first attempt to collect payment from Company or any other guarantor or surety or resort to any security or other means of obtaining payment of all or any part of the Liabilities or upon any other contingency. This is a continuing guaranty and shall be binding upon Guarantor regardless of: (i) how long after the date hereof the Agreement is entered into; (ii) how long after the date hereof any part of the obligations under the Agreements is incurred by Company; and (iii) the amount of the obligations under the Agreements at

any time outstanding. Transmission Provider may enforce this Guaranty from time to time and as often as occasion for such enforcement may arise.

3. The obligations hereunder are independent of the obligations of Company and a separate action or actions may be brought and prosecuted against Guarantor whether action is brought against Company or whether Guarantor is joined in any such action or actions. Guarantor's liability under this Guaranty is not conditioned or contingent upon genuineness, validity, regularity or enforceability of any of the Agreements.
4. Guarantor authorizes Transmission Provider, without notice or demand and without affecting its liability hereunder, from time to time, to: (i) renew, extend, modify, supplement or otherwise change the terms of any or all the Agreements or any part thereof; (ii) take and hold security for the payment of this Guaranty or any or all of the Liabilities, and exchange, enforce, waive and release any such security; and (iii) apply such security and direct the order or manner of sale of any collateral provided as such security as Transmission Provider (or any other person) in its sole discretion may determine. The obligations and liabilities of Guarantor hereunder shall be absolute and unconditional, shall not be subject to any counterclaim, set-off, deduction or defense based upon any claim Guarantor may have against Company, any other Guarantor, or any other person or entity, and shall remain in full force and effect until all of the obligations of Guarantor hereunder and all of the Liabilities, including all obligations of Company under each of the Agreements, have been fully and irrevocably satisfied, without regard to, or release or discharge by, any event, circumstance or condition (whether or not Guarantor shall have knowledge or notice thereof) which might constitute a legal or

equitable defense or discharge of a Guarantor or surety or which might in any way limit recourse against Guarantor, including without limitation: (i) any renewal, amendment or modification of, or supplement to, the terms of any or all of the Agreements; (ii) any waiver, consent or indulgence by Transmission Provider (or any other person), or any exercise or non-exercise by Transmission Provider (or any other person) of any right, power or remedy, under or in respect of this Guaranty or any of or all the Agreements (whether or not Guarantor or Company has or have notice or knowledge of any such action or inaction); (iii) the invalidity or unenforceability, in whole or in part, of any or all of the Agreements, or the termination, cancellation or frustration of any thereof, or any limitation or cessation of Company's liability under any thereof (other than any limitation or cessation expressly provided for therein), including without limitation any invalidity, unenforceability or impaired liability resulting from Company's lack of capacity, power and/or authority to enter into any or all of the Agreements and/or to incur any or all of the obligations thereunder, or from the execution and delivery of any or all of the Agreements by any person acting for Company without or in excess of authority; (iv) any actual, purported or attempted sale, assignment or other transfer by Transmission Provider (or any other person) of any or all of the Agreements or of any or all of its rights, interests or obligations thereunder; (v) the taking or holding by Transmission Provider of a security interest, lien or other encumbrance in or on any property as security for any or all of the Liabilities, including any or all of the obligations of Company under any or all of the Agreements, the posting of a cash deposit, letter of credit, performance bond or other financial accommodation, or any exchange, release, non-perfection, loss or

alteration of, or any other dealing with, any such security; (vi) the addition of any party as a guarantor or surety of all or any part of the Liabilities, including obligations of Company under any or all of the Agreements; (vii) any merger, amalgamation or consolidation of Company into or with any other entity, or any sale, lease, transfer or other disposition of any or all of Company's assets or any sale, transfer or other disposition of any or all of the shares of capital stock or other securities of Company to any other person or entity; or (viii) any change in the financial condition of Company or (as applicable) of any subsidiary, affiliate, partner or controlling shareholder thereof, or Company's entry into an assignment for the benefit of creditors, an arrangement or any other Agreement or procedure for the restructuring of its liabilities, or Company's insolvency, bankruptcy, reorganization, dissolution, liquidation or any similar action by or occurrence with respect to Company.

5. Guarantor unconditionally waives, to the fullest extent permitted by law: (i) notice of any of the matters referred to in §4 hereof; (ii) any right to the enforcement, assertion or exercise by Transmission Provider (or any other person) of any of Guarantor of its rights, powers or remedies under, against or with respect to (a) any of the Agreements, (b) any other guarantor or surety, or (c) any security for all or any part of the Liabilities, including the obligations of Company under all or any of the Agreements or obligations of Guarantor hereunder; (iii) any requirement of diligence and any defense based on a claim of laches; (iv) all defenses which may now or hereafter exist by virtue of any statute of limitations, or of any stay, valuation, exemption, moratorium or similar law, except the sole defense of full and indefeasible payment; (v) any requirement that

Guarantor be joined as a party in any action or proceeding against Company to enforce any of the provisions of any of the Agreements; (vi) any requirement that Guarantor be involved in any dispute resolution procedures involving the Company to enforce any of its obligations under any of the Agreements (including the dispute resolution procedures set forth in the Tariff); (vii) any requirement that Transmission Provider (or any other person) mitigate or attempt to mitigate damages resulting from a default by Guarantor hereunder or from a default by Company under any of the Agreements; (viii) acceptance of this Guaranty; and (ix) all presentments, protests, notices of dishonor, demands for performance and any and all other demands upon and notices to Company, and any and all other formalities of any kind, the omission of or delay in performance of which might but for the provisions of this Section constitute legal or equitable grounds for relieving or discharging Guarantor in whole or in part from its irrevocable, absolute and continuing obligations hereunder, it being the intention of Guarantor that its obligations hereunder shall not be discharged except by payment and performance and then only to the extent thereof.

6. Guarantor waives any right to require Transmission Provider (or any other person) to (i) proceed against Company; (ii) proceed against or exhaust any security held from Company; or (iii) pursue any other remedy whatsoever. So long as any obligations remain outstanding under this Guaranty or any of the Agreements, Guarantor shall not exercise any rights against Company arising as a result of payment by Guarantor hereunder, by way of subrogation or otherwise, and will not prove any claim in competition with Transmission Provider (or any other party to any of the Agreements) in

respect of any payment under the Agreements in bankruptcy or insolvency proceedings of any nature. Guarantor will not claim any set-off or counterclaim against Company in respect of any liability of Guarantor to Company and Guarantor waives any benefit of any right to participate in any collateral which may be held by Transmission Provider (or any other party to any of the Agreements or holding any security for any of the Liabilities).

7. If after receipt of any payment of, or the proceeds of any collateral for, all or any part of the Liabilities, the surrender of such payment or proceeds is compelled or volunteered to any person because such payment or application of proceeds is or may be avoided, invalidated, recaptured, or set aside as a preference, fraudulent conveyance, impermissible set -off or for any other reason, whether or not such surrender is the result of: (i) any judgment, decree or order of any court or administrative body having jurisdiction, or (ii) any settlement or compromise of any claim as to any of the foregoing with any person (including Company), then the Liabilities, or part thereof affected, shall be reinstated and continue and this Guaranty shall be reinstated and continue in full force as to such Liabilities or part thereof as if such payment or proceeds had not been received, notwithstanding any previous cancellation of any instrument evidencing any such Liabilities or any previous instrument delivered to evidence the satisfaction thereof. The provisions of this Section shall survive the termination of this Guaranty and any satisfaction and discharge of Company by virtue of any payment, court order or any Federal, state or local law.

8. Any indebtedness of Company now or hereafter held by Guarantor is hereby subordinated to the Liabilities and any indebtedness of Company under any of the Agreements; and such indebtedness of Company to Guarantor shall be collected, enforced and received by Guarantor as trustee for Transmission Provider and be paid over to Transmission Provider on account of the Liabilities but without reducing or affecting in any manner the liability of Guarantor under the other provisions of this Guaranty.
9. Guarantor represents and warrants to Transmission Provider, as an inducement to Transmission Provider to make the credit advances to Company, that: (i) the execution, delivery and performance by Guarantor of this Guaranty (a) are within Guarantor's powers and have been duly authorized by all necessary action; (b) do not contravene Guarantor's charter documents or any law or any contractual restrictions binding on or affecting Guarantor or by which Guarantor's property may be affected; and (c) do not require any authorization or approval or other action by, or any notice to or filing with, any public authority or any other person except such as have been obtained or made; (ii) this Guaranty constitutes the legal, valid and binding obligation of Guarantor, enforceable in accordance with its terms, except as the enforceability thereof may be subject to or limited by bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws relating to or affecting the rights of creditors generally and by general principles of equity; (iii) Company is a wholly owned subsidiary of Guarantor; and (iv) there is no action, suit or proceeding affecting Guarantor pending or threatened before



any court, arbitrator, or public authority that may materially adversely affect Guarantor's ability to perform its obligations under this Guaranty.

10. The Guarantor must submit any and all documents that the Guarantor would be required to submit under Transmission Provider's Credit Policy (as may be amended from time to time) if the Guarantor applied for and/or obtained credit under such Credit Policy, including, without limitation, (i) at least annually a current bond/debt rating report for senior unsecured debt of the Guarantor and an issuer rating issued by Moody's Investor Services or Standard & Poor's, promptly upon its issuance, and (ii) financial reports of the Guarantor promptly upon their issuance including, without limitation, annual audited financial statements prepared in accordance with generally accepted accounting principles, with auditor notes and auditor's report, to be delivered no later than one hundred twenty (120) days after the end of each fiscal year of the Guarantor and internally prepared quarterly financial statements, if requested by Transmission Provider, prepared in accordance with generally accepted accounting principles, no later than sixty (60) days after the end of each fiscal quarter of the Guarantor. Further, Guarantor must inform Transmission Provider in writing within five (5) Business Days of any Material Change (as defined in the Transmission Provider's Credit Policy, as may be amended from time to time) in its financial status. In addition to any other remedies available at law or in equity, a Guarantor's failure to provide this information may result in proceedings by Transmission Provider to terminate the Agreements with the Company.
11. Guarantor agrees to pay on demand reasonable attorneys' fees and all other costs and expenses which Transmission Provider, and any ITCs (as defined in the Tariff), their

affiliates, representatives, successors and assigns may incur in the enforcement of this Guaranty. No terms or provisions of this Guaranty may be changed, waived, revoked or amended without Transmission Provider's prior written consent. Should any provision of this Guaranty be determined by a court of competent jurisdiction to be unenforceable, all of the other provisions shall remain effective. This Guaranty embodies the entire Agreement among the parties hereto with respect to the matters set forth herein, and supersedes all prior Agreements among the parties with respect to the matters set forth herein. No course of prior dealing among the parties, no usage of trade, and no parole or extrinsic evidence of any nature shall be used to supplement, modify or vary any of the terms hereof. There are no conditions to the full effectiveness of this Guaranty.

Transmission Provider may assign this Guaranty, and its rights hereunder in whole or in part, without consent and without in any way affecting Guarantor's liability under it. This Guaranty shall inure to the benefit of Guarantor, Transmission Provider, Company, the ITCs and their successors and assigns. Guarantor may not assign this Guaranty without Transmission Provider's consent. This Guaranty is in addition to the guaranties of any other guarantors and any and all other guaranties of any of the Liabilities, including Company's indebtedness or obligations under any or all of the Agreements.

12. This Guaranty shall be governed by the laws of the State of Indiana, without regard to conflicts of law principles. Guarantor hereby irrevocably submits to the jurisdiction of any Indiana or United States Federal court sitting in Indiana over any action or proceeding arising out of or relating to this Guaranty or any of the Agreements, and Guarantor hereby irrevocably agrees that all claims in respect of such action or

proceeding may be heard and determined in such Indiana state or federal court. Guarantor irrevocably consents to the service of any and all process in any such action or proceeding by the mailing of copies of such process to Guarantor at its address set forth herein. Guarantor agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Guarantor further waives any objection to venue in Indiana and any objection to an action or proceeding in such State on the basis of forum non-conveniens. Guarantor further agrees that any action or proceeding brought against Transmission Provider shall be brought only in Indiana or the United States Federal courts sitting in Indiana. Nothing herein shall affect the right of Transmission Provider to bring any action or proceeding against the Guarantor or its property in the courts of any other jurisdictions.

13. GUARANTOR ACKNOWLEDGES THAT IT HAS BEEN ADVISED BY COUNSEL OF ITS CHOICE WITH RESPECT TO THIS GUARANTY AND THAT IT MAKES THE FOLLOWING WAIVER KNOWINGLY AND VOLUNTARILY. GUARANTOR IRREVOCABLY WAIVES TRIAL BY JURY IN ANY COURT AND IN ANY SUIT, ACTION OR PROCEEDING OR ANY MATTER ARISING IN CONNECTION WITH OR IN ANY WAY RELATED TO THE TRANSACTIONS CONTEMPLATED BY THIS GUARANTY, THE AGREEMENTS OR ANY DOCUMENTS RELATED THERETO (INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS) AND THE ENFORCEMENT OF ANY OF COMPANY'S RIGHTS AND REMEDIES.

14. GUARANTOR HEREBY KNOWINGLY AND VOLUNTARILY AGREES THAT  
  
THE RESOLUTION OF ANY DISPUTE THAT ARISES UNDER THIS GUARANTY  
  
SHALL NOT BE SUBJECT TO THE DISPUTE RESOLUTION PROCEDURES SET  
  
FORTH IN THE TARIFF AND WAIVES ANY RIGHTS TO THE CONTRARY.

IN WITNESS WHEREOF, the undersigned Guarantor has executed this Guaranty as of  
this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

[GUARANTOR]

Tax I.D. No. \_\_\_\_\_

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

(Officer of the Corporation)

Address: \_\_\_\_\_

\_\_\_\_\_

**CONTINUED, EXHIBIT I -CORPORATE GUARANTY**

***SECRETARY'S CERTIFICATE OF DIRECTORS' RESOLUTIONS***

I, \_\_\_\_\_, do hereby certify that I am the Secretary of  
\_\_\_\_\_, a \_\_\_\_\_ corporation;  
that I am the keeper of the corporate records and the seal of said Corporation; that the foregoing  
is true and correct copy of resolutions duly adopted and ratified by the Board of Directors of said  
Corporation in accordance with its bylaws and the laws of the said State on the \_\_\_\_\_ day of  
\_\_\_\_\_, \_\_\_\_\_ as compared by me with the original of said resolutions recorded  
in the minutes of said Corporation which resolutions authorize the Corporation to execute that  
certain Unconditional Corporate Guaranty in consideration for, among other things, the credit  
advance of the Midcontinent Independent System Operator, Inc. to \_\_\_\_\_; and the  
same have not in any way been modified, repealed or rescinded but are in full force and effect;  
that the foregoing resolutions are not inconsistent with the Certificate of Incorporation and the  
bylaws of this Corporation.

WITNESS, my hand and the seal of said corporation this \_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_.

\_\_\_\_\_  
Secretary

[CORPORATE SEAL]

**CONTINUED, EXHIBIT I- CORPORATE GUARANTY**

***RESOLUTION TO THE BOARD OF DIRECTORS***

WHEREAS, \_\_\_\_\_ (the “Subsidiary”) desires to become and/or remain a Transmission Customer or Market Participant under the Transmission, Energy and Operating Reserve Markets Tariff (the “Tariff”) of the Midcontinent Independent System Operator, Inc. (the “Company”) and for the Company to make credit advances to the Subsidiary; and

WHEREAS, this Corporation deems it to be in its direct benefit and in its best interests to guaranty all present and future obligations of the Subsidiary under the Tariff and certain other agreements as an inducement to the Company to allow the Subsidiary to become or remain a Transmission Customer and/or Market Participant under the Tariff and to provide credit advances to the Subsidiary;

NOW THEREFORE, it is hereby:

RESOLVED, that the Board of Directors of this Corporation hereby approves the guaranty of obligations of the Subsidiary by this Corporation substantially as set forth in the Corporate Guaranty attached to these Resolutions as Exhibit A; and it is further

RESOLVED, that the officers and agents of this Corporation are hereby authorized, directed and empowered to make, execute and deliver, either jointly or individually, for and on behalf of and in the name of this Corporation, a guaranty with respect to the obligations of the Subsidiary under the Tariff and certain other agreements and any and all amendments, supplements and modifications thereto substantially in the form of the Corporate Guaranty attached to these Resolutions as Exhibit A; and it is further

RESOLVED, that said officers and agents, and each of them, are hereby authorized, directed and empowered, either jointly or individually, to execute and deliver any and all instruments, papers and documents and to do all other acts that each of them may deem convenient or proper to effectuate the purpose and intent of these Resolutions from time to time or otherwise; and it is further

RESOLVED, that all action heretofore taken and all documentation heretofore delivered by any of said officers and agents, or by any individual who currently holds or has held any of said offices, in furtherance of the foregoing is hereby ratified, adopted, approved and confirmed and declared to be binding and enforceable obligations of this Corporation in accordance with the respective terms and provisions hereof, and it is further

RESOLVED, that the authorization herein set forth shall remain in full force and effect until written notice of their modification or discontinuance shall be given to and actually received by the Company, but no such modification or discontinuance shall affect the validity of the acts of any person, authorized to so act by these resolutions performed prior to the receipt of such notice by the Company.



**CONTINUED, EXHIBIT I- CORPORATE GUARANTY**

***FOREIGN GUARANTY***

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, including, without limitation, the credit advance by the Midcontinent Independent System Operator, Inc. (“Transmission Provider”) to (“Company”), the undersigned guarantor (“Guarantor”), hereby unconditionally and irrevocably guarantees the prompt and complete payment of all amounts that Company now or hereafter owes, and the performance of all other obligations of the Company, under the terms and conditions of the Transmission Provider’s Open Access Transmission, Energy and Operating Reserve Markets Tariff on file with the Commission, as may be amended and supplemented from time to time, together with all schedules and attachments thereto and any replacements or substitutes (the “Tariff”), any agreements entered into by Company under, pursuant to, or in connection with the Tariff and/or any agreements to which Transmission Provider and Company are Parties, as may be amended or supplemented from time to time whether now existing or hereafter arising in accordance with their respective terms, together with costs of enforcement and collection, including attorneys’ fees (collectively, the “Liabilities”). The Tariff, any and all agreements entered into by Company under, pursuant to or in connection with the Tariff, and any and all agreements to which the Company and Transmission Provider are parties, each as it may be amended from time to time and whether it currently exists or is entered into at anytime in the future are collectively referred to herein as the “Agreements”. The Agreements include, without limitation, the Tariff, the Service Agreement, dated \_\_\_\_\_, \_\_\_\_\_, and the Market Participant Agreement, dated \_\_\_\_\_, \_\_\_\_\_.

1. If Company does not perform each of its obligations in strict accordance with each respective Agreement, Guarantor shall immediately pay upon demand all amounts now or hereafter due under all of the Agreements (including, without limitation, all principal, interest and fees) and otherwise proceed to complete the same and satisfy all of the Liabilities, including Company's obligations under all of the Agreements. This Guaranty may be satisfied by Guarantor paying and/or performing (as appropriate) Company's Liabilities or by the Guarantor causing Company's Liabilities to be paid or performed; provided, however, that Guarantor shall at all times remain fully responsible and liable for its obligations hereunder notwithstanding any such payment or performance (or failure thereof) by any third party.
2. This Guaranty is an absolute, unconditional and continuing guaranty of the full and punctual payment and performance by Company of all of the Liabilities, including each of its obligations under each of the Agreements, and not of collectibility only, and is in no way conditioned upon any requirement that Transmission Provider (or any other person) first attempt to collect payment from Company or any other guarantor or surety or resort to any security or other means of obtaining payment of all or any part of the Liabilities or upon any other contingency. This is a continuing guaranty and shall be binding upon Guarantor regardless of: (i) how long after the date hereof the Agreement is entered into; (ii) how long after the date hereof any part of the obligations under the Agreements is incurred by Company; and (iii) the amount of the obligations under the Agreements at any time outstanding. Transmission Provider may enforce this Guaranty from time to time and as often as occasion for such enforcement may arise.

3. The obligations hereunder are independent of the obligations of Company and a separate action or actions may be brought and prosecuted against Guarantor whether action is brought against Company or whether Guarantor is joined in any such action or actions. Guarantor's liability under this Guaranty is not conditioned or contingent upon genuineness, validity, regularity or enforceability of any of the Agreements.
4. Guarantor authorizes Transmission Provider, without notice or demand and without affecting its liability hereunder, from time to time, to: (i) renew, extend, modify, supplement or otherwise change the terms of any or all the Agreements or any part thereof; (ii) take and hold security for the payment of this Guaranty or any or all of the Liabilities, and exchange, enforce, waive and release any such security; and (iii) apply such security and direct the order or manner of sale of any collateral provided as such security as Transmission Provider (or any other person) in its sole discretion may determine. The obligations and liabilities of Guarantor hereunder shall be absolute and unconditional, shall not be subject to any counterclaim, set-off, deduction or defense based upon any claim Guarantor may have against Company, any other Guarantor, or any other person or entity, and shall remain in full force and effect until all of the obligations of Guarantor hereunder and all of the Liabilities, including all obligations of Company under each of the Agreements, have been fully and irrevocably satisfied, without regard to, or release or discharge by, any event, circumstance or condition (whether or not Guarantor shall have knowledge or notice thereof) which might constitute a legal or equitable defense or discharge of a Guarantor or surety or which might in any way limit recourse against Guarantor, including without limitation: (i) any renewal, amendment or

modification of, or supplement to, the terms of any or all of the Agreements; (ii) any waiver, consent or indulgence by Transmission Provider (or any other person), or any exercise or non-exercise by Transmission Provider (or any other person) of any right, power or remedy, under or in respect of this Guaranty or any of or all the Agreements (whether or not Guarantor or Company has or have notice or knowledge of any such action or inaction); (iii) the invalidity or unenforceability, in whole or in part, of any or all of the Agreements, or the termination, cancellation or frustration of any thereof, or any limitation or cessation of Company's liability under any thereof (other than any limitation or cessation expressly provided for therein), including without limitation any invalidity, unenforceability or impaired liability resulting from Company's lack of capacity, power and/or authority to enter into any or all of the Agreements and/or to incur any or all of the obligations thereunder, or from the execution and delivery of any or all of the Agreements by any person acting for Company without or in excess of authority; (iv) any actual, purported or attempted sale, assignment or other transfer by Transmission Provider (or any other person) of any or all of the Agreements or of any or all of its rights, interests or obligations thereunder; (v) the taking or holding by Transmission Provider of a security interest, lien or other encumbrance in or on any property as security for any or all of the Liabilities, including any or all of the obligations of Company under any or all of the Agreements, the posting of a cash deposit, letter of credit, performance bond or other financial accommodation, or any exchange, release, non-perfection, loss or alteration of, or any other dealing with, any such security; (vi) the addition of any party as a guarantor or surety of all or any part of the Liabilities, including obligations of

Company under any or all of the Agreements; (vii) any merger, amalgamation or consolidation of Company into or with any other entity, or any sale, lease, transfer or other disposition of any or all of Company's assets or any sale, transfer or other disposition of any or all of the shares of capital stock or other securities of Company to any other person or entity; or (viii) any change in the financial condition of Company or (as applicable) of any subsidiary, affiliate, partner or controlling shareholder thereof, or Company's entry into an assignment for the benefit of creditors, an arrangement or any other Agreement or procedure for the restructuring of its liabilities, or Company's insolvency, bankruptcy, reorganization, dissolution, liquidation or any similar action by or occurrence with respect to Company.

5. Guarantor waives any right to require Transmission Provider (or any other person) to (i) proceed against Company; (ii) proceed against or exhaust any security held from Company; or (iii) pursue any other remedy whatsoever. So long as any obligations remain outstanding under this Guaranty or any of the Agreements, Guarantor shall not exercise any rights against Company arising as a result of payment by Guarantor hereunder, by way of subrogation or otherwise, and will not prove any claim in competition with Transmission Provider (or any other party to any of the Agreements) in respect of any payment under the Agreements in bankruptcy or insolvency proceedings of any nature. Guarantor will not claim any set-off or counterclaim against Company in respect of any liability of Guarantor to Company and Guarantor waives any benefit of any right to participate in any collateral which may be held by Transmission Provider (or

any other party to any of the Agreements or holding any security for any of the Liabilities).

6. If after receipt of any payment of, or the proceeds of any collateral for, all or any part of the Liabilities, the surrender of such payment or proceeds is compelled or volunteered to any person because such payment or application of proceeds is or may be avoided, invalidated, recaptured, or set aside as a preference, fraudulent conveyance, impermissible set -off or for any other reason, whether or not such surrender is the result of: (i) any judgment, decree or order of any court or administrative body having jurisdiction, or (ii) any settlement or compromise of any claim as to any of the foregoing with any person (including Company), then the Liabilities, or part thereof affected, shall be reinstated and continue and this Guaranty shall be reinstated and continue in full force as to such Liabilities or part thereof as if such payment or proceeds had not been received, notwithstanding any previous cancellation of any instrument evidencing any such Liabilities or any previous instrument delivered to evidence the satisfaction thereof. The provisions of this Section shall survive the termination of this Guaranty and any satisfaction and discharge of Company by virtue of any payment, court order or any Federal, state or local law.
7. Any indebtedness of Company now or hereafter held by Guarantor is hereby subordinated to the Liabilities and any indebtedness of Company under any of the Agreements; and such indebtedness of Company to Guarantor shall be collected, enforced and received by Guarantor as trustee for Transmission Provider and be paid over to Transmission Provider on account of the Liabilities but without reducing or

affecting in any manner the liability of Guarantor under the other provisions of this Guaranty.

8. Guarantor represents and warrants to Transmission Provider, as an inducement to Transmission Provider to make the credit advances to Company, that: (i) the execution, delivery and performance by Guarantor of this Guaranty (a) are within Guarantor's powers and have been duly authorized by all necessary action; (b) do not contravene Guarantor's charter documents or any law or any contractual restrictions binding on or affecting Guarantor or by which Guarantor's property may be affected; and (c) do not require any authorization or approval or other action by, or any notice to or filing with, any public authority or any other person except such as have been obtained or made; (ii) this Guaranty constitutes the legal, valid and binding obligation of Guarantor, enforceable in accordance with its terms, except as the enforceability thereof may be subject to or limited by bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws relating to or affecting the rights of creditors generally and by general principles of equity; (iii) Company is a wholly owned subsidiary of Guarantor; and (iv) there is no action, suit or proceeding affecting Guarantor pending or threatened before any court, arbitrator, or public authority that may materially adversely affect Guarantor's ability to perform its obligations under this Guaranty.
9. The Guarantor must submit any and all documents that the Guarantor would be required to submit under Transmission Provider's Credit Policy (as may be amended from time to time) if the Guarantor applied for and/or obtained credit under such Credit Policy, including, without limitation, (i) at least annually a current bond/debt rating report for

senior unsecured debt of the Guarantor and an issuer rating issued by Moody's Investor Services or Standard & Poor's, promptly upon its issuance, and (ii) financial reports of the Guarantor promptly upon their issuance including, without limitation, annual audited financial statements prepared in accordance with generally accepted accounting principles, with auditor notes and auditor's report, to be delivered no later than one hundred twenty (120) days after the end of each fiscal year of the Guarantor and internally prepared quarterly financial statements, if requested by Transmission Provider, prepared in accordance with generally accepted accounting principles, no later than sixty (60) days after the end of each fiscal quarter of the Guarantor. Further, Guarantor must inform Transmission Provider in writing within five (5) Business Days of any Material Change (as defined in the Transmission Provider's Credit Policy, as may be amended from time to time) in its financial status. In addition to any other remedies available at law or in equity, a Guarantor's failure to provide this information may result in proceedings by Transmission Provider to terminate the Agreements with the Company.

10. Guarantor agrees to pay on demand reasonable attorneys' fees and all other costs and expenses which Transmission Provider, and any ITCs (as defined in the Tariff), their affiliates, representatives, successors and assigns may incur in the enforcement of this Guaranty. No terms or provisions of this Guaranty may be changed, waived, revoked or amended without Transmission Provider's prior written consent. Should any provision of this Guaranty be determined by a court of competent jurisdiction to be unenforceable, all of the other provisions shall remain effective. This Guaranty embodies the entire Agreement among the parties hereto with respect to the matters set forth herein, and



supersedes all prior Agreements among the parties with respect to the matters set forth herein. No course of prior dealing among the parties, no usage of trade, and no parole or extrinsic evidence of any nature shall be used to supplement, modify or vary any of the terms hereof. There are no conditions to the full effectiveness of this Guaranty.

Transmission Provider may assign this Guaranty, and its rights hereunder in whole or in part, without consent and without in any way affecting Guarantor's liability under it.

This Guaranty shall inure to the benefit of Guarantor, Transmission Provider, Company, the ITCs and their successors and assigns. Guarantor may not assign this Guaranty without Transmission Provider's consent. This Guaranty is in addition to the guaranties of any other guarantors and any and all other guaranties of any of the Liabilities, including Company's indebtedness or obligations under any or all of the Agreements.

11. This Guaranty shall be governed by the laws of the State of Indiana, without regard to conflicts of law principles. Guarantor hereby irrevocably submits to the jurisdiction of any Indiana or United States Federal court sitting in Indiana over any action or proceeding arising out of or relating to this Guaranty or any of the Agreements, and Guarantor hereby irrevocably agrees that all claims in respect of such action or proceeding may be heard and determined in such Indiana state or federal court. Guarantor irrevocably consents to the service of any and all process in any such action or proceeding by the mailing of copies of such process to Guarantor at its address set forth herein. Guarantor agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Guarantor further waives any objection to venue in

Indiana and any objection to an action or proceeding in such State on the basis of forum non-conveniens. Guarantor further agrees that any action or proceeding brought against Transmission Provider shall be brought only in Indiana or the United States Federal courts sitting in Indiana. Nothing herein shall affect the right of Transmission Provider to bring any action or proceeding against the Guarantor or its property in the courts of any other jurisdictions.

12. Payments. All payments by Guarantor under this Guaranty shall be made (a) in U.S. dollars to such account in the United States as Transmission Provider may from time to time designate to Guarantor and (b) free and clear of, and without deduction or withholding for or on account of any present or future income, stamp other taxes or levies, imposts, duties, charges, fees, deductions or withholdings now or hereafter imposed, levied, collected, withheld or assessed by an governmental authority (collectively “Taxes”). If any Taxes are required to be withheld from any amounts payable by Guarantor under this Guaranty, the amounts payable shall be increased to the extent necessary to provide the full amount (after payment of all Taxes) owing by Guarantor under this Guaranty.

13. Judgment Currency. The obligations of Guarantor under this Guaranty shall, notwithstanding judgment in a currency other than U.S. dollars (the “Judgment Currency”), be discharged only to the extent that, on any day following receipt by Transmission Provider of any sum adjudged to be due in the Judgment Currency, Transmission Provider may in accordance with normal banking procedures purchase U.S. dollars with the Judgment Currency. If the amount of U.S. dollars so purchased is less

than the sum originally due to the Transmission Provider in U.S. dollars, Guarantor agrees, as a separate obligation and notwithstanding such judgment, to indemnify the Transmission Provider against such loss.

14. GUARANTOR ACKNOWLEDGES THAT IT HAS BEEN ADVISED BY COUNSEL OF ITS CHOICE WITH RESPECT TO THIS GUARANTY AND THAT IT MAKES THE FOLLOWING WAIVER KNOWINGLY AND VOLUNTARILY. GUARANTOR IRREVOCABLY WAIVES TRIAL BY JURY IN ANY COURT AND IN ANY SUIT, ACTION OR PROCEEDING OR ANY MATTER ARISING IN CONNECTION WITH OR IN ANY WAY RELATED TO THE TRANSACTIONS CONTEMPLATED BY THIS GUARANTY, THE AGREEMENTS OR ANY DOCUMENTS RELATED THERETO (INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS) AND THE ENFORCEMENT OF ANY OF COMPANY'S RIGHTS AND REMEDIES.
15. GUARANTOR HEREBY KNOWINGLY AND VOLUNTARILY AGREES THAT THE RESOLUTION OF ANY DISPUTE THAT ARISES UNDER THIS GUARANTY SHALL NOT BE SUBJECT TO THE DISPUTE RESOLUTION PROCEDURES SET FORTH IN THE TARIFF AND WAIVES ANY RIGHTS TO THE CONTRARY.

IN WITNESS WHEREOF, the undersigned Guarantor has executed this Guaranty as of

this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

[GUARANTOR]

Tax I.D. No. \_\_\_\_\_

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

(Officer of the Corporation)

Address: \_\_\_\_\_

**CONTINUED, EXHIBIT I – FOREIGN GUARANTEE**

***SECRETARY'S CERTIFICATE OF DIRECTORS' RESOLUTIONS***

I, \_\_\_\_\_, do hereby certify that I am the Secretary of  
\_\_\_\_\_, a \_\_\_\_\_ corporation;  
that I am the keeper of the corporate records and the seal of said Corporation; that the foregoing  
is true and correct copy of resolutions duly adopted and ratified by the Board of Directors of said  
Corporation in accordance with its bylaws and the laws of the said State on the \_\_\_\_\_ day of  
\_\_\_\_\_, \_\_\_\_\_ as compared by me with the original of said resolutions recorded  
in the minutes of said Corporation which resolutions authorize the Corporation to execute that  
certain Unconditional Corporate Guaranty in consideration for, among other things, the credit  
advance of the Midcontinent Independent System Operator, Inc. to \_\_\_\_\_; and the  
same have not in any way been modified, repealed or rescinded but are in full force and effect;  
that the foregoing resolutions are not inconsistent with the Certificate of Incorporation and the  
bylaws of this Corporation.

WITNESS, my hand and the seal of said corporation this \_\_\_\_\_ day of \_\_\_\_\_,

\_\_\_\_\_.

\_\_\_\_\_  
Secretary

[CORPORATE SEAL]

**CONTINUED, EXHIBIT I- FOREIGN GUARANTEE**

***RESOLUTION TO THE BOARD OF DIRECTORS***

WHEREAS, \_\_\_\_\_ (the “Subsidiary”) desires to become and/or remain a Transmission Customer or Market Participant under the Open Access Transmission, Energy and Operating Reserve Markets Tariff (the “Tariff”) of the Midcontinent Independent System Operator, Inc. (the “Company”) and for the Company to make credit advances to the Subsidiary; and

WHEREAS, this Corporation deems it to be in its direct benefit and in its best interests to guaranty all present and future obligations of the Subsidiary under the Tariff and certain other agreements as an inducement to the Company to allow the Subsidiary to become or remain a Transmission Customer and/or Market Participant under the Tariff and to provide credit advances to the Subsidiary;

NOW THEREFORE, it is hereby:

RESOLVED, that the Board of Directors of this Corporation hereby approves the guaranty of obligations of the Subsidiary by this Corporation substantially as set forth in the Corporate Guaranty attached to these Resolutions as Exhibit A; and it is further

RESOLVED, that the officers and agents of this Corporation are hereby authorized, directed and empowered to make, execute and deliver, either jointly or individually, for and on behalf of and in the name of this Corporation, a guaranty with respect to the obligations of the Subsidiary under the Tariff and certain other agreements and any and all amendments, supplements and

modifications thereto substantially in the form of the Corporate Guaranty attached to these Resolutions as Exhibit A; and it is further

RESOLVED, that said officers and agents, and each of them, are hereby authorized, directed and empowered, either jointly or individually, to execute and deliver any and all instruments, papers and documents and to do all other acts that each of them may deem convenient or proper to effectuate the purpose and intent of these Resolutions from time to time or otherwise; and it is further

RESOLVED, that all action heretofore taken and all documentation heretofore delivered by any of said officers and agents, or by any individual who currently holds or has held any of said offices, in furtherance of the foregoing is hereby ratified, adopted, approved and confirmed and declared to be binding and enforceable obligations of this Corporation in accordance with the respective terms and provisions hereof, and it is further

RESOLVED, that the authorization herein set forth shall remain in full force and effect until written notice of their modification or discontinuance shall be given to and actually received by the Company, but no such modification or discontinuance shall affect the validity of the acts of any person, authorized to so act by these resolutions performed prior to the receipt of such notice by the Company.

**EXHIBIT II**

**IRREVOCABLE LETTER OF CREDIT**

Irrevocable Standby Letter of Credit No. \_\_\_\_\_

Issued: [Date]

Expires at our counter (unless evergreen): [Date]

Midcontinent Independent System Operator, Inc.

720 City Center Drive

Carmel, IN 46032

Attn: Manager, Credit & Risk Management

Ladies and Gentlemen:

We, \_\_\_\_\_ [Fill in name of Bank] \_\_\_\_\_ (“Issuer”) do hereby issue this Irrevocable Non-Transferable Standby Letter of Credit No. \_\_\_\_\_ by order of, for the account of and on behalf of \_\_\_\_\_ (“Account Party”) and in favor of the Midcontinent Independent System Operator, Inc. (“Beneficiary” or “Transmission Provider”).

The term “Beneficiary” includes any successor by operation of law of the named beneficiary including without limitation any liquidator, receiver or conservator.

This Letter of Credit is issued, presentable and payable and we guaranty to the drawers, endorsers and bona fide holders of this Letter of Credit that drafts under and in compliance with the terms of this Letter of Credit will be honored on presentation and surrender of certain documents pursuant to the terms of this Letter of Credit.



This Letter of Credit is available in one or more drafts and may be drawn hereunder for the account of \_\_\_\_\_ up to an aggregate amount not exceeding \$ \_\_\_\_\_ .00 (United States Dollars \_\_\_\_\_ and 00/100).

This Letter of Credit is drawn against by presentation to us at our office located at \_\_\_\_\_ of a drawing certificate: (i) signed by an officer or authorized agent of the Beneficiary; (ii) dated the date of presentation; and (iii) containing one (1) of the following statements:

1. “The undersigned hereby certifies to \_\_\_\_\_ (“Issuer”), with reference to its Irrevocable Non-Transferable Standby Letter of Credit No. \_\_\_\_\_, dated \_\_\_\_\_, issued on behalf of \_\_\_\_\_ (“Account Party”) and in favor of the Midcontinent Independent System Operator, Inc. (“Beneficiary”) that said Account Party has failed to make a payment in accordance with the terms and provisions of one or more of the following, as applicable: Beneficiary’s Transmission, Energy and Operating Reserve Markets Tariff, as may be amended and supplemented from time to time, together with all replacements and substitutes (the “Tariff”), any and all agreements entered into by Account Party under, pursuant to, or in connection with the Tariff and any and all agreements to which Account Party and Beneficiary are parties, as such agreements may be amended and supplemented from time to time, whether now or hereafter executed, and any replacements or substitutions thereof, (collectively, the “Agreements”). The Beneficiary hereby draws upon the Letter of Credit in an amount equal to \$ \_\_\_\_\_ (United States Dollars \_\_\_\_\_ and 00/100)”; or

2. “As of the close of business on \_\_\_\_\_, 20\_\_ (fill in date which is less than one hundred- ten (110) days before the expiration date of the Letter of Credit), Account Party has failed to renew, replace or amend the Letter of Credit in a manner acceptable to Beneficiary”; or
3. “As of the close of business on \_\_\_\_\_, 20\_\_ (fill in date which is more than ten (10) Business Days after the Beneficiary has requested that Account Party replace the Letter of Credit because the Issuer’s Long Term rating is lower than “A-” by S&P or lower than “A3” by Moody’s), Account Party has failed to replace the Letter of Credit in a manner acceptable to Beneficiary.”

Beneficiary shall have the right, in the event of a draw pursuant to subparagraph (2) or (3) of the immediately preceding paragraph, to draw down the entire face value of the Letter of Credit.

If presentation of any drawing certificate is made on a Business Day and such presentation is made on or before 10:00 a.m. \_\_\_\_\_ Time, Issuer shall satisfy such drawing request on the same Business Day. If the drawing certificate is received after 10:00 a.m. \_\_\_\_\_ Time, Issuer will satisfy such drawing request on the next Business Day.

It is a condition of this Letter of Credit that it will be automatically extended without amendment for one (1) year from the expiration date hereof, or any future expiration date, unless at least one hundred twenty (120) days prior to any expiration date we notify you at the above address by registered mail that we elect not to consider this Letter of Credit renewed for any such period.

In connection with any draw on this Letter of Credit, if you have not received from us within five (5) Calendar Days from the date of your draw, a notice from us in the form of the certificate attached hereto as Exhibit A appropriately completed, indicating we have not reinstated the

Letter of Credit for all amounts drawn on this Letter of Credit, your right to draw on us for the full face amount of this Letter of Credit shall be automatically reinstated and this automatic reinstatement of your right to make a draw for the full face amount of this Letter of Credit shall be applicable to successive draws so long as this Letter of Credit shall have not terminated as set forth herein.

This Letter of Credit may be terminated upon Beneficiary's irrevocable receipt of full payment from the Account Party of all amounts due from Account Party under the Tariff and each of the Agreements, Account Party ceasing to be a Market Participant and/or Transmission Customer under the Tariff and Issuer's receipt of a written release from the Beneficiary releasing the Issuer from its obligations under this Letter of Credit.

Disbursements under the Letter of Credit shall be in accordance with the following terms and conditions:

1. The amount, which may be drawn by the Beneficiary under this Letter of Credit, shall be automatically reinstated by the amount of any drawings hereunder unless Issuer timely delivers the Certificate of Non Reinstatement of Amounts Available under the Irrevocable Standby Letter of Credit attached as Exhibit A hereto as provided above.
2. All commissions and charges will be borne by the Account Party.
3. This Letter of Credit may not be transferred or assigned by the Issuer.
4. This Letter of Credit is irrevocable.
5. This Letter of Credit shall be governed by the International Standby Practices Publication No. 590 of the International Chamber of Commerce, including any amendments, modifications or revisions thereof (the "ISP"), except to the extent that terms hereof are

inconsistent with the provisions of the ISP, in which case the terms of the Letter of Credit shall govern. This Letter of Credit shall be governed by the internal laws of the State of Indiana to the extent that the terms of the ISP are not applicable; provided that, in the event of any conflict between the ISP and such Indiana laws, the ISP shall control.

6. This Letter of Credit may not be amended, changed or modified without the express written consent of the Beneficiary and the Issuer.
7. The Beneficiary shall not be deemed to have waived any rights under this Letter of Credit, unless the Beneficiary or an authorized agent of the Beneficiary shall have signed a written waiver.

No such waiver, unless expressly so stated therein, shall be effective as to any transaction that occurs subsequent to the date of the waiver, nor as to any continuance of a breach after the waiver.

8. A failure to make any partial drawings at any time shall not impair or reduce the availability of this Letter of Credit in any subsequent period or our obligation to honor your subsequent demands for payment made in accordance with the terms of this Letter of Credit.

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[Authorized Signature]

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[Date]

Name: \_\_\_\_\_ Title: \_\_\_\_\_

**CONTINUED, EXHIBIT II- IRREVOCABLE LETTER OF CREDIT**

**CERTIFICATE OF NONREINSTATEMENT**

**OF AMOUNTS AVAILABLE UNDER IRREVOCABLE**

**LETTER OF CREDIT NO. \_\_\_\_\_**

The undersigned, a duly authorized officer of \_\_\_\_\_ (the "Bank"), hereby certifies to Midcontinent Independent System Operator, Inc. ("Transmission Provider") with reference to Bank's Irrevocable Letter of Credit No. \_\_\_\_\_ (the "Letter of Credit") issued by the Bank in favor of Transmission Provider that the amount drawn by Transmission Provider pursuant to its most recent drawing dated as of \_\_\_\_\_ has not been reinstated either (a) because the Bank has not been reimbursed for such drawing, or (b) a Default has occurred under the Reimbursement and Pledge Agreement dated as of \_\_\_\_\_, 20\_\_\_\_, between the Bank and the Account Party, as defined in the Letter of Credit, and is continuing.

Except as herein expressly set forth, all other terms and conditions of the Letter of Credit remain unchanged.

IN WITNESS WHEREOF, the Bank has executed and delivered this certificate this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

[Name of Bank]: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

### EXHIBIT III

#### CASH COLLATERAL AGREEMENT

\_\_\_\_\_ (Entity Code) \_\_\_\_\_ (“Tariff Customer”) has agreed to deliver cash collateral to the Midcontinent Independent System Operator, Inc. (“Transmission Provider”) to secure Tariff Customer’s performance under the terms and conditions of the Transmission Provider’s Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission, as may be amended and supplemented from time to time, together with all replacements and substitutes (the “Tariff”), any and all agreements entered into by Tariff Customer under, pursuant to, or in connection with the Tariff and any and all agreements to which the Tariff Customer and Transmission Provider are parties, as such Tariff and agreements may be amended from time to time, whether now or hereafter executed (the “Agreements”), together with costs of enforcement and collection, including attorneys’ fees (collectively, the “Liabilities”). The Agreements include, without limitation, the Tariff, agreements with Transmission Provider related to the purchase and/or sale of electric capacity, energy, ancillary services and related products or services, each as amended from time to time, between Tariff Customer and Transmission Provider.

Tariff Customer agrees to deliver to Transmission Provider cash collateral (the “INITIAL MARGIN”) by wire transfer to a segregated account designated by Transmission Provider in a written notice to Tariff Customer. Such account (the “Account”) shall be with a Qualified Institution (the “Custodian”) and registered in the name of Transmission Provider for the benefit of Tariff Customer. Transmission Provider shall have complete and total control over the Account and the Margin, provided that the Tariff Customer has certain contract rights to the

Margin as provided under the Tariff and/or this Agreement. Qualified Institution means a commercial bank or trust company organized under the law of the United States or a political subdivision thereof, with a Credit Rating not lower than “A-” by S&P or “A3” in the case of Moody’s. The INITIAL MARGIN, together with any additional amounts deposited by or at the direction of Tariff Customer in the Account and any and all interest, shall be referred to herein as the “MARGIN”. Transmission Provider agrees that Tariff Customer shall earn interest on the MARGIN at the Transmission Provider’s overnight bank rate from and including the date of deposit to, but excluding, the date such MARGIN is returned (or applied as described below). Interest shall be deposited and held in the Account and may be used upon the occurrence of a Default (as defined in the Tariff) to satisfy the obligations of Tariff Customer. Any unpaid interest earned and not applied to amounts owed by Tariff Customer shall be released and paid to Tariff Customer quarterly subject to the terms and conditions of Section 7.15 of the Tariff and provided that no Default shall exist and be continuing.

To secure its obligations under this Cash Collateral Agreement and the other Liabilities, the Tariff Customer hereby grants to Transmission Provider a present and continuing first-priority security interest in, and lien on and right of offset against, all of the undersigned’s right, title, and interest in the ACCOUNT and the MARGIN (including all interest thereon), including all products and proceeds of the foregoing, any and all renewals, extensions, replacements, modifications, additions, and substitutions of the foregoing, and all rights, remedies, claims and demands under or in connection with the foregoing (the “Collateral”). Tariff Customer agrees to take such action as Transmission Provider reasonably requires in order to perfect Transmission Provider’s first-priority continuing security interest in, and lien on and right of offset against the

COLLATERAL, including, without limitation entering into a control agreement, in form and substance acceptable to Transmission Provider to give Transmission Provider control of the COLLATERAL.

Transmission Provider agrees that it shall not have the right to sell, pledge, assign, invest, use, commingle or otherwise dispose of, or otherwise use in its business the COLLATERAL unless and until a Default has occurred, provided that Transmission Provider shall have all the rights of a secured party as contemplated by the UCC. Transmission Provider further agrees that it shall be entitled to apply any portion or all of the COLLATERAL to satisfy any of the Liabilities, including any outstanding payment obligation of Tariff Customer under any of the Agreements only if a Default, as defined in the Tariff, with respect to Tariff Customer has occurred and is continuing. In such event, Transmission Provider may do any one or more of the following: (a) exercise any of the rights and remedies of a secured party with respect to the COLLATERAL, including any such rights and remedies under law then in effect; and/or (b) exercise its rights of setoff against any and all of the COLLATERAL, including interest accrued and not yet paid to Tariff Customer. In addition to other rights available to Transmission Provider, Transmission Provider shall have the right, upon realizing on the COLLATERAL to (x) apply the COLLATERAL to reduce Tariff Customer's obligations under the Tariff, this Cash Collateral Agreement and/or any other Agreements and/or or (y) hold the proceeds as collateral security for Tariff Customer's obligations under the Tariff, the Credit and Security Agreement, this Cash Collateral Agreement and/or the other Agreements.

If additional cash collateral is required by the Credit Policy or Transmission Provider and Tariff Customer agrees to add additional cash collateral, then such cash collateral shall be added to the



existing MARGIN under this Cash Collateral Agreement and the security interest granted under this Agreement shall attach to such additional cash collateral.

Tariff Customer hereby constitutes and appoints Transmission Provider, through any of its officers, as its true and lawful attorney-in-fact, with full power of substitution and authority in the place and stead of Tariff Customer and in the name of Tariff Customer or in its own name, from time to time, for the purpose of carrying out the terms of this Agreement from and after the occurrence of a Default, to take any and all appropriate action and to execute any and all documents and instruments which may be necessary or desirable to accomplish the purposes of this Agreement. Such power of attorney is coupled with an interest and shall be irrevocable until such time as all of the Liabilities, including Tariff Customer's obligations under the Tariff and the other Agreements, are fully and finally and irrevocably paid and performed, all of the Agreements (other than the Tariff and this Cash Collateral Agreement) have terminated and Tariff Customer is no longer a Market Participant and/or Transmission Customer (as such terms are defined in the Tariff). Tariff Customer hereby ratifies and approves all acts of such attorneys. Neither Transmission Provider nor any attorney will be liable for any acts or omissions nor for any error of judgment or mistake of fact or law, absent gross negligence, bad faith or willful misconduct and subject to the limitations on liability set forth in the Tariff.

Until such time as Transmission Provider exercises its remedies hereunder, all income, earnings and profits with respect to the ACCOUNT (and all COLLATERAL) shall be reported for state and federal income tax purposes as attributable to Tariff Customer and not Transmission Provider; and Tariff Customer hereby instructs Transmission Provider (and any other person

authorized to report taxable income distributions) to issue, or cause to be issued, IRS Form 1099 indicating Tariff Customer as the recipient of such income, earnings and profits.

Subject to the approval of Transmission Provider, Tariff Customer may substitute any portion of the MARGIN deposited hereunder with a letter of credit issued by a Qualified Institution in form and substance acceptable to Transmission Provider or other form of collateral acceptable to Transmission Provider, in Transmission Provider's sole discretion.

Tariff Customer hereby expressly acknowledges and agrees that this Cash Collateral Agreement shall be in effect as of the date the INITIAL MARGIN is delivered to Transmission Provider and shall govern the period of time during which the MARGIN is held by Transmission Provider in the Account.

Within one hundred twenty (120) days after the last to occur of (i) the termination of all of the Agreements (other than the Tariff and this Cash Collateral Agreement); (ii) the irrevocable payment and satisfaction of all obligations of Tariff Customer under all Agreements (including the Tariff), and (iii) the Participant ceasing to be a Market Participant and/or Transmission Customer under the Tariff, Transmission Provider shall return any remaining MARGIN to Tariff Customer.

Please acknowledge your agreement to the terms hereof by signing the acknowledgement set forth below.

Very truly yours,  
Company Name: \_\_\_\_\_  
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

ACKNOWLEDGED AND AGREED:

MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.

By: \_\_\_\_\_  
Name:  
Title:

## EXHIBIT IV

### SECURITY INTEREST AGREEMENT

All rights and obligations as defined in the Open Access Transmission, Energy and Operating Reserve Markets Tariff of the Midcontinent Independent System Operator, Inc. (“Tariff”) and described in this Security Agreement (both are available at [www.misoenergy.org](http://www.misoenergy.org)) are subject to change.

This Security Agreement (“**Security Agreement**”) is made as of the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by \_\_\_\_\_, a(n) \_\_\_\_\_, having its chief executive offices at \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and with a taxpayer ID number of \_\_\_\_ - \_\_\_\_\_ (the “**Company**”), in favor of Midcontinent Independent System Operator, Inc. , a Delaware non-profit, non-stock corporation, having a notice address of 720 City Center Drive, Carmel, Indiana 46032 (both in its capacity as agent for Transmission Owners and in its separate capacity as Energy Market Counterparty under the Tariff and related agreements, the “**Transmission Provider**”).

### Recitals

WHEREAS, Transmission Provider administers that certain Open Access Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission (“Commission”), including but not limited to, any other applicable Commission-accepted tariff or rate schedule, as the same may be amended and supplemented from time to time and together with all replacements and substitutes thereto (collectively, the “Tariff”);

WHEREAS, Transmission Provider maintains a Credit Policy (which is Attachment L to the Tariff, as the same may be amended from time to time in accordance with applicable law) in

order to determine, on a case by case basis, the level of unsecured credit available to each person who takes services under the Tariff and the form and amount of financial assurance to be required by each person, if any;

WHEREAS, Company has requested that Transmission Provider net the invoiced and measured Settlements owed to Company against invoiced, measured and estimated Settlements owed by Company to Transmission Provider in order to reduce the amount of Financial Security provided by, or on behalf of, Company; and

WHEREAS, as a condition precedent to Transmission Provider's agreement to net amounts owed to, and by, Company, and to secure the full and prompt repayment of all of the Liabilities (as hereinafter defined), Company is required to, and shall, grant a continuing first priority security interest in, and to, the Collateral (as hereinafter defined).

1 of 6

Transmission Provider Security Agreement

NOW, THEREFORE, in consideration the representations, warranties and covenants herein contained and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Company and Transmission Provider hereby agree to, and accept, all of the following:

(1) The “Liabilities” as that term is used in this Security Agreement means all of the payment obligations (including, without limitation, reasonable attorneys’ fees) of the Company in favor of the Transmission Provider or any ITC (as defined in the Tariff) (whether for the Transmission Provider’s or ITC’s own account or for the account of any other person) under the Tariff and/or any and all agreements entered into, under, pursuant to, or in connection with the Tariff (including, without limitation, the Transmission Provider’s Credit Policy) and any and all other agreements to which Transmission Provider and the Company are parties (collectively, the “Agreements”).

(2) As security for the payment and performance of all of the obligations of the Company under the Tariff and/or the Agreements (including, without limitation, all costs to enforce the obligations of the Company and collect all amounts owed by the Company thereunder or hereunder, including reasonable attorneys’ fees), Transmission Provider shall have, and the Company hereby pledges, assigns, conveys and transfers to Transmission Provider, and hereby grants to Transmission Provider a present and continuing first priority security interest in and to, and a general first lien upon and right of setoff against, all right, title and interest in any and all accounts receivable and other rights of payment of the Company for goods and services provided

under, or otherwise arising under, pursuant to or in connection with, the Tariff and/or any of the Agreements and any other similar rights of the Company arising under, or in connection with, the Tariff and/or any of the Agreements, however created or evidenced, whether now existing or hereafter owned, acquired, created, used or arising, including all products and proceeds of the foregoing, any and all renewals, extensions, replacements, modifications, additions, and substitutions of the foregoing and all rights, remedies, claims and demands under or in connection with each of the foregoing (the “Collateral”).

(3) The Company hereby represents and warrants to Transmission Provider that: all Collateral is lawfully owned by the Company, free and clear of any prior security interest, pledge, sale, assignment, transfer or other encumbrance other than any recoupment, setoff or other rights of Transmission Provider in and to such Collateral; the Company has the unencumbered right to pledge, sell, assign or transfer the Collateral subject to any recoupment, setoff or other right of Transmission Provider in and to such Collateral and subject to the security interest granted in favor of Transmission Provider herein; no financing statement covering all or a portion of the Collateral is on file in any public office other than in favor of Transmission Provider; and the security interest herein constitutes a legal and valid, first priority security interest in the Collateral.

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Transmission Provider Security Agreement

(4) The Company represents and warrants to Transmission Provider that the exact corporate name of the Company is correctly stated in the preamble to this Security Agreement and the Company is organized and validly existing under the laws of the State of \_\_\_\_\_. The Company has provided Transmission Provider with a true, accurate and complete list of all previous legal names of the Company (and its predecessors) and all past and present assumed (or fictitious) names and trade names of the Company (and its predecessors) for the past six (6) years. The Company's chief executive office and taxpayer identification number are accurately set forth in the preamble to this Security Agreement. Company shall provide a certificate of existence (or good standing, as the case may be) from the Secretary of State of the state in which Company was organized, such certificate to be dated within ten (10) days of the date of this Security Agreement.

(5) All Collateral held or controlled by the Transmission Provider after the date of this Security Agreement shall be free of any lien, security interest or encumbrance, granted or arising by, through or under the Company except for liens, security interests or encumbrances in favor of Transmission Provider, and the Company agrees not to grant any security interest or permit any lien or encumbrance to arise by, through or under the Company in any of the Collateral except for security interests, liens and encumbrances in favor of Transmission Provider without the prior written consent of Transmission Provider.



(6) The Company shall provide prior written notice of any change in its jurisdiction of organization, which notice must be received at least thirty (30) days before such change becomes effective.

(7) Upon the Transmission Provider's request, the Company agrees to do such reasonable acts and things and deliver or cause to be delivered such other documents as Transmission Provider may reasonably deem necessary to establish and maintain a valid first priority perfected security interest in the Collateral (free of all other liens and claims except those of Transmission Provider) to secure the payment and performance of the Liabilities, and to defend title to the Collateral against any person claiming any interest therein adverse to Transmission Provider (unless such adverse interest arises by, through or under the Transmission Provider). The Company authorizes Transmission Provider to file a financing statement or statements in those public offices deemed advisable or necessary by Transmission Provider to protect the security interest herein granted by the Company. If permitted by law, the Company agrees that a carbon, photographic or other reproduction of this Security Agreement or of a financing statement may be filed as a financing statement.

Transmission Provider Security Agreement

(8) The Company agrees that all checks and other instruments received by Transmission Provider after the occurrence and during the continuance of any Default (as that term is defined in the Tariff) as products or proceeds of Collateral will be credited upon receipt to the Liabilities by the Transmission Provider in an order and manner consistent with the Tariff, subject to final payment.

(9) Subject to the Tariff, if a Default occurs and is continuing, Transmission Provider shall have all rights and remedies available at law or in equity including, without limitation, the rights and remedies of a secured party under the Indiana Uniform Commercial Code, as in effect from time to time, including, without limitation, the right to take possession of the Collateral. Subject to the Tariff, Transmission Provider may in its discretion transfer any property constituting Collateral into its own name or that of its nominee, and receive the income thereon and hold such income as security for the Liabilities or apply it on amounts due on Liabilities. Any and all deposit accounts, deposits or other sums at any time credited by or due from Transmission Provider to the Company shall at all times constitute security for any and all Liabilities, and Transmission Provider may apply or set off such deposits or other sums against Liabilities at any time in Default (or as otherwise permitted by the Tariff) whether or not the Liabilities are then due or other collateral is considered by Transmission Provider to be adequate.

(10) To the extent permitted by applicable law and for the sole purpose of exercising the Transmission Provider's rights under this Security Agreement from and during the occurrence of a Default, the Company hereby constitutes and appoints Transmission Provider, through any of

its officers, as its true and lawful attorney-in-fact, with full power of substitution and authority in the place and stead of the Company and in the name of the Company or in its own name, from time to time, to take any and all appropriate action and to execute any and all documents and instruments which may be necessary or desirable to exercise the Transmission Provider's rights under this Security Agreement from and during the occurrence of a Default. To the extent permitted by applicable law, such power of attorney is coupled with an interest and shall be irrevocable until such time as all of the Liabilities are fully and finally and irrevocably paid and performed. To the extent permitted by applicable law, the Company hereby ratifies and approves all acts of such attorneys that are taken within the authority granted to such attorneys pursuant to this Security Agreement and in a manner consistent with this Security Agreement and the Tariff; provided, however, this sentence shall not be deemed to be a waiver of any rights of the Company under this Security Agreement, any other agreement or the Tariff with respect to any breach of this Security Agreement by the Transmission Provider. Neither Transmission Provider nor any attorney will be liable for any acts or omissions nor for any error of judgment or mistake of fact or law, absent gross negligence or intentional misconduct and subject to the limitations on liability set forth in the Tariff.

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Transmission Provider Security Agreement

(11) Until such time as Transmission Provider exercises its remedies upon a Default, all income, earnings and profits with respect to the Collateral are property of the Company and shall be reported for state and federal income tax purposes as attributable to the Company and not Transmission Provider; and the Company hereby instructs Transmission Provider (and any other person authorized to report taxable income distributions) to issue, or cause to be issued, as legally required, IRS Form 1099 indicating the Company as the recipient of such income, earnings and profits.

(12) Whenever possible, each provision of this Security Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Security Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition without invalidating the remainder of such provision or the remaining provisions of this Security Agreement. The Company recognizes that Transmission Provider has relied on this Security Agreement in extending credit to the Company and agrees that such reliance by Transmission Provider shall be sufficient consideration for this Security Agreement.

(13) To the extent there is any conflict between this Security Agreement, as it may be amended, and the Tariff (including, without limitation, the Credit Policy), the Tariff controls. The Collateral shall be held in accordance with Section 7.12 of the Tariff, as such Section may be amended from time to time.

(14) The Company maintains any and all rights under Section 206 of the Federal Power Act it may have with regard to this Security Agreement or its implementation.

(15) This Agreement and all rights and obligations hereunder, including matters of construction, validity and performance, shall be governed by the Uniform Commercial Code and other applicable laws of the State of Indiana, without regard to conflict of law principles. Capitalized terms used herein and not specifically herein defined shall have the meanings ascribed to them in the Tariff.

(16) The Company acknowledges receipt of a copy of the financing statement to be filed in the appropriate jurisdiction.

5 of 6

Transmission Provider Security Agreement

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Company Name

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Authorized Signature

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Print Name

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Title

State of \_\_\_\_\_ )

) SS:

County of \_\_\_\_\_ )

Before me, a Notary Public in and for said County and State, personally appeared [Name],  
known to me to be the [Title] of the [Company], and acknowledged the execution of the  
foregoing for and on behalf of said company.

Witness my hand and Notarial Seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

My Commission Expires:

\_\_\_\_\_

Signature

\_\_\_\_\_

\_\_\_\_\_

Residing in \_\_\_\_\_ County, \_\_\_\_\_

Printed, Notary Public

**EXHIBIT V**  
**CREDIT AND SECURITY AGREEMENT**

This Credit and Security Agreement is effective as of the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_ (the “Company”) and Midcontinent Independent System Operator, Inc. (“Transmission Provider”).

WHEREAS, Transmission Provider offers certain transmission, energy market and other services under the Transmission Provider’s Open Access Transmission, Energy and Operating Reserve Markets Tariff on file with the Federal Energy Regulatory Commission (“Commission”) as it may be amended and supplemented from time to time (the “Tariff”);

WHEREAS, Transmission Provider maintains a Credit Policy (which is Attachment L to the Tariff, as the same may be amended from time to time in accordance with applicable law) in order to determine, on a case-by-case basis, the level of unsecured credit available to each person who takes services under Transmission Provider’s Tariff and the form and amount of financial assurance to be required by each person, if any;

WHEREAS, as of the date hereof, Transmission Provider has made a determination as to the unsecured credit limit and financial assurance accommodations, if any, required of the Company to assure prompt payment of all amounts due under, in connection with, or pursuant to the Tariff; and

WHEREAS, in the event the Company provides financial assurance to the Transmission Provider in the form of a letter of credit, the Transmission Provider requires the Company, in accordance with the terms of the Transmission Provider’s Credit Policy on file with the



Commission, to execute this Credit and Security Agreement in order to perfect Transmission Provider's security interest in the Collateral (as hereinafter defined);

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by each of the parties hereto, the Company and the Transmission Provider hereby agree to, and accept, all of the following:

(1) The "Liabilities" as that term is used in this Credit and Security Agreement means all of the payment obligations (including, without limitation, reasonable attorneys' fees) of the Company in favor of the Transmission Provider or any ITC (as defined in the Tariff) (whether for the Transmission Provider's or ITC's own account or for the account of any other person) under the Tariff and any and all other agreements to which Transmission Provider and the Company are parties (collectively, the "Agreements").

(2) As security for the payment and performance of the Liabilities, Transmission Provider shall have, and the Company hereby grants to Transmission Provider, a continuing security interest in the following collateral (the "Collateral"): all of the Company's right, title, and interest in any and all cash, cash collateral, cash deposits and deposit accounts of the Company held or controlled by Transmission Provider that are or contain proceeds from any draw upon any letter(s) of credit naming Transmission Provider as beneficiary, however created or evidenced, whether now existing or hereafter owned, acquired, created, used or arising, including all products and proceeds of the foregoing, any and all renewals, extensions, replacements, modifications, additions, and substitutions of the foregoing and all rights, remedies, claims and demands under or in connection with each of the foregoing. Notwithstanding anything in this Credit and Security Agreement to the contrary, the Collateral shall not include any cash

deposited or advanced by the Company in connection with the Company's transmission system enhancement obligations under the Tariff.

(3) The Company hereby represents and warrants to Transmission Provider that: all Collateral is lawfully owned by the Company, free and clear of any prior security interest, pledge, sale, assignment, transfer or other encumbrance other than any recoupment, setoff or other rights of Transmission Provider in and to such Collateral; the Company has the unencumbered right to pledge, sell, assign or transfer the Collateral subject to any recoupment, setoff or other right of Transmission Provider in and to such Collateral and subject to the security interest granted in favor of Transmission Provider herein; no financing statement covering all or a portion of the Collateral is on file in any public office other than in favor of Transmission Provider; and the security interest herein constitutes a legal and valid, first priority security interest in the Collateral.

(4) The Company represents and warrants to Transmission Provider that the exact corporate name of the Company is correctly stated in the preamble to this Credit and Security Agreement and the Company is organized and validly existing under the laws of the State of \_\_\_\_\_. The Company has provided Transmission Provider with a true, accurate and complete list of all previous legal names of the Company (and its predecessors) and all past and present assumed (or fictitious) names and trade names of the Company (and its predecessors) for the past six (6) years.

(5) All Collateral held or controlled by the Transmission Provider after the date of this Credit and Security Agreement shall be free of any lien, security interest or encumbrance, granted or arising by, through or under the Company except for liens, security interests or encumbrances in favor

of Transmission Provider, and the Company agrees not to grant any security interest or permit any lien or encumbrance to arise by, through or under the Company in any of the Collateral except for security interests, liens and encumbrances in favor of Transmission Provider without the prior written consent of Transmission Provider.

(6) The Company shall provide prior written notice of any change in its jurisdiction of organization, which notice must be received at least thirty (30) days before such change becomes effective.

(7) Upon the Transmission Provider's request, the Company agrees to do such reasonable acts and things and deliver or cause to be delivered such other documents as Transmission Provider may reasonably deem necessary to establish and maintain a valid perfected security interest in the Collateral (free of all other liens and claims except those of Transmission Provider) to secure the payment and performance of the Liabilities, and to defend title to the Collateral against any person claiming any interest therein adverse to Transmission Provider (unless such adverse interest arises by, through or under the Transmission Provider). The Company authorizes Transmission Provider to file a financing statement or statements in those public offices deemed advisable or necessary by Transmission Provider to protect the security interest herein granted by the Company. If permitted by law, the Company agrees that a carbon, photographic or other reproduction of this Credit and Security Agreement or of a financing statement may be filed as a financing statement.

(8) The Company agrees that all checks and other instruments received by Transmission Provider after the occurrence and during the continuance of any Default (as that term is defined in the Tariff) or any default under the Tariff as products or proceeds of Collateral will be credited

upon receipt to the Liabilities by the Transmission Provider in an order and manner consistent with the Tariff, subject to final payment.

(9) Subject to the Tariff, if a Default occurs and is continuing (including any default under the OATT), Transmission Provider shall have all rights and remedies available at law or in equity including, without limitation, the rights and remedies of a secured party under the Indiana Uniform Commercial Code, as in effect from time to time, including, without limitation, the right to take possession of the Collateral.

Subject to the Tariff, Transmission Provider may in its discretion transfer any property constituting Collateral into its own name or that of its nominee, and receive the income thereon and hold such income as security for the Liabilities or apply it on amounts due on Liabilities.

(10) To the extent permitted by applicable law and for the sole purpose of exercising the Transmission Provider's rights under this Credit and Security Agreement from and during the occurrence of a Default (including any default under the Tariff), the Company hereby constitutes and appoints Transmission Provider, through any of its officers, as its true and lawful attorney-in-fact, with full power of substitution and authority in the place and stead of the Company and in the name of the Company or in its own name, from time to time, to take any and all appropriate action and to execute any and all documents and instruments which may be necessary or desirable to exercise the Transmission Provider's rights under this Credit and Security Agreement from and during the occurrence of a Default (including any default under the Tariff). To the extent permitted by applicable law, such power of attorney is coupled with an interest and shall be irrevocable until such time as all of the Liabilities are fully and finally and

irrevocably paid and performed. To the extent permitted by applicable law, the Company hereby ratifies and approves all acts of such attorneys that are taken within the authority granted to such attorneys pursuant to this Credit and Security Agreement and in a manner consistent with this Credit and Security Agreement and the Tariff; provided, however, this sentence shall not be deemed to be a waiver of any rights of the Company under this Credit and Security Agreement, any other agreement or the Tariff with respect to any breach of this Credit and Security Agreement by the Transmission Provider. Neither Transmission Provider nor any attorney will be liable for any acts or omissions nor for any error of judgment or mistake of fact or law, absent gross negligence or intentional misconduct and subject to the limitations on liability set forth in the Tariff.

(11) Until such time as Transmission Provider exercises its remedies upon a Default (including any default under the Tariff), all income, earnings and profits with respect to the Collateral are property of the Company and shall be reported for state and federal income tax purposes as attributable to the Company and not Transmission Provider; and the Company hereby instructs Transmission Provider (and any other person authorized to report taxable income distributions) to issue, or cause to be issued, as legally required, IRS Form 1099 indicating the Company as the recipient of such income, earnings and profits.

(12) Whenever possible, each provision of this Credit and Security Agreement shall be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Credit and Security Agreement shall be prohibited by or invalid under applicable law, such provision shall be ineffective only to the extent of such prohibition without invalidating the remainder of such provision or the remaining provisions of this Credit and

Security Agreement. The Company recognizes that Transmission Provider has relied on this Credit and Security Agreement in extending credit to the Company and agrees that such reliance by Transmission Provider shall be sufficient consideration for this Credit and Security Agreement.

(13) To the extent there is any conflict between this Credit and Security Agreement, as it may be amended, and the Tariff (including, without limitation, the Credit Policy), the Tariff controls. The Collateral shall be held in accordance with Section 7.15 of the Tariff, as such Section may be amended from time to time.

(14) The Company maintains any and all rights under Section 206 of the Federal Power Act it may have with regard to this Credit and Security Agreement or its implementation.

This Credit and Security Agreement shall be construed and enforced in accordance with, and governed by, the laws of the State of Indiana (without giving effect to the principles of conflicts of laws thereof).

Company Name \_\_\_\_\_

Authorized Signature \_\_\_\_\_

Print Name \_\_\_\_\_

Before me, a Notary Public in and for said County and State, personally appeared [Name],  
known to me to be the [Title] of the [Company], and acknowledged the execution of the  
foregoing for and on behalf of said company.

Witness my hand and Notarial Seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

My Commission Expires: \_\_\_\_\_

Signature

Residing in \_\_\_\_\_ County, \_\_\_\_\_

Printed, Notary Public

MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.

Authorized Signature

\_\_\_\_\_

Authorized Signatory

State of \_\_\_\_\_ )

) SS:

County of \_\_\_\_\_ )

Before me, a Notary Public in and for said County and State, personally appeared

\_\_\_\_\_, known to me to be the

\_\_\_\_\_ of the Midcontinent Independent System Operator,

Inc, and acknowledged the execution of the foregoing for and on behalf of said company.

Witness my hand and Notarial Seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

My Commission Expires: \_\_\_\_\_

Signature

Residing in \_\_\_\_\_ County, \_\_\_\_\_

Printed, Notary Public



**EXHIBIT VI**

**MISO MINIMUM PARTICIPATION CRITERIA**

**ANNUAL CERTIFICATION FORM**

I, \_\_\_\_\_, a duly authorized officer of  
\_\_\_\_\_  
\_\_\_\_\_ (“Tariff Customer”), understanding that  
the Midcontinent Independent System Operator, Inc. (“MISO”) is relying on this  
certification as evidence supporting MISO determination that Tariff Customer meets the  
minimum participation requirements as set forth in Attachment L to MISO’s Open Access  
Transmission, Energy and Operating Reserve Markets Tariff (“Tariff”), hereby certify that  
I have full authority to certify and represent on behalf of Participant and further certify and  
represent as follows:

1. Training. Employees or agents transacting, or planning to transact, in markets or  
services provided pursuant to the MISO Tariff on behalf of the Tariff Customer or  
Applicant have received or will receive applicable training<sup>1</sup> with regards to their  
participation under the MISO Tariff as a condition of being authorized to transact  
on behalf of Tariff Customer.
2. Risk Management. Tariff Customer, Applicant or their agents maintain current  
written risk management policies and procedures that address those risks that could  
materially affect Tariff Customer’s ability to pay its MISO invoices when due,  
including, but not limited to credit risks, liquidity risks and market risks.

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<sup>1</sup> As used in this representation, training is deemed ‘applicable’ where it is commensurate and proportional in  
sophistication, scope and frequency to the volume of transactions and the nature and extent of the risk taken by  
the participant.

3. Operational Capabilities. Applicant or Tariff Customer has available appropriate personnel resources, operating procedures and technical abilities to promptly and effectively respond to MISO communications and directions related to, but not limited to, Settlements, billing, credit requirements, and other financial matters.
4. Capitalization. Applicant or Tariff Customer will maintain the minimum capitalization or alternative capitalization requirements applicable to the level of service Applicant or Tariff Customer transacts or plans to transact, as detailed in Section III of Attachment L to the Tariff. Minimum capitalization may be satisfied by either: (a) submitting audited financial statements for the most recent fiscal year that demonstrate a minimum tangible net worth or minimum total assets relative to the services transacting; or (b) providing alternative capitalization in the form of Financial Security.
5. Appropriate Person. Applicant or Tariff Customer is now and in good faith will seek to remain an “appropriate person” per Section 4(c)(3) of the Commodity Exchange Act<sup>2</sup> (“CEA”). Under 4(c)(3)(K) this “appropriate person” definition includes “Eligible Contract Participants” as defined in Section 1a(18)<sup>3</sup> of the CEA, and persons in the business of: (1) generating, transmitting, or distributing electric energy, or (2) providing electric energy services that are necessary to support the reliable operation of the transmission system. If, at any time, a Tariff Customer cannot meet the eligibility

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<sup>2</sup> 7 USC § 6(c)(3)

<sup>3</sup> 7 USC § 1a(18)

requirements set forth above, it shall immediately notify Transmission Provider and immediately cease conducting transactions in MISO markets.

If the minimum participation requirements detailed in Section III of the Credit Policy are not met, Applicant or Tariff Customer certification may be denied or suspended, as appropriate.

Are you aware of any individual who will be participating in trading activity on behalf of Applicant or Tariff Customer who is subject to a prohibition against trading in electric energy markets?

☐ Yes ☐ No

Has the Applicant, Tariff Customer, or an affiliate financially defaulted in an energy market within the last five years?

☐ Yes ☐ No

If yes, provide:

1. The market where default occurred
2. Date of default
3. If/when the default was cured
4. If uncured, the magnitude of loss to the market

If any of the following events have occurred within the last five years provide a summary:

1. Bankruptcy
2. Dissolution
3. Merger or acquisition that led to a Material Change for the Tariff Customer

Unless prohibited by law, list any past or ongoing investigations, of which Applicant is aware and has not previously disclosed to the Transmission Provider, and that have occurred within the last five years against the applicant, Tariff Customer, or affiliates of Tariff Customer by FERC, SEC, CFTC, any exchange monitored by the National Futures Association, or any entity responsible for regulating activity in energy markets. The applicant must take reasonable efforts to obtain permission to disclose information related to a non-public investigation.

Information provided herein shall be treated as Confidential Information pursuant to the Transmission Provider's Tariff.

*Date:* \_\_\_\_\_

\_\_\_\_\_  
(Signature)

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

## EXHIBIT VII

### MISO MINIMUM PARTICIPATION CRITERIA

#### APPROPRIATE PERSON VERIFICATION

Applicant or Tariff Customer Name: \_\_\_\_\_

**Instructions:** Your submission is required within seven (7) calendar days of written request from MISO for “appropriate person” verification. Your completed form should provide MISO with clear guidance explaining how your Applicant or Tariff Customer meets the Commodity Futures Trading Commission’s (“CFTC”) definition of “appropriate person” per Section 4(c)(3) of the Commodity Exchange Act<sup>4</sup> (“CEA”). This is necessary to satisfy the minimum requirements for participation in Section III.B of Attachment L of MISO’s Tariff. Submit this completed form along with evidence which demonstrates Applicant or Tariff Customer is an “appropriate person” to [MISOcredit@misoenergy.org](mailto:MISOcredit@misoenergy.org) or overnight to MISO Credit, 720 City Center Dr., Carmel, IN 46032.

**4(c)(3)** “For purposes of this subsection, the term “appropriate person” shall be limited to the following persons or classes thereof:”

- (A) A bank or trust company (acting in an individual or fiduciary capacity).
- (B) A savings association.
- (C) An insurance company.

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<sup>4</sup> 7 USC § 6(c)(3)

**(D)** An investment company subject to regulation under the Investment Company Act of 1940 (15 U.S.C. 80a–1 et seq.).

**(E)** A commodity pool formed or operated by a person subject to regulation under this chapter.

**(F)** A corporation, partnership, proprietorship, organization, trust, or other business entity with a net worth exceeding \$1,000,000 or total assets exceeding \$5,000,000, or the obligations of which under the agreement, contract or transaction are guaranteed or otherwise supported by a letter of credit or keepwell, support, or other agreement by any such entity or by an entity referred to in subparagraph (A), (B), (C), (H), (I), or (K) of this paragraph.

**(G)** An employee benefit plan with assets exceeding \$1,000,000, or whose investment decisions are made by a bank, trust company, insurance company, investment adviser registered under the Investment Advisers Act of 1940 [15 U.S.C. 80b–1 et seq.], or a commodity trading advisor subject to regulation under this chapter.

**(H)** Any governmental entity (including the United States, any state, or any foreign government) or political subdivision thereof, or any multinational or supranational entity or any instrumentality, agency, or department of any of the foregoing.

**(I)** A broker-dealer subject to regulation under the Securities Exchange Act of 1934 (15 U.S.C. 78a et seq.) acting on its own behalf or on behalf of another appropriate person.

**(J)** A futures commission merchant, floor broker, or floor trader subject to regulation under this chapter acting on its own behalf or on behalf of another appropriate person.

**(K)** Such other persons that the Commission determines to be appropriate in light of their financial or other qualifications, or the applicability of appropriate regulatory protections. The

Final Order of the CFTC at 77 FR 30596 states that under 4(c)(3)(K) the definition of “appropriate person” includes “eligible contract participants” as defined in Section 1a(18) of the CEA<sup>5</sup> and persons in the business of: (1) generating, transmitting, or distributing electric energy, or (2) providing electric energy services that are necessary to support the reliable operation of the transmission system.

Applicant or Tariff Customer must qualify under at least one of the above provisions of the definition of an “appropriate person”. Please reference the applicable sections (A-K) and provide a short description below. If submitting unaudited financials as evidence to support (F) above the Transmission Provider will require an accompanying memo attesting to the accuracy of the financials which is executed by an Officer of the Applicant or Tariff Customer.

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Date: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
<sup>5</sup> 7 USC § 1a(18)

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_



## EXHIBIT VIII

### MISO MINIMUM PARTICIPATION CRITERIA

#### ANNUAL DISCLOSURE

Applicants and Tariff Customers are required to provide information about their affiliation with other MISO Applicants, Tariff Customers or Members in compliance with Sections I.A.5), I.B.5) and II.C of Attachment L to MISO's Energy and Operating Reserve Markets Tariff. An Affiliate is any individual, corporation, partnership, firm, joint venture, association, joint stock company, trust or unincorporated organization, directly or indirectly controlling, controlled by, or under common control with the Tariff Customer or Applicant. The term "control" means the possession, directly or indirectly, of the power to direct the management or policies of a person or an entity. A voting interest of ten percent or more creates a rebuttable presumption of control.

<b><u>Legal Name of Applicant or Tariff Customer</u></b>	<b><u>Entity Code</u></b>

<b><u>Legal Name of Affiliated Applicant, Tariff Customer or</u></b> <b><u>Member</u></b>	<b><u>Entity Code or member</u></b> <b><u>sector</u></b>

Information regarding the issuance of securities by Applicants, Tariff Customers, Members and their Affiliates is required to preserve the independence of MISO's Directors, Officers and staff in accordance with MISO's Standards of Conduct. For the purposes of this form, securities include publicly-traded bonds, stocks, debentures, notes and options available to retail investors.

Please complete the table below by providing information about securities issued by the Applicant, Tariff Customer, or any Affiliate where such entity (a) has a North American Industry Classification System code within the "Electric Power Generation, Transmission, and Distribution" industry group (*i.e.*, beginning with 2211) or that owns or operates facilities subject to the jurisdiction of the Federal Energy Regulatory Commission under Part II of the Federal Power Act, (b) is a Qualified Transmission Developer, or (c) has engaged in activities or transactions under the MISO Tariff or any associated rate schedule in the current or prior calendar year.

<b><u>Legal Name of Applicant or Tariff Customer</u></b>	<b><u>Exchange &amp; Stock Symbol (if applicable)</u></b>	<b><u>At Least One Debt Security CUSIP # (if applicable)</u></b>	<b><u>DUNS Number (if applicable)</u></b>	<b><u>Entity Code</u></b>
<b><u>Corporate Parent(s) of Applicant or Tariff Customer</u></b>	<b><u>Exchange &amp; Stock Symbol (if applicable)</u></b>	<b><u>At Least One Debt Security CUSIP # (if applicable)</u></b>	<b><u>DUNS Number (if applicable)</u></b>	<b><u>MISO Tariff Customer or Member?</u></b>
<b><u>Other Affiliates (as defined above) that issue securities</u></b>	<b><u>Exchange &amp; Stock Symbol (if applicable)</u></b>	<b><u>At Least One Debt Security CUSIP # (if applicable)</u></b>	<b><u>DUNS Number (if applicable)</u></b>	<b><u>MISO Tariff Customer or Member?</u></b>

Please use additional sheets as necessary.

The submitted information is correct and complete to the best of my knowledge.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed name and title

\_\_\_\_\_  
Date

Tab C

### **Demand Resource Eligibility**

A Market Participant that possesses ownership or equivalent contractual rights in a Demand Resource can request accreditation for a Demand Resource as an LMR by registering such resource with the Transmission Provider as documented in the BPM for Resource Adequacy.

The Market Participant registering the Demand Resource must include the contracts with each end-use customer indicating rights to require the Demand Resource to curtail Load.

Notwithstanding, a copy of a contract with an end-use customer will not be required if the Market Participant is the end-use customer. In addition, the Market Participant must meet the following requirements:

- a. The Demand Resource must be equal to or greater than 100 kW (a grouping of smaller resources aggregated together that can reduce an LSE's Coincident Peak Demand for the applicable Season may qualify in meeting this standard).
- b. ~~The Demand Resource must be available to be scheduled for a Demand reduction at the targeted Demand reduction amount or by moving to a specified firm service level with notice based on their physical availability but with no more than 12 Hours advance notice required from the Transmission Provider. Limitations due to applicable regulatory restrictions that are more restrictive than the physical limitations of the Demand Resource will supersede the physical availability of the Demand Resource; however, in no event shall the Demand Resource's maximum notice requirement be greater than 12 hours. Further, limitations due to contractual obligations that are more restrictive than the physical limitations of the Demand Resource in place as of December 21, 2018 will supersede the~~

~~physical availability of the Demand Resource for the 2019/2020 and 2020/2021 Planning Years; however, in no event shall the Demand Resource's maximum notice requirement be greater than 12 hours. A Demand Resource with a notification time requirement greater than 6 hours but less than or equal to 12 hours and a minimum of 10 interruptions allowed during the Planning Year will receive 50% credit as a Planning Resource for the 2022/2023 Planning Year. For the 2022/2023 Planning Year, Demand Resources with notification time requirements greater than 6 hours but less than or equal to 12 hours with less than 10 interruptions allowed will receive no credit. Beginning in the 2023/2024 Planning Year, a~~ Demand Resource must have a notification time requirement less than or equal to six (6) hours to receive credit as a Planning Resource in the applicable Seasons.

- c. Once Scheduling Instructions are given by the Transmission Provider that require a Demand reduction, the Demand Resource must be capable of ramping down to meet the targeted Demand reduction amount or to achieve the firm service level by the Hour designated by the Transmission Provider's Scheduling Instructions.
- d. Once the targeted amount of Demand reduction or firm service level is achieved, the Demand Resource must be able to maintain the targeted amount of Demand reduction or firm service level for at least four (4) continuous Hours.
- e. ~~For the 2022/2023 Planning Year, the Demand Resource must be capable of being interrupted for at least the first five (5) times requested based on their physical availability (when called upon by the Transmission Provider for an Emergency)~~

~~during any Planning Year for which the Demand Resource receives credit as a Planning Resource. This availability must include at least the entire Summer Season. In addition to notification time requirements, the amount of credit that a Demand Resource receives as a Planning Resource will be based on the number of interruptions allowed on the Demand Resource during the Planning Year. Demand Resources with a notification time requirement less than or equal to 6 hours will receive credit as a Planning Resource based on a multiplier of: (i) 80% if 5 to 9 interruptions per Planning Year are allowed on the Demand Resource; or, (ii) 100% if 10 or more interruptions per Planning Year are allowed on the Demand Resource.~~

~~Beginning in the 2023/2024 Planning Year, the~~[A](#) Demand Resource must have a notification time equal to or less than six (6) hours and be capable of being interrupted for: (i) at least the first five (5) times requested in the Summer Season; (ii) at least the first five (5) times requested in the Winter Season; (iii) at least the first three (3) times requested in the Spring Season; and (iv) at least the first three (3) times requested in the Fall Season, based on their physical availability when called upon by the Transmission Provider for an Emergency during any applicable Season in the Planning Year for which the Demand Resource receives credit as a Planning Resource. These obligations only apply to Seasons in which a Demand Resource clears the Planning Resource Auction. Limitations due to applicable regulatory restrictions that are more restrictive than the physical limitations of the Demand Resource will supersede the physical

availability of the Demand Resource.

- f. Unless the Demand Resource is unavailable as a result of maintenance requirements or for reasons of Force Majeure, when a Demand reduction is requested by the Transmission Provider for an Emergency, the resultant reduction must be a reduction that would not have otherwise occurred within the next twenty four (24) hour period. There shall be no penalties assessed to a Market Participant representing the entity that has offered ZRCs from the LMR if the Demand Resource is unavailable for interruption as a result of maintenance requirements in accordance with Good Utility Practice, or for reasons of Force Majeure, or in the event that the specified Demand reduction had already been accomplished for other reasons (*e.g.*, economic considerations, operating one's own Demand Resource at or above the credited level of Demand Resource, or local reliability concerns in accordance with instructions from the Local Balancing Authority).
- g. A Demand Resource for which curtailment is not an obligation during Emergency events declared by the Transmission Provider pursuant to the Transmission Provider emergency operating procedures, will not qualify as an LMR.
- h. A Market Participant shall be prohibited from registering a Demand Resource for which credit is already being taken by a Market Participant.
- i. Demand Resources that are offered into the Day-Ahead and/or Real-Time Energy and Operating Reserve Markets as price sensitive Bids are obligated to be interrupted during an Emergency pursuant to the Transmission Provider

emergency operating procedures regardless of the projected or actual Real-Time Energy Market LMP.

- j. A Market Participant must demonstrate ~~demand~~-Demand reduction capability for each Planning Year on an annual basis through the performance of a real power test using the defined baselines for the Measurement and Verification of the test, as described below in this subsection~~as established in the BPM for Resource Adequacy. Beginning with the 2020/2021 Planning Year each Demand Resource must validate its performance by meeting the Transmission Provider's Scheduling Instructions when called upon during the prior Planning Year or conducting a real power test.~~ A Demand Resource for which a real power test is conducted will receive credit as one (1) of the minimum deployments or interruptions required for such resource for the applicable Season of the Planning Year in which such a test occurs.

Alternatively, A-a Demand Resource may provide operational data and documentation, ~~or develop an alternative mechanism, subject to the approval of the Transmission Provider~~, by which the demand reduction capability can be demonstrated without requiring an actual demand reduction if a real power test is precluded or waived due to one of the ~~two~~ conditions as specified below:

- 1) Such a real power test is either explicitly precluded or explicitly waived under a retail program approved by any applicable regulatory authority, the Market Participant registering the Demand Resource is participating in such retail program with the same resource being registered with the



Transmission Provider, ~~restriction~~ and documentation of such a ~~limitation~~preclusion or waiver is ~~documented~~provided during ~~DR~~ registration; ~~or~~ for the Planning Resource Auction.

2) For the 2026 / 2027 Planning Year, A-a Market Participant registering a Demand Resource with the Transmission Provider for the Planning Resource Auction, where such resource is also participating in a retail program overseen by a regulatory authority, may waive the obligation to conduct a real power test by notifying the Transmission Provider during DR registration into the PRA and accepting a penalty equal to three (3) times the Hourly Real-Time Ex Post LMP at the Load CPNode described in and distributed pursuant to Section 69A.3.9. A Demand Resource providing such notice must satisfy the documentation requirements described in the Business Practices Manual for Resource Adequacy and credit requirements by March 1 prior to the Planning Year totaling the ICAP value registered, but not tested, multiplied by \$2,40012,000/MW, where \$2,40012,000 is the product of  $3 * 4 * \$200-1,000$  to account for the three (3) times energy penalty assumed under the waiver, the four (4) hours of LMR requirements, and a \$200-1,000 LMP as a proxy for pricing under ~~emergency~~Emergency conditions.

3) A Market Participant may request waiver of the obligation to conduct a real power test of a Demand Resource provided the Demand Resource being registered meets the following conditions during the three-year

period beginning on January 1st of the Year that is three years prior to the start of the applicable Planning Year:

- a) The resource has responded to at least one Scheduling Instruction, has fully met the performance requirements of all Scheduling Instructions issued, and has met the requirements of Section 69A.3.5.e; and
- b) The resource has not experienced a significant change in its operations or any change in the composition of the underlying non-residential components of the aggregation from the Planning Year prior to the Planning Year for which the resource is being registered. Aggregations comprised entirely of residential components satisfy this requirement unless they request a change in the total accredited amount of the program. The requirements of this subsection shall be further defined in the Business Practices Manual for Resources Adequacy.

Demand Resources not using a firm service level baseline.

For a resource that is not using the firm service level baseline Measurement and Verification procedure, the test must demonstrate 100% of the registered capacity value, subject to the requirements specified in the Business Practices Manual for Resource Adequacy. A weather adjustment may be applied to all such resources that have a temperature dependency. In no case will the weather adjustment increase the registered capacity value of the Demand Resource by more than 25%

of the tested value. Each component of an aggregation of assets using the calculated baseline technique must provide the results of separate tests for each component of the aggregation and these tests must be performed simultaneously. The baseline used for the performance of a real power test is the actual hourly use in the Hour the test begins.

Demand Resource using a firm service level baseline.

An asset using the firm service level baseline must provide a real power test under one of the following two conditions:

1. A test demonstrating the ability to reduce Demand when starting from a point at the beginning of the test that is at least 80% of the maximum Hourly metered Demand and ending at a point at or below the firm service level. When determining the maximum hourly Demand consumed to verify the real power test data submitted by a Market Participant, the Transmission Provider will exclude Hours with Demand that is at least two (2) standard deviations above the mean Demand consumed in a Season.; or
  2. A test demonstrating the ability to reduce Demand when starting from a point at least as great as the maximum Demand consumed during expected Resource Adequacy Hours, as set forth in the Resource Adequacy Business Practices Manual, and ending at a point at or below the firm service level.
- A test must be performed to satisfy the requirements for each Season for the most recent period spanning September 1 through August 31. A single annual test that

[satisfies the criteria for each Season shall satisfy this requirement.](#)

[Demand Resource using a custom baseline.](#)

[A resource using a custom baseline will be subject to the appropriate testing criteria determined by the Transmission Provider using the most appropriate baseline methodology set forth above.](#)

All existing accredited Demand Resources that neither conduct a real power test nor meet Scheduling Instructions issued by the Transmission Provider during the prior Planning Year must participate in training provided by the Transmission Provider on the deployment of LMRs during the prior Planning Year. Any existing accredited Demand Resource must submit (1) the real power test results, (2) reference performance of Scheduling Instructions for demand reduction when called upon during the calendar year prior to the upcoming Planning Year, (3) ~~alternate testing mechanism~~, relevant data, and a reference of training participation to the Transmission Provider, or (4) a Demand Resource Deferral Notice pursuant to 69A.3.5([4m](#)) and a reference of training participation to the Transmission Provider no later than February 1 prior to such Planning Year for existing accredited DR. For new Demand Resources, (1) a real power test must be conducted and results submitted to the Transmission Provider, ~~(2) alternate testing mechanism must be submitted~~, or ([32](#)) a Demand Resource Deferral Notice must be submitted prior to qualifying as a Demand Resource, but no later

than March 1 prior to the PRA in accordance with the BPM for Resource

Adequacy. ~~During a transition period that shall apply only to the 2021-2022~~

~~Planning Year, Market Participants may submit a Demand Resource Deferral~~

~~Notice no later than March 31, 2021 for existing accredited Demand Resource,~~

~~and Market Participants may submit a Demand Resource Deferral Notice no later~~

~~than March 31, 2021 prior to initially qualifying as a Demand Resource.~~

k. [Data submission requirements](#)

[A Market Participant must provide hourly meter data for each Demand Resource](#)

[being registered as detailed in the Business Practices Manual for Resource](#)

[Adequacy. A Market Participant electing to use the Demand Response Deferral](#)

[Notice must provide all available hourly meter data demonstrating the Demand](#)

[increase justifying the Demand Response Deferral Notice at the time of the real](#)

[power test required under Section 69A.3.5.m.](#)

- l. [Market Participants providing physical, regulatory, or contractual limitations of](#)  
the notice times and availability of Demand Resources must provide appropriate  
documentation to the Transmission Provider in accordance with the BPM for  
Resource Adequacy.

- ~~l.m.~~ [A Market Participant may defer the obligation to conduct a real power test, as set](#)  
forth in section 69A.3.5(j), by providing a Demand Resource Deferral Notice to  
the Transmission Provider in writing and signed by an officer of the company no  
later than February 1<sup>st</sup> prior to the Planning Year. During a transition period that  
shall apply only to the 2021-2022 Planning Year, Market Participants may submit

a Demand Resource Deferral Notice no later than March 31, 2021 for existing accredited Demand Resource, and Market Participants may submit a Demand Resource Deferral Notice no later than March 31, 2021 prior to initially qualifying as a Demand Resource. The Demand Resource Deferral Notice shall contain: (1) the expected Demand Resource test value (in megawatts) from such Demand Resource and if the Demand Resource is new, the LBA or external BA where it is represented; and (2) appropriate information validating that real power test results will be submitted to the Transmission Provider by the last Business Day of May prior to the Planning Year. A Market Participant that provides a Demand Resource Deferral Notice must satisfy credit requirements by March 1 prior to the Planning Year totaling the amount of Demand Resource test value provided in the Demand Resource Deferral Notice multiplied by ~~\$2,400~~12,000/MW, where ~~\$2,400~~12,000 is the product of 3\*4\* ~~\$200~~1,000 to account for the three (3) times energy penalty assumed under the deferral, the four (4) hours of LMR requirements, and a ~~\$200~~1,000 LMP as a proxy for pricing under emergency conditions. During a transition period that shall apply only to the 2021-2022 Planning Year, Market Participants that have elected to submit a Demand Resource Deferral Notice must satisfy credit requirements by March 31, 2021. If the Market Participant submits the real power test results on or before the last Business Day of May prior to the Planning Year that are equal to or greater than the expected Demand Resource test value, then the Transmission Provider will adjust the Market Participant's credit requirement to account for these

changes within twenty (20) Business Days after that real power test is submitted.

In the event ZRCs associated with a Planning Resource for which Demand Resource testing has been successfully deferred are unconverted in accordance with section 69A.7.3, the Market Participant may provide notice to the Transmission Provider that it wishes to forfeit the deferred Demand Resource value, in which case the Transmission Provider will adjust the Market Participant's Demand Resource value and credit requirement within twenty (20) Business Days. A Market Participant that provides a Demand Resource Deferral Notice and that either (1) has not submitted any real power test result for such Demand Resource by the last Business Day of May prior to the Planning Year, or (2) has submitted a real power test result by the last Business Day of May prior to the Planning Year that demonstrates fewer megawatts are available than the expected Demand Resource test value submitted in the Demand Resource Deferral Notice, shall be subject to a penalty equal to three (3) times the Hourly Real-Time Ex Post LMP at the Load CPNode for any such deficiency described in and distributed pursuant to Section 69A.3.9. In addition, such Market Participant shall not have their credit released until a real power test result demonstrating the availability of all megawatts submitted in the Demand Resource Deferral Notice is submitted and verified by the Transmission Provider, or the end of the Planning Year, whichever is earlier.

Tab D



**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**Midcontinent Independent  
System Operator, Inc.**

)  
)

**Docket No. ER25-\_\_\_\_-000**

**PREPARED DIRECT TESTIMONY OF  
ZHAOXIA XIE  
DIRECTOR OF MARKET DESIGN AND DEVELOPMENT**

1   **I.    PROFESSIONAL BACKGROUND AND QUALIFICATIONS**

2   **Q.    PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH**  
3   **MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.**

4   A.   My name is Zhaoxia Xie and I am the Director of Market Design and Development at the  
5       Midcontinent Independent System Operator, Inc. (MISO). The business address for MISO  
6       is 720 City Center Drive, Carmel, IN 46032.

7   **Q.    PLEASE    DESCRIBE    YOUR    EDUCATION    AND    PROFESSIONAL**  
8   **BACKGROUND.**

9   A.   I hold a Master of Science degree in Electrical Engineering from Iowa State University,  
10       with an emphasis in power systems. I received a Bachelor of Science degree in Electrical  
11       Engineering from Huazhong University of Science and Technology. I have more than 25  
12       years of experience in the electric industry. Prior to MISO, I worked on Energy  
13       Management System (EMS) software design and development. I began my tenure with  
14       MISO in 2003 and have held various leadership positions that span across EMS and Market  
15       Implementation, Model Engineering, Seams Administration, and Market Design and  
16       Development. I have supported multiple initiatives and filings with the Federal Energy  
17       Regulatory Commission (Commission) on MISO's Energy and Ancillary Service Markets  
18       and Resource Adequacy construct.

19   **Q.    PLEASE DESCRIBE YOUR CURRENT ROLE AND JOB RESPONSIBILITIES.**

20   A.   In my current role as Director of Market Design and Development at MISO, I am  
21       responsible for the functions of Markets and Operations Design and Demand Response  
22       Administration. I oversee the identification and development of policies, Tariff provisions,  
23       market rules and processes across MISO's Energy, Operating Reserves, Financial

1 Transmission Rights (FTRs) and Capacity markets to advance MISO's goals related to  
2 reliability and market efficiency. I also serve as the MISO liaison to the Resource Adequacy  
3 Subcommittee (RASC), which is the stakeholder led group at MISO focused on Resource  
4 Adequacy matters.

5 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

6 A. The purpose of my testimony is to support the changes MISO is seeking to make to the  
7 testing requirements for Demand Resources (the "DR Testing" filing) registering to  
8 participate in the annual Planning Resource Auction (PRA) beginning in Planning Year  
9 2026 / 2027. The proposed changes to the testing provisions contained in the instant DR  
10 Testing filing are necessary to ensure that the Demand Resources entering and potentially  
11 clearing the PRA are real, capable of delivering the registered capacity, and available to be  
12 called on and relied upon by MISO when needed.

13 **Q. PLEASE PROVIDE A HIGH-LEVEL OVERVIEW OF THE CHANGES TO THE**  
14 **DEMAND RESPONSE TESTING REQUIREMENTS MISO IS PROPOSING IN**  
15 **THIS FILING.**

16 A. MISO is proposing several changes to the Demand Resource testing requirements as part  
17 of this filing and those changes include:

- 18 1. Requiring all Market Participants to conduct a real power test for all Demand Resources  
19 registering in the PRA beginning with the 2026 / 2027 PRA, except as discussed below  
20 in Section II.B. *Real Power Test Waiver Requirements*.
- 21 2. Aligning Demand Resource testing requirements with the Measurement and  
22 Verification (M&V) methodology used to measure the performance of a Demand  
23 Resource when deployed.

3. Introducing parameters for conducting a real power test.
4. Redefining eligibility for a Demand Resource to qualify for a waiver from the real power test requirements.
5. Introducing data submission requirements for Demand Resources.
6. Introducing into the Tariff the Seasonal Accredited Capacity calculation applicable to Demand Resources for Planning Years (PY) 2026 / 2027 and 2027 / 2028.

These changes are discussed below.

**Q. WHAT WAS MISO'S DESIGN PHILOSOPHY WHEN MAKING THESE CHANGES?**

A. MISO's design philosophy reflects a desire to ensure equitable and consistent treatment of resources to ensure Market Participants have certainty regarding the rules of participation and improve the confidence that ratepayers are procuring resources capable of reducing Demand. As such, this design seeks to provide a set of rules and regulations for Demand Resources that clearly establish the requirements of a real power test, explicitly tie how a real power test relates to accreditation of Demand Resources, and provide a mechanism whereby Market Participants can waive the requirements to perform a real power test when authorized by regulatory authorities or verified through past performance in response to Scheduling Instructions issued by MISO. With those goals in mind, MISO decided upon the design presented in the instant filing.

**Q. HOW DOES THIS FILING RELATE TO OTHER RESOURCE ADEQUACY FILINGS MISO HAS SUBMITTED?**

A. This is the fourth in a series of five expected filings related to the participation of demand-side resources in the MISO markets, summarized in Figure 1.

Topic/Effort	Key Objectives of FERC Filing	Anticipated Filing Date	Anticipated Effective Date
Demand Response Participation Rules Enhancements	<ul style="list-style-type: none"> <li>Address issues identified by FERC Office of Enforcement and IMM with respect to Demand Response Resources (DRRs) and Load Modifying Resources (LMRs) currently participating in MISO's Markets</li> </ul>	Filed March 21, 2025 ER25-1729	July 19, 2025
Dual Registration of EDRs	<ul style="list-style-type: none"> <li>Eliminate dual registration for EDRs as a LMR and/or DRR to align the incentive signals sent by the participation options</li> </ul>	Filed April 25, 2025 ER25-2050	July 19, 2025
Demand Response and Emergency Resources Reforms (formerly known as LMR Reforms)	<ul style="list-style-type: none"> <li>Improve availability, operational effectiveness, and accreditation of demand response and emergency only resources to allow earlier access during emergency conditions based on notification times</li> <li>Key elements: i) Participation Options, ii) Measurement &amp; Verification Baseline methodology, iii) Accreditation, iv) Real-time availability, v) MISO Initiated Testing</li> </ul>	Filed April 4, 2025 ER25-1886	September 1, 2027
LMR Testing Rules	<ul style="list-style-type: none"> <li>Provide a standard, clear testing requirement for Demand Resources participating in the PRA</li> <li>Resources without contracts overseen by regulatory authorities will be required to test 2026 / 2027 PY</li> <li>Resources without explicit testing waivers approved by regulatory authorities will be required to test in 2027 / 2028 PY</li> </ul>	July 14, 2025	July 15, 2025
LMR Participation Rules Enhancements	<ul style="list-style-type: none"> <li>Clarify when and how MPs can replace LMRs during a Planning Year after clearing in the PRA</li> <li>Test Deferral</li> <li>Update non-performance penalties*</li> </ul>	2025	Tentatively June 1, 2026 for PY2026-27

Figure 1. Summary of filings addressing Demand Response and Load Modifying Resource's participation in the MISO markets.

These changes have occurred as part of the broader Resource Availability and Need (RAN) filings and in response to several FERC Office of Enforcement orders. MISO has previously filed rule changes regarding how Demand Response Resources (DRRs) participate in the Energy markets in Docket No. ER25-1729, several changes related to the participation and accreditation of Demand Response and Emergency Resources (DR/ER) in Docket No. ER25-1886, and the removal of dual-registration of Load Modifying Resources (LMRs) and DRRs as Emergency Demand Response (EDR) resources in Docket No. ER25-2050. This filing focuses on the rules governing the evidence provided by Market Participants registering Demand Resources into the PRA to demonstrate their ability to reduce Demand. The fifth and final filing in this series is expected to be made at a future date and will focus on other LMR participation rules and the penalties applied to LMRs that fail to meet their performance obligations.

**Q. PLEASE PROVIDE A SUMMARY OF THE FORTHCOMING CHANGES IMPACTING LOAD MODIFYING RESOURCES AND WHEN MISO INTENDS FOR THESE RULE CHANGES TO TAKE EFFECT.**

A. If the five filings are accepted as presented, Figures 2 through 4 provide summaries of the changes coming into effect over the next three (3) Planning Years. The proposed effective dates of these changes are staggered as shown in the figures below:

Filing	Changes that apply to 2026 / 2027 PY
DRR Rules Enhancements	<ul style="list-style-type: none"> <li>Increased clarity regarding qualification requirements for LMRs</li> <li>Increased data submission requirements after a deployment</li> <li>Measurement and Verification explicitly approved by MISO</li> </ul>
LMR Testing Rules* (To be filed July 14 <sup>th</sup> )	<ul style="list-style-type: none"> <li>Resources will need to provide a real power test unless overseen by a regulatory authority Testing, Data submission at the time of registration, and Accreditation to provide clarity and standardization</li> <li>Aggregations may continue to use the FSL baseline until 28 / 29 subject to restrictions</li> <li>Changes to credit requirements for resources electing a waiver to reflect Ex-Post Real-Time LMP price floors</li> </ul>
LMR Participation Rules Enhancements (To be filed at a later date)	<ul style="list-style-type: none"> <li>Demand Resource Deferral Notice changes Resource must begin operations prior to March 1 to qualify, and the test must be performed prior to the start of the Season rather than the Planning Year</li> <li>LMR will be permitted to replace under certain conditions</li> <li>LMR penalties strengthened for non-performance and under-performance</li> </ul>
Dual Registration of EDRs	<ul style="list-style-type: none"> <li>Dual-registration of EDR and LMR no longer permitted</li> </ul>

Figure 2. Summary of changes pending FERC approval scheduled to be effective in PY 2026 / 2027.

Filing	Changes that apply to 2027 / 2028 PY
LMR Testing Rules (To be filed July 14 <sup>th</sup> )	<ul style="list-style-type: none"> <li>All resources will be required to perform a real power test unless explicitly exempted by a regulatory authority</li> <li>Credit requirement for all resources adjusted to permit a waiver anytime a resource has fully met its performance obligations when issued Scheduling Instructions and has not experienced a change in operations</li> <li>When MISO-initiated testing begins, MISO-initiated tests will count towards the requirement to obtain a testing waiver</li> </ul>

Figure 3. Summary of changes pending FERC approval scheduled to be effective in PY 2027 / 2028.

Filing	Changes that apply to 2028 / 2029 PY
Demand Response and Emergency Resources Reforms (formerly known as LMR Reforms)	<ul style="list-style-type: none"> <li>Changes to the participation options               <ul style="list-style-type: none"> <li>LMR split into LMR – Type I, LMR – Type II</li> <li>Creation of Non -Emergency BTMG</li> <li>Removal of dual -registration of any kind</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>Measurement &amp; Verification Baseline methodology               <ul style="list-style-type: none"> <li>FSL no longer permitted to aggregate</li> <li>Inclusion of Statistical Interval M&amp;V</li> <li>Data submission requirement for the entire Planning Year</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>Accreditation               <ul style="list-style-type: none"> <li>Accreditation determined by real time availability brings LMR accreditation into alignment with Schedule 53A Resources</li> <li>Accreditation split into multiple parts for each participation option/resource type to properly capture capability</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>Real-time availability               <ul style="list-style-type: none"> <li>Real-time availability changes emphasis accurate availability information for all resource types improving reliability</li> </ul> </li> </ul>
	<ul style="list-style-type: none"> <li>MISO Initiated Testing               <ul style="list-style-type: none"> <li>Ensure resources are testing periodically ensuring resources can respond to a Scheduling Instruction</li> <li>Provides additional checks on resources ability to provide useful Demand reduction</li> </ul> </li> </ul>

Figure 4. Summary of changes pending FERC approval scheduled to be effective in PY 2028 / 2029.

## **II. OVERVIEW OF MISO’S APPROACH TO DEMAND RESPONSE**

**Q. PLEASE DESCRIBE HOW DEMAND RESOURCES CURRENTLY PARTICIPATE IN THE MISO CAPACITY MARKETS.**

A. MISO currently defines a Demand Resource as, “Interruptible Load or Direct Control Load Management and other resources that can reduce Demand during Emergencies.” This definition has been modified pending FERC acceptance of the DR/ER Reforms to include all resources that reduce Demand. The proposed new definition is “Interruptible Load, Direct Control Load Management, and other resources capable of taking actions to voluntarily, actively, and temporarily adjust Demand in response to Setpoint Instructions or Scheduling Instructions.”

Currently, Demand Resources have two options to select from if participating in the MISO Planning Resource Auction (PRA): participation as a Demand Response Resource (DRR) or participation as an LMR. Additionally, MISO permits a Demand Response Resource to dual-register as a Load Modifying Resource with the effect that a Demand Resource may participate in the Energy and Ancillary Services markets as a DRR and in the PRA as an LMR. To the best of MISO’s knowledge, all Demand Resources that have participated in

1 the Planning Resource Auction have done so while dual-registered as an LMR. MISO has  
2 ensured Demand Resources participating in the PRA as a DRR have the same testing  
3 requirement as Demand Resources participating in the PRA as an LMR. This design  
4 ensures the rules changes proposed by this instant filing cover all scenarios of participation  
5 under the current participation framework and provides a smooth transition to the rules as  
6 they will apply pending FERC approval of the DR/ER reforms filing.

7 **Q. PLEASE DESCRIBE THE CURRENT TESTING PROVISIONS FOR DEMAND**  
8 **RESOURCES.**

9 A. Demand Resources are currently required to either provide a real power test, submit the  
10 results of a Scheduling Instruction in lieu of a real power test, or request a waiver of the  
11 real power test requirement.

12 **Q. HOW DOES THE REAL POWER TEST WAIVER CURRENTLY WORK?**

13 A. Market Participants registering Demand Resources (DR) may currently request a waiver  
14 of the real power test requirement under one of two conditions: (i) Such a real power test  
15 is precluded by any applicable regulatory restriction and such a limitation is documented  
16 during DR registration; or (ii) a Market Participant may waive the obligation to conduct a  
17 real power test by notifying the Transmission Provider during DR registration and  
18 accepting a penalty equal to three (3) times the Hourly Real-Time Ex Post LMP at the Load  
19 CPNode described in and distributed pursuant to Section 69A.3.9.

20 **Q. WILL THE PROPOSED NEW TESTING REQUIREMENTS APPLY TO**  
21 **RESOURCES REGISTERED AS AN EDR?**

22 A. An EDR that is not dual-registered as an LMR is not subject to these testing provisions.  
23 Furthermore, MISO has a pending filing to eliminate the dual registration of LMRs as



EDRs in Docket No. ER25-2050. If accepted, EDRs will not be able to participate in the MISO Capacity market and therefore, will not be subject to these testing requirements.

**Q. PLEASE DESCRIBE THE GOALS OF THE DEMAND RESPONSE TESTING REFORMS MISO IS SEEKING TO IMPLEMENT.**

A. The primary goal of the testing reforms is to ensure Demand Resources being registered for the PRA are capable of providing the registered Demand reduction when called upon by MISO and for which they are being compensated. To accomplish this goal, it is important that the Tariff: clearly define the testing requirements applicable to Demand Resources; establish associated Demand Resource accreditation rules; and identify any acceptable waivers of the testing requirements.

**Q. HAVE THE COMMISSION’S RECENT ENFORCEMENT ACTIONS INVOLVING MISO MARKET PARTICIPANTS SHAPED THIS PROPOSAL?**

A. Yes. MISO and the MISO Independent Market Monitor (IMM) have identified Demand Resources that are over-registering or registering resources for which Demand reduction is improbable. In the case of Ketchup Caddy, the Commission assessed civil penalties and in the case of Voltus, the Commission approved a settlement that included penalties and disgorgement for Tariff violations and fraud.<sup>1</sup> In both cases, penalties were assessed to Market Participants for registering demand response resources without the knowledge or consent of the resource owners and clearing LMR capacity through the PRA that would not have been able to provide the registered Demand reduction if the resources were dispatched. During the recent LMR registration period for the 2025 / 2026 Planning Year,

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<sup>1</sup> *Ketchup Caddy, LLC and Philip Mango*, Order Assessing Civil Penalties, 189 FERC ¶ 61,176 (Dec. 5, 2024) (KC Order); *Voltus, Inc. and Gregg Dixon*, Order Approving Stipulation and Consent, 190 FERC ¶ 61,008, (Jan. 6, 2025) (Voltus Order).

MISO identified, between 256 and 320 MWs per Season of Demand Resources which requested to register with excess capacity or Demand that was not real and addressed the registration of such Demand Resources, as needed, for the 2025 PRA. The changes set forth herein will standardize the testing requirement, establish a link between the testing, accreditation, and measurement and verification of Demand Resources, and reduce the risk of over-registration or fraudulent registration of those resources into the PRA.

**Q. WHAT ARE MISO’S MARKET DESIGN GUIDING PRINCIPLES?**

A. MISO’s market vision is to foster wholesale electricity markets that deliver reliable and economically efficient outcomes. MISO’s Market Design Guiding Principles are an important guide to evaluating and developing market enhancements including these proposed Demand Response testing reforms. These guiding principles, which are listed below, support an economically efficient wholesale market system that minimizes cost to distribute and deliver electricity. The guiding principles are:

- Support an economically efficient wholesale market system that minimizes cost to distribute and deliver electricity;
- Facilitate non-discriminatory market participation regardless of resource type, business model, sector or location;
- Develop transparent market prices reflective of marginal system cost and cost allocation reflective of cost-causation and service beneficiaries;
- Support Market Participants in making efficient operational and investment decisions; and,
- Maximize alignment of market requirements with system reliability requirements.

1 **Q. HOW DO THE DEMAND RESPONSE TESTING REFORMS ALIGN WITH**  
2 **THESE PRINCIPLES?**

3 A. The proposed testing changes are consistent with MISO's Market Design Guiding  
4 Principles by supporting efficient wholesale markets, facilitating non-discriminatory  
5 market participation, supporting efficient operational and investment decisions, and  
6 supporting Market Participants in making efficient investment decisions. These changes  
7 accomplish this by ensuring resources participating in the PRA can provide the demand  
8 reduction they are being compensated for.

9 **Q. WHY IS MISO PROPOSING THESE REFORMS AT THIS TIME?**

10 A. MISO is proposing these testing rules at this time to have them in place for resources  
11 registering for the PRA for Planning Year 2026 / 2027. Stakeholders have indicated that  
12 many Demand Resources test in the Summer Season prior to the PRA for the next Planning  
13 Year. It is important that Demand Resources planning to register in the 2026 PRA for  
14 participation in the 2026 / 2027 Planning Year have certainty regarding the rules that apply  
15 to Demand Resources with regards to the waiver requirements from the testing provisions  
16 in the Summer of 2025. Demand Resources will be required to adhere to the new Demand  
17 Resource Testing rules that are the subject of this filing, if accepted, in order to register for  
18 the 2026 PRA for participation in the Capacity market during Planning Year 2026 / 2027.

19 **Q. WHY IS IT NECESSARY FOR THESE REFORMS TO HAVE A NEXT DAY**  
20 **EFFECTIVE DATE?**

21 A. Market Participants registering for the PRA are required to perform a real power test during  
22 the calendar year prior to the subsequent Planning Year; however, there is an inherent  
23 mismatch between this calendar year requirement (*i.e.*, January – December) and the

1 Planning Year (*i.e.*, June – May). Most Demand Resources that conduct a real power test  
2 do so during the summer Season. Given the timing of when Market Participants generally  
3 perform a real power test, MISO is seeking a next day effective date to provide certainty  
4 to Market Participants regarding the need to perform a real power test for the 2026 / 2027  
5 Planning Year. Establishing this testing requirement as soon as practicable will put Market  
6 Participants on notice that a real power test is a requirement for registration for the 2026 /  
7 2027 PRA while preserving as much of the Summer Season as possible for Market  
8 Participants to conduct the test if they choose to test during the Summer Season.

9 **Q. WILL RESOURCES REGISTERED FOR THE 2025 / 2026 PLANNING YEAR BE**  
10 **REQUIRED TO PERFORM A REAL POWER TEST IF THEY HAVE OBTAINED**  
11 **A WAIVER?**

12 A. No. MISO will not require resources participating in the Planning Year that began June 1,  
13 2025 to perform a real power test if they elected to obtain a real power test waiver at the  
14 time of registration. The effective date only applies to resources registering in the 2026 /  
15 2027 Planning Year and beyond.

16 **III. PROPOSED CHANGES TO DEMAND RESPONSE TESTING REQUIREMENTS**

17 **A. ALIGNMENT OF TESTING REQUIREMENTS WITH MEASUREMENT**  
18 **AND VERIFICATION BASELINES**

19 **Q. HOW DOES MISO PLAN TO ALIGN M&V BASELINES WITH THE TESTING**  
20 **REQUIREMENTS FOR A DEMAND RESOURCE?**

21 A. The Tariff changes proposed in this filing establish real power test rules for Demand  
22 Resources based upon the M&V methodology used to verify performance of the specific  
23 Demand Resource. At a high level, M&V is designed to measure how much demand

1 reduction occurred. MISO recognizes three broad types of Demand Resources, based upon  
2 the M&V methodology used: (1) those using a firm service level baseline; (2) large  
3 aggregations using a statistical baseline, such as a direct load control or other custom  
4 baseline defined as a statistical methodology, and (3) resources not using a firm service  
5 level baseline or a statistical baseline, such as the calculated baseline.

6 **Q. WHY IS IT APPROPRIATE TO ALIGN RESOURCE TESTING REQUIREMENTS**  
7 **TO THE M&V METHODOLOGY USED TO VERIFY THE PERFORMANCE OF**  
8 **DEMAND RESOURCES?**

9 A. Alignment between the testing criteria and the M&V methodology is necessary to account  
10 for the fundamental differences that exist in the obligations of each M&V methodology.  
11 Just as these resources' performance is measured in different ways to account for these  
12 fundamental differences, it is appropriate to account for these fundamental differences  
13 when establishing real power test requirements. Without accounting for these differences,  
14 resources risk having performance burdens placed upon them that they cannot meet or have  
15 testing criteria that do not accurately reflect the performance obligation imposed on the  
16 resource by its M&V methodology.

17 **Q. HOW WILL THE PERFORMANCE OF A TEST BY A DEMAND RESOURCE BE**  
18 **DETERMINED?**

19 A. For all Demand Resources using a Measurement and Verification that is not the calculated  
20 baseline, the performance of the test is determined using the appropriate Measurement and  
21 Verification baseline methodology. For these baselines, performance evaluation is broadly  
22 performed by evaluating Demand at the start of the test and comparing it to Demand at the  
23 end of the test. For the calculated baseline Measurement and Verification methodology, the

1 baseline is based upon performance over the previous days (10 or 5 depending on  
2 weekday/weekend status). The effect of this is that if using the calculated baseline  
3 methodology to measure test performance, a Demand Resource would need to operate the  
4 tested equipment continuously for about a two-week period prior to the test to properly  
5 demonstrate the maximum amount of Demand reduction achievable. To alleviate this  
6 potential burden, for Demand Resources registered using the calculated baseline, the test  
7 will be measured by comparing the Demand at the time the Market Participant indicates  
8 the test begins to the Demand achieved when the Market Participant indicates the testing  
9 period has concluded rather than using the calculated baseline. When evaluating  
10 performance after a Setpoint Instruction or Scheduling Instruction, performance will be  
11 evaluated using the calculated baseline.

12 **Q. PLEASE DESCRIBE THE FIRM SERVICE LEVEL BASELINE**  
13 **METHODOLOGY.**

14 A. The firm service level baseline methodology is currently defined in the Business Practices  
15 Manual for Demand Response (BPM – 026) and measures whether a resource has curtailed  
16 its load to a set level of Demand. MISO has posted redlines to the Business Practices  
17 Manual for Demand Response (BPM-026) for Market Participants to review changes to  
18 the definition of firm service level. These changes match the proposed revisions submitted  
19 as part of the DR/ER Reforms Filing, currently pending before the Commission in Docket  
20 No. ER25-1886. Assuming FERC accepts those changes, they will become effective in the  
21 2028 / 2029 Planning Year. In the meantime, MISO has updated its BPM to continue to  
22 permit resources using the firm service level baseline to aggregate, subject to restrictions,  
23 in order to grant Market Participants the time necessary to understand the other

Measurement and Verification methods and adjust their registration processes, accordingly.

**Q. WHAT ARE THE TESTING REQUIREMENTS FOR A DEMAND RESOURCE USING THE FIRM SERVICE LEVEL BASELINE?**

A. A Demand Resource using the firm service level baseline will be required to curtail its Demand from a point equal to at least 80% of the maximum Demand consumed in an Hour to less than or equal to the registered firm service level. MISO will perform an outlier test and eliminate any observation that is at least two standard deviations greater than the mean load to prevent outlier hours from distorting the tests needed.

**Q. WHY MUST A DEMAND RESOURCE USING THE FIRM SERVICE LEVEL BASELINE REDUCE DEMAND FROM WITHIN 20% OF THE MAXIMUM DEMAND CONSUMED IN A PLANNING YEAR?**

A. By requiring these resources to test from a point near their maximum Demand consumed, MISO has evidence the resource can reduce to or below its firm service level from a high Demand consumption, and by extension any point in their Demand profile. MISO recognizes that a resource may not always know exactly where its peak Demand is in a given Planning Year, so the approach provides a tolerance band equivalent to the tolerance applied to other Demand Resources. Removing outliers prevents sporadic Demand spikes from acting as a barrier to entry.

**Q. HOW WILL A DEMAND RESOURCE REGISTERING FOR THE PRA USING THE CALCULATED BASELINE BE REQUIRED TO TEST?**

A. A Demand Resource using the calculated baseline will be required to provide a test for each individual resource registered. These resources must perform the test at the same time,

1 where the same time is defined as each individual resource must have its Demand curtailed  
2 during the same intervals. The amount of Demand reduction achieved may be adjusted  
3 upwards by up to 25% of the tested value for weather. This weather adjustment is in-line  
4 with the weather adjustment permitted for the performance of Demand Resources using  
5 the calculated baseline in Attachment TT.

6 **Q. WHY MUST A DEMAND RESOURCE USING A CALCULATED BASELINE**  
7 **TEST EACH COMPONENT AND DO SO AT THE SAME TIME?**

8 A. By testing each resource simultaneously and separately, MISO has a reasonable  
9 expectation of the maximum Demand reduction attainable by the resource. The  
10 requirement to test simultaneously is to address scenarios where Market Participants are  
11 testing each component at its individual peak Demand, without regard for whether these  
12 peaks overlap, and registering an amount of Demand reduction that can almost never be  
13 achieved. Each individual resource must provide test results separately as these resources  
14 will be measured individually, then the individual contribution of each resource will be  
15 aggregated up to determine the total performance of the resource.

16 **Q. HOW WILL A DEMAND RESOURCE USING A DIRECT LOAD CONTROL OR**  
17 **OTHER STATISTICAL APPROACH BE REQUIRED TO TEST?**

18 A. A Demand Resource using a direct load control or other statistical approach will be  
19 required to provide Demand reduction for the entire aggregation at once. Only one set of  
20 data needs to be submitted for resources using this methodology. The amount of Demand  
21 reduction achieved may be adjusted upwards by up to 25% of the tested value for  
22 weather. MISO will also permit these resources to increase their tested value by up to 25%  
23 to account for changes in the size of the aggregation after performing the test.



1           **B.     REAL POWRER TEST WAIVER REQUIREMENTS**

2   **Q.     IS MISO PROPOSING CHANGES TO THE EXISTING REAL POWER TEST**  
3   **WAIVER REQUIREMENTS?**

4   A.     Yes. MISO is retaining one waiver provision with minor modification, introducing a waiver  
5           for Planning Year 2026 / 2027 that permits resources to waive the testing requirement for  
6           one year to provide time for regulatory authorities to adjust their contracts and tariffs, and  
7           proposing a new waiver provision for resources with a demonstrated history of  
8           performance.

9   **Q.     PLEASE DESCRIBE THE FIRST WAIVER PROVISION.**

10 A.     MISO will continue to grant a waiver to Demand Resources for which testing is either  
11           explicitly precluded or explicitly waived under a retail program approved by any applicable  
12           regulatory authority. This provision is similar to the waiver provision that currently exists  
13           within the MISO Tariff, but it has been updated to require explicit preclusion or explicit  
14           waiver from testing requirements in response to stakeholder concerns regarding ambiguity  
15           of the language. MISO's goal is for all Demand Resources to be tested in order to register  
16           to participate in the PRA. However, this waiver provision is included in recognition of the  
17           fact that states have primary jurisdiction for resource adequacy and if they explicitly waive  
18           or explicitly preclude a resource from testing then MISO will honor that decision.

19 **Q.     PLEASE DESCRIBE THE WAIVER PROVISION THAT IS APPLICABLE FOR**  
20 **THE 2026 / 2027 PLANNING YEAR.**

21 A.     For the 2026 / 2027 Planning Year, a Market Participant registering a Demand Resource  
22           with the Transmission Provider for the Planning Resource Auction, where such resource is  
23           also participating in a retail program overseen by a regulatory authority, may waive the

obligation to conduct a real power test by notifying the Transmission Provider during DR registration into the PRA and accepting a penalty equal to three (3) times the Hourly Real-Time Ex Post LMP at the Load CPNode described in and distributed pursuant to Section 69A.3.9. This waiver provision will be carried forward for one year to provide time for Market Participants participating in retail programs overseen by regulatory authorities to adjust the contracts to determine if the resource should be tested or granted an explicit preclusion or explicit waiver from the real power testing requirements.

**Q. PLEASE DESCRIBE THE NEW WAIVER PROVISION BEING PROPOSED?**

A. A Market Participant may request waiver of the obligation to conduct a real power test of a Demand Resource provided the Demand Resource being registered meets the following conditions during the three-year period beginning on January 1st of the Year that is three years prior to the start of the applicable Planning Year:

a) The resource has responded to at least one Scheduling Instruction, has fully met the performance requirements of all Scheduling Instructions issued, and has met the requirements of Section 69A.3.5.e; and

b) The resource has not experienced a significant change in its operations or any change in the composition of the underlying non-residential components of the aggregation from the Planning Year prior to the Planning Year for which the resource is being registered. Aggregations comprised entirely of residential components satisfy this requirement unless they request a change in the total accredited amount of the program. The requirements of this subsection shall be further defined in the Business Practices Manual for Resources Adequacy.

1 This waiver is being implemented to provide the ability for resources with demonstrable  
2 performance and that have not had operational changes to forego the requirement to  
3 perform a real power test. Additionally, because these resources will have a history of good  
4 performance, no extra penalties will be applied and therefore no extra credit requirement  
5 is imposed.

6 **Q. WHY IS MISO CHANGING THE WAIVER REQUIREMENTS?**

7 A. MISO is proposing changes to the DR testing provisions in order to engender greater  
8 confidence in the efficacy of Demand Response resources to deliver the Capacity for which  
9 they register and are being compensated in the market. MISO's previously generous waiver  
10 provisions have been used by Market Participants to register resources that do not exist,  
11 for which no contract to reduce Demand existed, or cannot reduce Demand in the amounts  
12 registered. In fact, the FERC Office of Enforcement has taken action against two Market  
13 Participants who used the testing waiver to fraudulently register resources. The reforms  
14 MISO proposes in this filing are part of a larger effort to protect against market  
15 manipulation. This larger effort includes revisions to the Tariff to address contractual  
16 relationships between resource owners and Market Participants, enhance testing  
17 requirements prior to participating in the Planning Resource Auction, use MISO-initiated  
18 testing of Demand Resources to independently verify these resources are performing, and  
19 strengthen penalty provisions.

20 **Q. IS IT UNDULY DISCRIMINATORY TO GRANT A WAIVER FROM TESTING**  
21 **REQUIREMENTS TO DEMAND RESOURCES PARTICIPATING IN RETAIL**  
22 **PROGRAMS?**

1 A. No, it is not unduly discriminatory. Demand Resources that participate in retail programs  
2 are subject to oversight by a state regulatory authority. MISO recognizes that states have  
3 the primary responsibility for ensuring resource adequacy and state regulatory authorities  
4 have the right to exempt Demand Resources from testing requirements. In those situations,  
5 MISO will honor the rights of the states to oversee those resources. In the absence of  
6 oversight of a Demand Resource by a state regulatory authority, the proposed testing  
7 requirements will help determine the efficacy of all other Demand Resources participating  
8 in the PRA by requiring those resources to perform a real power test pursuant to the rules  
9 set forth in the Tariff.

10 C. **CREDIT REQUIREMENTS AND ACCREDITATION**

11 Q. **PLEASE DESCRIBE THE CHANGES MISO IS PROPOSING TO THE CREDIT**  
12 **PROVISIONS ASSOCIATED WITH THE WAIVER AND DEMAND RESOURCE**  
13 **DEFERRAL PROVISIONS OF THE TARIFF?**

14 A. Sub-Sections 69A.3.5(j) and (m) continue to use \$200 as the Locational Marginal Price  
15 (LMP) proxy for pricing under emergency conditions. However, in Docket No. ER21-700-  
16 000, the Commission accepted a filing from MISO that set the scarcity price floor at \$1,000.  
17 In that filing, MISO updated the \$200 amount to \$1,000 throughout the Tariff but missed  
18 these two sections. Therefore, MISO is updating the LMP proxy for pricing under  
19 emergency conditions in Sub-Sections 69A.3.5(j) and (m) from \$200 to \$1,000 to be  
20 consistent with other provisions within the Tariff that defines LMP proxy for pricing under  
21 emergency conditions.

22 Q. **HOW ARE DEMAND RESOURCES CURRENTLY ACCREDITED?**

1 A. The Tariff currently states that the accredited value of Demand Resources that qualify as a  
2 Planning Resource will be as established in the Business Practices Manual (BPM) for  
3 Resource Adequacy (BPM-011). BPM-011 states, “A Demand Resource must be registered  
4 and accredited with MISO and will receive 100 percent of its capacity rating for the  
5 Planning Year. Seasonal capacity values for Demand Resources will be based on  
6 documentation from the state, third party auditor, past performance, or mock test consistent  
7 with their ability at MISO’s seasonal Coincident Peak Demand. Because DR is a reduction  
8 in Demand, Seasonal Accredited Capacity (SAC) is adjusted upward by applying the MISO  
9 PRM and transmission loss percentage for the LBA to the capacity rating.”

10 **Q. IS MISO PROPOSING TO CHANGE HOW THESE RESOURCES WILL BE**  
11 **ACCREDITED IN THE FUTURE?**

12 A. MISO is proposing changes to Section 69A.4.2 of the Tariff to clarify how a Demand  
13 Resource will be accredited during Planning Years 2026 / 2027 and 2027 / 2028. The  
14 changes to Section 69A.4.2 are intended to remain in place until the DR/ER reforms filing  
15 becomes effective in Planning Year 2028 / 2029, assuming it is accepted as presented.  
16 Pursuant to this proposed stop-gap measure, a Demand Resource that is not using the firm  
17 service level baseline will be accredited at 100% of the tested amount of Demand reduction  
18 plus any weather adjustment. A Demand Resource using the firm service level baseline will  
19 have its accreditation match the value submitted for the resource’s contribution to the Load  
20 Serving Entity’s Coincident Peak Demand forecast. These values will be grossed-up by the  
21 Planning Reserve Margin Requirement and transmission losses, pursuant to Section  
22 69A.3.3 of the Tariff.

1 **Q. WHY IS THE APPROACH TO THE ACCREDITATION OF DEMAND**  
2 **RESOURCES USING A FIRM SERVICE LEVEL BASELINE DIFFERENT FROM**  
3 **THAT OF OTHER DEMAND RESOURCES?**

4 A. The firm service level baseline is unique in that the performance obligation is measured  
5 relative to a value specified by the Market Participant at the time of registration. So long  
6 as the resource curtails its Demand to or below this registered value, the Demand Resource  
7 is deemed to have met its performance obligation, which creates confusion regarding the  
8 relationship between testing and performance for some Market Participants. As an  
9 example, a 10 MW resource registered with a firm service level of 8 MW has fully met its  
10 performance obligations so long as it is consuming 8 MW or less Demand. When  
11 registered, a test demonstrating reduction from 10 MW to 3 MW will be submitted, thereby  
12 claiming 7 MW of accreditation despite the resource being required to provide at most only  
13 2 MW of reduction. The changes proposed in this instant filing ensure this resource receives  
14 at most 2 MW of accreditation, in line with its maximum expected Demand reduction  
15 capabilities.

16 **Q. WHY IS MISO PROPOSING THESE CLARIFICATIONS AT THIS TIME?**

17 A. Market Participants are currently using several different ways to determine the capacity  
18 rating of Demand Resources. MISO seeks to standardize the methodology, provide  
19 certainty to Market Participants regarding what they should test to, and ensure no double  
20 counting is occurring. MISO has not made a change to the concept that a resource receives  
21 100% accreditation for its capacity rating for the 2026 / 2027 and 2027 / 2028 Planning  
22 Years. The result of this is that a resource registered under different Market Participants  
23 may receive different accreditation based on how each Market Participant interprets 100%

1 of the capacity rating. Given the ambiguity that exists for what “capacity rating” means to  
2 different stakeholders, some stakeholders may consider this proposal a change to  
3 accreditation; however, the only change is the clarification around what MISO intends for  
4 “100% of the capacity rating” to mean.

5 **Q. PLEASE DISCUSS THE DATA SUBMISSION REQUIREMENTS MISO IS**  
6 **ADDING TO THE TARIFF.**

7 A. MISO is proposing to add to the Tariff sub-Section 69A.3.5(k) related to data submission  
8 requirements. Specifically, the new Tariff provision will require Market Participants to  
9 submit hourly meter data for each Demand Resource being registered and indicates that  
10 details regarding the requirement will be set forth in the BPM for Resource Adequacy.  
11 Furthermore, the new provision confirms that Market Participants electing to use the  
12 Demand Response Deferral Notice must provide hourly meter data pursuant to the  
13 requirements established in the BPM for Resource Adequacy.

14 **Q. WHY IS MISO ADDING THE DATA SUBMISSION REQUIREMENT TO THE**  
15 **TARIFF?**

16 A. Another method that Market Participants have employed to inappropriately increase  
17 accreditation in the MISO system is through the use of artificial inflation of the  
18 consumption baseline. To prevent this scenario, MISO is requiring Market Participants to  
19 submit a load profile for the entire Season they are registering for, meaning a full Planning  
20 Year if registering in all four Seasons.

21 **IV. STAKEHOLDER PROCESS**

22 **Q. HAS MISO PRESENTED THE DR TESTING REFORMS TO STAKEHOLDERS?**

1 A. Yes. MISO initially proposed testing requirement changes as part of the broader DR/ER  
2 Reforms effort for implementation in the 2028 / 2029 Planning Year. However, after  
3 discussions with stakeholders, the IMM, and after review of registrations for the 2025 /  
4 2026 Planning Year, MISO determined that testing provisions needed to be made effective  
5 sooner. MISO then began discussing the DR Testing changes proposed in this filing at the  
6 April 9, 2025 RASC meeting as part of the LMR Enhancements discussion. At that time,  
7 MISO indicated that it would make a filing to require real power tests beginning in  
8 Planning Year 2026 / 2027 and that it would make a separate filing to address LMR  
9 replacements and penalty provisions. For the proposed changes presented at the April 9,  
10 2025, RASC meeting, MISO requested and received stakeholder feedback on the proposal  
11 through April 23, 2025.

12 MISO returned to the May 21, 2025 RASC meeting and announced its intention to make a  
13 May 30<sup>th</sup> filing with a June 1, 2025 effective date for the DR Testing changes. The goal  
14 was to provide certainty to resources that desired to conduct a real power test in the Summer  
15 Season. The Organization of MISO States (OMS) and other stakeholders asked MISO to  
16 consider a slight delay in the filing to give them an opportunity to consider key aspects of  
17 the proposal. In recognition of the primary role states play in resource adequacy and their  
18 ability to oversee Demand response programs, MISO immediately began working with the  
19 OMS Resource Adequacy Working Group to address their concerns. This collaboration  
20 resulted in a slight modification to the existing waiver provisions and a carve out for  
21 Planning Year 2026 / 2027 for Demand Resources participating in retail programs to allow  
22 sufficient time to adjust the language governing such programs and other retail contracts  
23 to align with the MISO Tariff for the 2027 / 2028 Planning Year if this proposal is accepted



1 as filed. MISO also took this opportunity to further refine testing requirements and clarify  
2 Tariff language based upon feedback received from stakeholders after the May 21, 2025  
3 RASC meeting. In addition, MISO used the time to provide additional guidance to  
4 stakeholders related to the impact of the proposed changes. MISO presented the final  
5 design at the July 9, 2025 RASC meeting and informed stakeholders of its plan to file the  
6 proposal on July 14, 2025 with a July 15, 2025 effective date.

7 **Q. DOES MISO'S IMM SUPPORT THE PROPOSAL?**

8 A. Yes. MISO worked with the IMM to reach agreement on the final design, including the  
9 scope and timing of filing, and the IMM provided an Affidavit in support of the proposal.

10  
11 **V. CONCLUSION**

12 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

13 A. Yes.

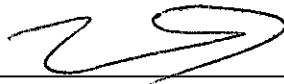
**Affidavit of Zhaoxia Xie**

COUNTY OF HAMILTON )

)

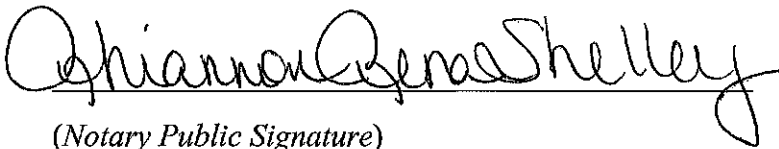
STATE OF INDIANA )

Zhaoxia Xie, being duly sworn, deposes and states that she prepared the Prepared Direct Testimony of Zhaoxia Xie, and the statements contained therein are true and correct to the best of her knowledge and belief.



Zhaoxia Xie

SUBSCRIBED AND SWORN BEFORE ME, this 8<sup>th</sup> day of July, 2025.

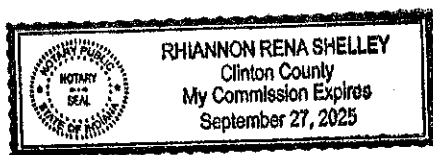


(Notary Public Signature)

Commissioned in Clinton county.

Commission Number: 705772

Commission Expires: 9/27/2025



Tab E

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**Midcontinent Independent System  
Operator, Inc.**

)  
)

**Docket No. ER25-\_\_\_\_-000**

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**Affidavit of David B. Patton, Ph.D.**

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**I. Qualifications and Purpose**

1. My name is David B. Patton. I am an economist and the President of Potomac Economics Ltd. Our offices are located at 10560 Arrowhead Drive, Fairfax, VA 22030. Potomac Economics is a firm specializing in expert economic analysis and monitoring of wholesale electricity markets. Potomac Economics has served as the Independent Market Monitor (“IMM”) for the Midcontinent Independent System Operator, Inc. (“MISO”) since 2002. Potomac Economics serves in a substantially similar role for the New York Independent System Operator, Inc., ISO New England, Inc., and the Electric Reliability Council of Texas.
2. As the Market Monitor for MISO, Potomac Economics is responsible for assessing the competitive performance of the MISO markets, including identifying and remedying market design flaws and abuses of market power. This work has included preparing reports that assess the performance of these markets and providing advice on numerous issues related to market design and economic efficiency.
3. I have worked as an energy economist for more than 30 years, focusing primarily on the electric utility and natural gas industries. I have provided strategic advice, analysis, and expert testimony in the areas of electric power industry restructuring, pricing, mergers, and market power. I have also advised Regional Transmission Organizations on transmission pricing, market design, and congestion management issues. I have provided expert testimony and analysis of market power issues and competition in a number of mergers and market-based pricing cases before the Federal Energy Regulatory Commission (“the Commission”), state regulatory commissions, and the U.S. Department of Justice.

4. Prior to my experience as a consultant, I served as a Senior Economist in the Office of Economic Policy at the Commission, advocating a variety of policy issues including transmission pricing and open-access policies, market design issues, and electric utility mergers. As a member of the Commission's advisory staff, I worked on policies reflected in Order No. 888, particularly on issues related to power pool restructuring, independent system operators ("ISOs"), and functional unbundling. I also analyzed alternative transmission pricing and electricity auctions proposed by ISOs.
5. Before joining the Commission, I worked as an economist for the U.S. Department of Energy. During this time, I helped to develop and analyze policies related to investment in oil and gas exploration, electric utility demand-side management, residential and commercial energy efficiency, and the deployment of new energy technologies. I have a Ph.D. in Economics and an M.A. in Economics from George Mason University, and a B.A. in Economics with a minor in Mathematics from New Mexico State University.
6. The purpose of this affidavit is to support certain proposed revisions to MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff ("Tariff") to reform testing of Demand Resources (DR)<sup>1</sup> that register in the MISO Planning Resource Auction ("PRA"). The reforms will help ensure resource performance corresponds to the capability that MISO clears in the PRA and that is expected to be available when managing grid emergencies. This filing is the most recent in a series of filings by MISO to reform participation of DR in MISO markets. This present filing is intended to establish testing requirements that support critical parts of the accreditation reforms in the previous filings.

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<sup>1</sup> Demand Resources is a Tariff term referring to participant load entities that can reduce demand during emergencies.

In particular, MISO is proposing to (1) align DR testing requirements with the resources' corresponding Measurement and Verification ("M&V") methodology used to measure the capability of the resource; (2) require an annual test of power reduction capability for Demand Resources seeking to participate in the MISO capacity markets and eliminate the ability to submit "Mock Tests"; (3) improve the reliability of the real power reduction tests, to include strengthening data requirements for demand profiles (4) establish clear testing parameters; (5) establish stricter criteria for participants seeking a testing waiver; and (6) introduce the Seasonal Accredited Capacity calculation for Demand Resources into the Tariff.

7. MISO is also proposing a one-year exemption from the testing in order to address concerns related to certain Demand Resources that are part of existing programs governed by retail utility tariffs. This extension should provide sufficient time to allow resources that currently participate under regulated retail programs that do not require or prohibit testing to modify the retail tariffs to comply with MISO's requirements. We support this extension because the resources in retail programs likely have been vetted for performance by the utilities that sponsor those programs.
8. MISO's filing is motivated in part by the manipulation of the current rules. We have identified cases where the participants have exploited gaps in the PRA registration procedures that facilitated market manipulation, including the overstatement of the DR capability. We helped MISO to identify the key issues and solutions, and we support the testing requirements and procedures proposed in this filing.

9. My affidavit discusses the key economic issues associated with MISO's proposals and why they contribute to a more efficient market. I also explain why a speedy approval is important in this filing.

## **II. Background and the Need For Reforms**

10. Demand Resources are grid-connected consumers of electricity that agree to reduce their consumption under various conditions when called upon by MISO. This allows the MISO more flexibility to balance the system because it can adjust both supply and demand. MISO has rules and procedures that encourage and facilitate DR participation in the MISO markets. Good rules and procedures can result in efficient participation by these resources.
11. As a result, MISO has embarked on Tariff reforms to improve the participation of Demand Resources, making a series of filings, including three prior filings, this present filing, and an anticipated fifth one. The reforms in large part were in response to adverse outcomes arising from Demand Resources manipulating MISO's rules, overstating their capability, and causing MISO to pay for and rely on capability it was not receiving. Consequently, MISO's DR filings, among other things, tightened the rules around DR participation, clarified the parameters for capacity accreditation in the Planning Resource Auction (PRA) and eliminated cross-registration of Demand Resources across alternative participation modes.
12. We have conducted multiple investigations into Demand Resource participation in MISO's energy, ancillary, and capacity markets, and our findings also identified the need to strengthen testing requirements, which is the subject of the present filing. One significant vulnerability in MISO's tariff is the allowance for participants to submit "mock tests". In



order to register in the PRA, a Demand Resource must demonstrate its capability to reduce its consumption through real power testing. However, participants may provide mock test data by requesting a real test waiver under certain conditions. These mock tests are simulated reductions by the participant that are not associated with a real test.

Unfortunately, we identified multiple instances where mock test submissions did not correspond to the physical capability of the resources.

13. In some cases, the mock test submissions consisted of fabricated data for resources that did not yet exist at the time the resources were registered. In other cases, we observed participants used mock tests to exaggerate capabilities after failing a real power test. For the relatively small cost of higher collateral and associated non-performance penalties, participants are able to use mock tests to collect capacity payments for demand response that exceeds their capability.
14. These mock-tested resources currently account for nearly thirty percent of MISO's total DR capability for the 2025/26 Planning Year, and the capability of mock tested resources increased by 700 MW for this Planning Year. Out of the newly registered customers for the 2025/26 Planning Year, seventy-five percent of the new customers were registered with mock tests. Additionally, there are dozens of individual account numbers and meter numbers that have cleared the PRA for multiple years and have never provided real test data to support their registered MW.
15. In addition to the issues that we identified related to the unreliable nature of the mock tests, MISO's procedures for accepting the real power tests have allowed significant instances of manipulation. Under MISO's current rules, Demand Resources must demonstrate the ability to curtail to just 50 percent of the registered capability in order to pass a real test.

Based on an audit of a subset of the LMRs we found that the LMRs that successfully passed the real tests demonstrated only 62 percent of the registered capacity on average.

We also observed in the course of our investigations that some participants conducted real tests and then multiplied the amount of curtailed MW by two to determine the quantity of registered demand response.<sup>2</sup>

16. Based on the audit we conducted of a subset of the LMRs, we found that *only 41 percent* of the LMR capability was based on demonstrated demand reductions that passed MISO's real power test criteria. The balance of the LMR capability registered to participate in the PRA was supported by (i) mock tests after having failed the real tests, (ii) mock test data for resources that never conducted a real test, or (iii) capability associated with curtailments not achieved during the real test even though the resource passed the real test at the 50 percent criterion.
17. Prior to the 2025/26 planning year, MISO accepted real tests from participants claiming routine demand reductions that occurred over extended periods of time as evidence of their ability to curtail. In some cases, these reductions were associated with planned shutdowns that took more than 24 hours to complete, even though Demand Resource registered lead times are limited to six hours or less. In the 2025/26 Planning Year, MISO determined that resources using long lead planned shutdowns for real tests was not an adequate demonstration or reflection of what the Demand Resources could do in a MISO emergency. MISO rejected any MW associated with lead times longer than six hours. This was an important improvement because it is critical that the real tests reflect what the Demand

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<sup>2</sup> MISO more closely scrutinized the test data provided in the 2025/26 PRA and rejected between 250 MW and 400 MW of LMRs, depending on the season.

Resources are able to do in an emergency, rather than demonstrating what can be expected during a well-orchestrated planned shutdown.

18. Finally, some of the testing that we observed has been inconsistent with the Measurement and Verification (M&V) methodology that the participants indicated should be used to measure actual performance. For example, multiple Demand Resources registered as Firm Service Level (FSL) Demand Resources, meaning that rather than a “curtailment amount” the M&V would be based on a “curtail to” level. Although the M&V would be used to assess the performance of the resources when called upon by MISO, some of the real tests submitted for those resources were instantaneous load reductions that were then multiplied by two to support the registered Demand Response capacity. This example highlights a gaming strategy that we identified whereby a participant could register resources based on a high FSL during peak conditions (above the consumption typically seen during shoulder seasons, for example), pass the “real test”, then never have to take any action to curtail if it was called upon at a time that was not the peak load for the year. It is important that the testing requirements and M&V requirements align and are based on the type of Demand Resource is being registered.
19. Finally, in our previous investigations, we identified instances of participants inflating their baseline consumption in order to signal a higher ability to reduce demand. Although this strategy was used as part of a manipulative scheme by a special type of Demand Response (*viz.*, Demand Response Resources in MISO’s energy and ancillary services markets), there are currently no provisions in place to prevent participants from engaging in this strategy when conducting real tests. MISO’s proposal to require accurate and detailed load profiles

will prevent participants from using inflated baselines during testing to overstate their curtailment capability.

### **III. MISO's Proposed Changes in Testing Requirements**

20. MISO is aware of the issues that we identified in the course of our investigations and proposes several important testing changes that will address the issues we found, as well as additional potential vulnerabilities. The elements of MISO's proposed changes to the Demand Resource testing requirements are in four broad categories: (1) revising testing requirements and procedures, (2) clearly defining Demand Resource categories and align testing and performance M&V requirements, (3) collecting additional data, and (4) clarifying accreditation methodologies. I discuss each in more detail in what follows.

#### **A. Requiring real power test for all Demand Resources registering in the PRA**

21. As introduced above, MISO's current policies and procedures for testing LMRs for PRA registration has resulted in adverse conduct, causing MISO to pay for and rely on capability it was not receiving. As a result, MISO is now proposing to strengthen DR testing requirements to ensure that Demand Resources can demonstrate the ability to provide the amount of MW for which they are compensated. MISO's improved testing requirements will provide greater assurance that resources that are procured through the PRA to meet its reliability standards are providing value by contributing to system reliability.
22. We have recommended MISO eliminate mock testing and require all Demand Resources to perform real power tests. This is non-discriminatory and consistent with the requirements for generating resources that participate in MISO's seasonal capacity auction. Generating resources must perform Generator Verification Test Capacity (GVTC) to demonstrate the

ability to provide the amount of MW they register and clear in the auction.<sup>3</sup> For the purposes of this current filing, MISO will require all Demand Resources that do not have a waiver to conduct real tests to demonstrate demand reduction in order to register. This will ensure that the registered DR capability is reliable under expected emergency conditions, rather than a demonstration of a carefully planned and orchestrated shutdown. I believe this is essential to ensure that LMRs procured in the PRA are likely to be available when needed during emergencies. Eliminating unreliable or phantom DR capability is also important because it will allow MISO to procure other capacity that is much more likely to be reliable and available when needed. It will also ensure that prices are set more efficiently to reflect that actual available supply in the PRA.

23. Finally, MISO's proposed changes will allow resources that participate under a retail tariff to continue to receive a waiver for one year. This recognizes the practical reality that regulated utilities and states that facilitate demand response programs likely need more time to develop, file, and implement required retail tariff changes to comply with MISO's proposed requirements. Additionally, these programs typically have validation, measurement and verification procedures that significantly reduce the likelihood that such resources are providing unreliable or phantom capability. Therefore, I support the limited proposed one-year waiver.

#### **B. Improving Testing Parameters**

24. MISO's proposed reforms include specifying a variety of parameters for testing. For example, MISO will set parameters that establish when testing will take place, so that

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<sup>3</sup> We also recommended that the tests should be conducted by MISO at a time of MISO's choosing to mimic the conditions under which Demand Resources would be expected to curtail. Earlier this year MISO filed to require MISO-directed testing at a time of MISO's choosing with an implementation date in the 2028-29 Planning Year.

testing occurs at a time when MISO determines the resources are most likely to be deployed. The reforms also specify that tests must demonstrate 100 percent of the registered MW, unless there are weather impacts, in which case the testing must demonstrate at least 80 percent of the registered capability. This addresses our concerns that participants have been doubling test results to inflate capacity values.

**C. Redefining eligibility requirements for a waiver from the real power test requirements**

25. MISO is proposing important changes to limit participants' ability to request a testing waiver. This change is in response to FERC actions taken against two participants. In both of these cases, the use of testing waivers was an instrument used by participants to fraudulently register resources. The waiver reforms include removing the credit requirement for requesting a waiver and instead subjecting the resource to an evaluation of performance over the prior three years. The evaluation must demonstrate demand reduction capabilities through previous tests as long as the resource has not substantially changed operating parameters. They also must have successfully met any scheduling instructions issued to them. I support these changes as they will help ensure that waivers are not used to inflate registered LMR capability.

**D. Clearly Defined Demand Resource categories that Align Testing and Performance Measurement & Verification**

26. The proposed Tariff changes establish real power test rules for Demand Resources based upon the M&V methodology used to verify performance of the specific Demand Resource. This is an important change to ensure that resources are not using one M&V methodology to test resources and another M&V methodology for performance purposes when deployed by MISO. M&V is designed to measure how much demand reduction actually occurred so

that a particular Demand Response can be assessed as to whether it met its obligations.

Module E-1 of MISO's Tariff categorizes Demand Response as either demand that curtails *by* a certain amount or *to* a certain consumption level (i.e., the "Firm Service Level" or FSL). However, Attachment TT of MISO's Tariff currently lists three primary options for determining M&V that are only applicable for demand that curtails *by* a certain amount: a calculated baseline, direct load control, and a custom baseline. Attachment TT does not specify M&V for resources registered with a Firm Service Level.

27. MISO's Tariff filing will specify real power testing requirements based on the type of Demand Resource Registration to ensure appropriate testing in Module E. For the FSL baseline M&V methodology, the real power test will require a curtailment from a point within 20 percent of the maximum demand claimed for use in its capacity accreditation in a planning year down to a level at or below the registered FSL. This test is appropriate because it measures how much response is available and whether the FSL baseline can be achieved. This important change addresses concerns that we identified where resources registered as FSL baseline resources for performance but provided real test data showing an instantaneous load drop that was not tied to the FSL at all.
28. Demand Resources using the calculated, direct control, or custom baselines must demonstrate a load reduction consistent with 100 percent of the registered capacity value during the real test. These resources can be aggregates of individual resources. Aggregations will be required to test all individual resources simultaneously and submit the real power test results for each individual resource. Testing all resources within an aggregation at the same time will ensure that participants cannot submit more curtailment capability associated with the underlying assets than can be achieved when all underlying

assets curtail simultaneously. This is reasonable because by testing each resource simultaneously and separately, MISO is assured of the maximum expected contribution of the aggregated resource.

29. This important change to align testing with expected performance will address concerns that we identified related to past tests that were submitted by participants that relied on a different testing methodology than the performance M&V criteria. In some cases, the registered FSLs were higher than the starting consumption levels when the tests were conducted. This would allow the resource to pass the test without reducing consumption. Ensuring that the M&V for testing aligns with the M&V for performance will prevent that type of gaming opportunity in the future.
30. Finally, the real power test parameters proposed in this filing will require the resource to demonstrate demand reduction within the registered notification time, which will ensure that the registered capability matches what the resource could achieve in a real deployment. We have identified instances when participants submitted tests based on long shutdowns that occurred across multiple days. Given that these shutdowns were planned and coordinated well in advance, there is little evidence to suggest that these planned shutdowns are representative of how the Demand Resources would perform when instructed to curtail during an emergency. The proposed Tariff rules requiring that testing demonstrate the registered curtailment MW within the registered lead times will ensure that tests appropriately demonstrate the feasible curtailment amounts that are likely to be available when MISO declares emergencies. We find these proposed changes to be both reasonable and beneficial.



#### **IV. Proposed Registration and Accreditation Changes**

##### **A. New Data Requirements for Registration of Demand Resources for the PRA.**

31. The accreditation for some Demand Resources relies on a comparison of a baseline consumption to the actual consumption during a deployment. Given that M&V must have an assumed counterfactual, this creates an incentive to inflate the baseline so that during deployments, it appears the demand reduction is higher than what is actually being provided. We have been involved in cases where participants have manipulated their baselines in MISO. To prevent this scenario, MISO is requiring participants to submit a load profile for the entire season for which they are registering – a full planning year if registering in all four Seasons.
32. This requirement will ensure that resources actually exist by the time of the auction, which we had discovered to be an issue in an investigation recently. Mandating that participants submit load profile data from historical periods will ensure that resources that are not yet constructed will have to submit an ICAP deferral and be subject to penalties if the resources are ultimately not constructed.
33. By requiring resources to provide historical load profile data, MISO can be reassured that the amount of Demand Response MW registered by these resources will be limited to historical use patterns, which will mitigate concerns in the short run that the registered MW may be overstated. Therefore, I support these proposed changes.

##### **B. Clarification on Seasonal Accredited Capacity calculation for Demand Resources**

34. Currently, the MISO establishes Seasonal Accredited Capacity (SAC) in Business Practices Manual that allows seasonal accreditation based on documentation from “the state, third party auditor, past performance, or mock test” assessed at seasonal coincident peak.”

35. MISO is proposing to move the seasonal accreditation procedures to the Tariff and change the calculation. In particular, for resources that do not use an FSL, MISO proposes to establish Seasonal Accredited Capacity equal to the registered value for the PRA, as set forth in proposed Tariff Section 69A.3.5.j. For a Demand Resource that is using the FSL baseline, MISO is proposing the SAC be equal to the resource's demand at the Coincident Peak Demand less the FSL. This proposal simplifies the seasonal accreditation and allows MISO to perform better oversight of the accreditation process.

#### **V. Need for Speed and the Proposed Effective Date**

36. MISO is working to introduce these rules in time to apply to participants who want to participate in the 2026/27 planning year. Many stakeholders typically test in the summer, and MISO needs to have these rules in place for Summer 2025 testing season, in advance of the 2026 / 2027 PRA Registration window. Accordingly, we support MISO's request to expedite this filing and its request for a one-day effective date from the day of filing. We believe this request is reasonable because MISO has been discussing these improvements with its stakeholders since early 2025 giving them ample time to schedule tests the summer and fall that will comply with the proposed rules.

#### **VI. Conclusion**

37. As described in this Affidavit, MISO is proposing a wide range of changes to its testing and accreditation rules that together are intended to address concerns that LMR capability has been overestimated and over-accredited in the PRA in the past. We have engaged with MISO in the development of these rules and participated in the stakeholder processes to present and discuss the proposals. Taken together, these proposed changes are a substantial

improvement over the current rules and should help ensure that Demand Response capability procured in the PRA will likely be available and perform reliably in the hours when they are most needed to maintain reliability in MISO. Therefore, I support these changes and respectfully recommend that the Commission approve them.

38. In addition, I find that addressing these concerns is urgent as capacity margins fall in MISO. Therefore, I support MISO's proposal to implement them in time for the 2026/2027 Planning Year. The limited one-year waiver for resources that participate in demand response program under a regulated retail tariff is also reasonable. Therefore, I encourage the Commission to approve the proposal as well as the one-day effective date.

39. This concludes my affidavit.

ATTESTATION

I am the witness identified in the foregoing Affidavit of David B. Patton, Ph.D. I have read the affidavit and am familiar with its contents. The facts set forth therein are true to the best of my knowledge, information, and belief.

*David Patton*

David B. Patton, Ph.D.

Subscribed and sworn before me this 14 day of July 2025

Notary Public



My commission expires:

11/30/25

MATTHEW JAMES CARRIER  
NOTARY PUBLIC  
REG. #7233763  
COMMONWEALTH OF VIRGINIA  
MY COMMISSION EXPIRES NOVEMBER 30, 2025