



Selection Report

Sub T – IA/IL State Line – Woodford County
765 kV Competitive Transmission Project



May 15, 2026

Public

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Executive Summary

MISO has chosen Ameren Transmission Company of Illinois, GridLiance Heartland, LLC, Dairyland Power Cooperative, and the Illinois Municipal Electric Agency (AGDI) to jointly develop the Sub T – IA/IL State Line – Woodford County 765 kV Competitive Transmission Project (STIW).

This report explains MISO’s competitive developer selection process and the STIW project, summarizes the five proposals MISO received to build and operate STIW, and explains why MISO selected AGDI to develop STIW.

In 2024, MISO approved the Long-Range Transmission Planning (LRTP) Tranche 2.1 portfolio for inclusion in the 2024 MISO Transmission Expansion Plan. This tranche included Projects 38 and 40 which consist of new and upgraded transmission facilities in Iowa, Illinois, and Indiana.

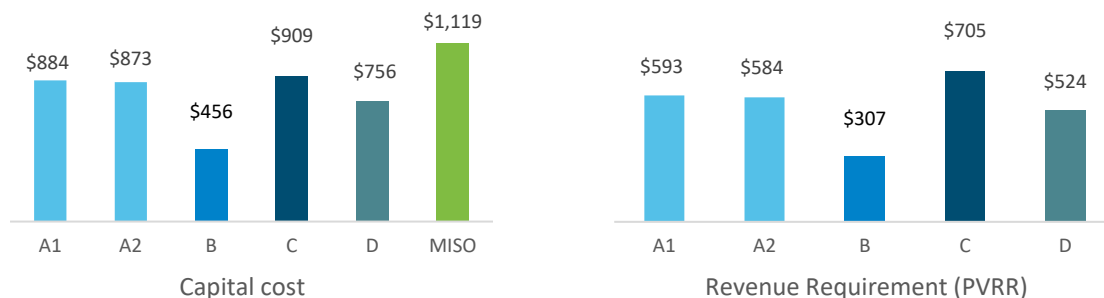
MISO determined that two new 765 kV transmission line facilities within Project 40 were eligible for its Competitive Transmission Process. MISO grouped these facilities into one project and titled it the Sub T – IA/IL State Border – Woodford County 765 kV Competitive Transmission Project and refers to it as “STIW.” STIW is located in both Iowa and Illinois, and must be placed into service by June 1, 2024.

MISO issued a Request for Proposals (RFP) for STIW on August 8, 2025. On January 20, 2026, four developers submitted a total of five proposals.

Project Proposals

All developers proposed to erect galvanized steel lattice structures over 139-to-149-line miles.

Figure 1. Proposal Cost (\$M)¹



Developer A proposed to install Tern ACSR conductor at 15” bundle spacing for its two submitted proposals. Its first proposal would use guyed-V lattice towers, and its second proposal would use guyed-Y lattice towers. The latter design would require 20 feet less right-of-way (ROW) and 8% less steel. All other aspects of its two proposals were materially similar.

¹ The MISO capital cost estimate was escalated to the estimated in-service year dollars based on MISO’s 2.50% annual inflation rate. The developers’ estimates reflect the sum of capital costs in the years in which they were spent.

It offered, from project award through the first 15 years, to:

- Cap its return on equity (ROE) at 9.8% and its equity capital at 45% (a 4.41% weighted average cost of equity),
- Forfeit its equity return on the first 10% of investment greater than its ~\$880 million estimates, and
- Cap its annual revenue at its estimated expenses, subject to notable exclusions such as additional AFUDC-related expenses, additional property taxes, and costs due to structure changes,
- But make these offers subject to a minimum earnings requirement of 8.5% ROE.

It did not offer any commitments dependent upon MISO's administration of Woodford County – IL/IN State Border (WILL) 765 kV Competitive Transmission Project, another project in Illinois that must interconnect into the Woodford County Substation by the same in-service date (ISD).

It provided a letter of intent from its construction contractor and letters of support from vendors of transmission line materials. It established extensive prior 765 kV experience.

It will execute project operations and maintenance (O&M) with its existing assets and crews. It will establish a field office to allow it to perform first response internally, but its substation crew would be three hours from the project. Its control center already monitors and operates 765 kV facilities.

Developer B proposed to install Drake ACSR conductor at 18" bundle spacing on guyed-V lattice towers. It performed a full-scale test of its guyed-V lattice tangent to validate its design. It designed for the longest average spans between structures, which resulted in the fewest structures per mile, tallest average structure and the widest average ROW.

It offered, for the entire life of the project, to:

- Cap its weighted average cost of equity (WACE) at 3.92% (a 9.8% ROE at its current equity structure of 40%),
- Decrease its WACE to 0.00% on the first 20% of investment greater than its ~\$456 million estimate then, a WACE of 2.0% for additional overages (with very few exceptions),
- Cap its annual revenues at its estimated expenses,
- Make all its STIW commitments subject to an overriding minimum return on equity of 8.0%, and
- Reduce its revenue caps by 4% and its capital cost cap by 5% if it develops both WILL and STIW.

It provided a teaming agreement with its construction contractor and letters of support from both vendors and providers of transmission line materials and engineering and surveying services. It exhibited knowledge of each state's routing preferences. It cited prior 765 kV experience among its personnel.

It would use a third-party control center and use contractors for substation and transmission line maintenance. The substation contractor would be three hours from the project. It will establish a field office to allow it to perform first response internally and build a local warehouse to maintain spare parts.

Developer C proposed to install Redwing ACSR conductor at 15" bundle spacing on self-supporting lattice towers. It was the only developer to select self-supporting structures.

It offered for the entire life of the project to:

- Cap its ROE at 9.6% and its equity capital at 45% (a 4.32% WACE),
- Cap its annual revenue at 7% greater than its estimated expenses,
- Make these offers subject to an overriding minimum earnings requirement of 7.8% ROE, and
- Reduce its revenue caps by 5% for STIW if it develops both WIIL and STIW.

It did not offer any commitments dependent upon the project's capital cost.

It submitted a memorandum of understanding from its construction contractor and letters of support from vendors of transmission line materials. It exhibited knowledge of each state's routing preferences. It collected LiDAR surveys at river crossings and transmission line crossings. It demonstrated its 765 kV experience through its affiliate.

It will execute project O&M with its existing assets and crews, which are already locally based. Its control center already monitors and operates 765 kV facilities.

AGDI proposed to install Redwing ACSR conductor at 18" bundle spacing on guyed-V lattice towers. It fully tested its tangent structures to validate their design. It explained best how it will justify its guyed design if there is opposition during the permitting process.

It offered, from project award through the first 20 years, to

- Cap its WACE at 5.24% (a 9.0% ROE at the partners' current weighted equity structure of 58.6%),
- Decrease its WACE to 2.00% on capital investment greater than 80% of its ~\$750 million estimate, and
- If it develops both WIIL and STIW, it will:
 - Combine its cost estimates for both projects and reduce the sum by 2%,
 - Cap its annual revenue from both projects at 1% less than the sum of its estimates, and
 - Make all offers subject to a minimum WACE of 4.10%.²

It provided master service agreements with its two construction management contractors, and it provided letters of support from vendors and suppliers of transmission line materials, land services, and engineering and surveying services. It demonstrated that its consultants and some of its team members have prior 765 kV experience.

It would perform the first responder duties itself and contract the transmission line maintenance to a third-party O&M provider.

Analysis and Selection

All proposals met the minimum requirements of the RFP. Each developer explained how it would procure materials and what contractors it would use to build the project. Each developer demonstrated it has the capital to build and operate the project and substantial experience operating and maintaining high-voltage transmission facilities. Each developer received credit for planning participation.

² Considering AGDI has been awarded both projects, these additional components create an effective average ROE of 7.9% at its revised project estimates.

MISO selected AGDI to develop STIW because AGDI justified its transmission design with robust studies and research, presented complete construction plans and significant subcontractor support, effectually described how it arrived at its preferred routes, and established that it can incorporate the project's O&M into its existing programs, which in total strengthened MISO's belief in AGDI's reasonable revenue assumptions and competitive cost commitments.

MISO determined Developer A's guyed-Y proposal was the second-best submission.

Figure 2. Evaluation Scores

Proposal	Cost and Design 30%	Project Implement. 35%	Oper. & Maint. 30%	Planning Particip. 5%	Score
D (AGDI)	Better (2)	Better (2)	Best	5	96
A2	Better (3)	Good (3)	Better (3)	5	85
A1	Better (4)	Good (4)	Better (2)	5	84
B	Best	Good (5)	Better (4)	5	80
C	Good (5)	Best	Better (5)	5	79

In **Cost and Design**, MISO determined Developer B's estimated costs and proposed design plans were a slightly superior value than other proposals. All developers proposed galvanized steel lattice towers, three of which were guyed-V designs. All developers committed to contain their revenue, but no commitments were perfectly comparable.

Developer A's guyed-Y design would achieve the lowest average structure weights and ROW, which gave it an initial cost advantage. It was the only developer to design for a 300-year weather event. It estimated the highest cost of debt.

Developer B's design would require the least structures, but this strategy necessitated the tallest towers and the widest ROW. Although the developer estimated a capital cost far lower than any other proposal, MISO was concerned about its ability to meet its estimated costs. This developer assumed, by a large margin, the lowest commodity and land prices and proposed the least flexible design strategy. However, after considering numerous cost analysis scenarios, Developer B's cost commitments still would achieve the lowest weighted average cost of capital (WACC) at lower project cost amounts due to its WACC cap and its revenue caps.

Both Developer A and B based their costs on later capital investment during construction, which minimized the AFUDC and return on CWIP in their estimates, respectively. Neither developer offered commitments related to this expense, and therefore customers could pay more if these developers built the project at a different rate.

Developer C's tangent transmission line structure is the heaviest of all developers due to the self-supporting nature of the lattice design proposed. It also has the most concrete foundation material required for installation of its tangent structure. It also estimated the highest O&M expense. These components resulted in the highest estimated capital cost and customer cost (PVRR). Although it was the only developer with an absolute PVRR cap (due to its 40-year revenue caps), MISO concluded that the costs of the competing

designs were not likely to rise to the level at which Developer C's proposal would offer the best value to customers.

AGDI submitted the most thorough study work for its transmission line design. Around and above its estimated capital cost, it would offer the lowest WACC due to its WACE commitment and a minimum earnings provision comparable to other developers³. AGDI's commitments became superior at even lower amounts if it develops both WIIL and STIW.

In **Project Implementation**, MISO determined Developer C submitted the best plans.

Developer A analyzed fewer and less varied route alternatives than other developers, was less explicit about adhering to state routing preferences, and discussed less routing and implementation strategy at major river crossings than other developers. Although it does have the most relevant experience, its implementation plan had less project-specific information than those of its competitors.

Developer B submitted the least quantitative routing analysis across the smallest study area. It provided fewer specific instances than other developers of how its site visits and agency communications influenced its proposed route and less insight into its major river crossing decisions. Its construction plan featured fewer project-specific considerations than some developers, but it included some quantitative aspects related to access and construction.

Developer C's routing study included the most rigorous qualitative and quantitative analysis of alternative routes and river crossings, and it established sufficient knowledge of the state's routing preferences. It most effectively researched, coordinated with local agencies, and conducted engineering and surveying activities during its proposal preparation to understand and mitigate project risks. Its construction plan extensively discussed project-specific observations, planned helicopter activities, and major activity production expectations.

AGDI was less explicit about adhering to state routing preferences than other developers, but it effectually described its route selection process and its construction sequencing. It qualitatively explained why each major river crossing was chosen. Its extensive and project-specific vendor and supplier support added the most certainty to its engineering, procurement, and construction plans.

In **Operations and Maintenance**, MISO determined that all developers could adequately perform the roles, responsibilities and functions associated with O&M. Based on the information provided and using a comparative evaluation basis, MISO determined that AGDI submitted the best plans.

Developer A plans to become registered as a NERC BA, plans to become signatory to MISO's Amended Balancing Authority Agreement, and plans to use its existing control center to provide the operational LBA functions. Its first responders can arrive within 15 minutes, and its emergency repair crews can arrive within six hours to the midpoint of the line. Developer A will utilize its affiliate system spare parts program and will utilize its centralized supply chain to make any needed purchases. Various spare parts will be stored within three to eight hours of the project.

³ The version of this report published on May 15, 2026, incorrectly stated the absence of a minimum earnings provision, this edit corrects that typographical error by removing "the absence of" as there is a minimum earnings provision.

Developer B will use an O&M provider whose control center currently performs LBA duties in MISO. Developer B plans to become registered as a NERC BA, plans to become a signatory to MISO's Amended Balancing Authority Agreement, and plans to have its designated control center provide the operational LBA functions. Its first responders can arrive in one and a half hours, and its emergency repair crews can arrive within three hours to the midpoint of the line. Developer B stated that all the spare equipment and parts will be dedicated to the STIW project. Developer B will use its warehouse and storage yard, which is one to two hours away from the project.

Developer C plans to become registered as a NERC BA, plans to become signatory to MISO's Amended Balancing Authority Agreement, and plans to have its designated control center provide the operational LBA functions. Developer C arranged with local crews to provide the initial forced outage response. Its first responders and emergency repair crews are located under one hour away from the midpoint of the project line. Specialized repair crews are also located within three hours 15 minutes of the midpoint of the project line. Developer C will own all the spare equipment and parts for this project, which will be stored approximately 1.5 to 2.5 hours from the project.

AGDI already operates as a MISO LBA and would include these new facilities in its existing processes. Its first responders can arrive in 30 minutes, and their emergency repair crews can arrive within three hours of the mid-point of the project line. AGDI will store the spare parts and equipment approximately 1.5 to three hours from the project. AGDI's partners will own all spare parts and equipment for this project and will negotiate a "mutual assistance" program among the partners that have similarly owned facilities and equipment needs.

AGDI's O&M team will be optimally located to efficiently operate and maintain the project facilities. While the other developers established they could reliably perform these services, they could not match AGDI's logistical advantages.

MISO and AGDI will execute the Selected Developer Agreement within 60 days of this report.

Sub T – IA/IL State Border – Woodford County 765 kV Competitive Transmission Project Selection Report

I. Competitive Project and Process

This report explains MISO’s decision to select AGDI (a joint proposal by Ameren Transmission Company of Illinois, GridLiance Heartland, LLC, Dairyland Power Cooperative, and Illinois Municipal Energy Agency) to develop the Sub T – IA/IL State Border – Woodford County 765 kV Competitive Transmission Project (STIW) and the process MISO used to reach its decision.

Competitive Project

On December 12, 2024, MISO’s Board of Directors approved the Tranche 2.1 Long-Range Transmission Planning portfolio for inclusion in the 2024 MISO Transmission Expansion Plan (MTEP24). Tranche 2.1 includes Projects 38 and 40, which consist of 20 new or upgraded transmission facilities in Iowa, Illinois, and Indiana.

MISO determined the following two Project 40 facilities are eligible for its Competitive Transmission Process:

- One 765 kV single-circuit transmission line from Sub T – IA/IL State Line; and
- One 765 kV single-circuit transmission line from IA/IL State Line – Woodford County Substation.

MISO grouped these two facilities together as the Sub T – IA/IL State Line – Woodford County 765 kV Competitive Transmission Project and refers to the project as “STIW.” STIW is located within both Iowa and Illinois, and must be placed into service by June 1, 2034.

Request for Proposals

MISO issued a Request for Proposals (RFP) on August 8, 2025, to solicit proposals from Qualified Transmission Developers (QTDs) to build and operate STIW. MISO held a public meeting on August 26, 2025, to provide information and answer questions about the project and the RFP. Full details about the RFP and a register of questions asked, along with the answers provided by MISO, are available on MISO’s Competitive Transmission Administration webpage.⁴

⁴ See “MTEP 24 - Long Range Transmission Plan Tranche 2.1 Portfolio Projects Questions & Responses Log” (available via <https://www.misoenergy.org/planning/competitive-transmission-administration/>).

MISO's goal is to select a proposal that provides the greatest overall value while meeting all project requirements and ensuring the highest likelihood of project success. Cost is an important component of value and a comparative advantage, but it is not the sole consideration. MISO anticipates the following aspects of the project may be particularly important. MISO encouraged developers to consider:

1. **765 kV Transmission Lines:** The 765 kV transmission system planned in MISO's Long Range Transmission Planning Study Tranche 2.1 will support the transfer of large amounts of power in MISO. Operation and maintenance activities, equipment failures, and weather events all have the potential to impact the availability of the 765 kV transmission lines. Due to the significance of the 765 kV transmission system, an important aspect of this project will be the design specifications for the new transmission lines and plans to maintain the transmission lines once in service.
2. **Mississippi River Crossing:** The competitive project includes the portion of the transmission line that crosses the Mississippi River at the IA/IL state line. An important aspect of the project is the strategy for crossing the Mississippi River, and how that affects the transmission line design, project implementation plans, and eventual maintenance for the new transmission line.
3. **Project Scale and Scope:** The project is large, with a MISO-estimated cost exceeding \$900 million. An important aspect of the project will be to demonstrate the ability to manage the complexities of a large project from the standpoint of financing and overall project management.
4. **Coordination with the Interconnecting Transmission Owners:** The project will connect to one facility owned and operated by MidAmerican Energy Company (MEC) and one facility that will be owned and operated by the WIIL Selected Developer. An important aspect of the project will be the planned coordination with these Transmission Owners⁵ on various regulatory, permitting, design, construction, and operations and maintenance activities.

Proposal Receipt

On January 20, 2026, four developers submitted proposals for STIW. MISO validated each developer was certified as a Qualified Transmission Developer on the dates the proposals were submitted and reviewed each proposal for completeness. It gave every developer the opportunity to clarify or cure unclear or incomplete submissions. All developers responded to MISO requests for clarification or cure, and no developer subsequently withdrew a proposal.

MISO later announced⁶ it had received five valid and complete proposals from four development teams: (1) Ameren Transmission Company of Illinois, GridLiance Heartland, LLC, Dairyland Power Cooperative and Illinois Municipal Electric Agency (jointly); (2) Invenergy Transmission and Exelon Corporation (jointly); (3) Midcontinent Grid Solutions; and (4) Viridon Midcontinent LLC and National Grid Ventures US Transmission, Inc. (jointly).

⁵ Unless otherwise specified herein, all capitalized terms shall have the meaning as set forth in MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff ("Tariff").

⁶ See "STIW RFP Respondents Public Posting"
<https://cdn.misoenergy.org/STIW%20RFP%20Respondents%20Public%20Posting746400.pdf>.

Proposal Quality

MISO appreciates the amount and complexity of information competitive developers must organize, summarize, and submit in response to MISO's competitive RFPs.

Although the proposals were generally well-written, MISO did identify aspects that complicated its review or did not align with the RFP's directions. For instance, one or more developers submitted:

- Cost Containment Term sheets:
 - With confusing or conflicting definitions and long paragraphs of almost one page in length;
 - With a minimum earnings provision buried in a long paragraph, which could suggest an intent to obscure a provision that would dilute other commitments; and
 - That did not clearly identify whether certain commitments would begin upon project award or at the in-service date (ISD);
- Project cost workbooks that did not align with cost containment offers;
- RFP answers that did not address all information requested (MISO is not obligated to request clarification of incomplete answers);
- Insufficient cost detail;
- Unclear O&M expense calculations; and
- Missing method 4 structures in Power Line Systems (PLS) models to validate the structure design against the proposed criteria.

MISO recognizes it also has a role to play in facilitating well-written, competitive proposals. It will continue to look for opportunities in future RFPs to ask more specific questions and provide clearer direction.

Confidentiality

MISO recognizes the importance of transparency in the Competitive Transmission Process. However, MISO is obligated to treat the following information as confidential⁷ unless a developer consents to its disclosure:

- all detailed breakdowns of costs, including the itemized costs for labor and materials,
- all details of a developer's financing arrangements (as well as those for any project participants),
- all detailed design, routing, siting, or specialty construction techniques, and
- any other information or portions of documents that a developer has clearly designated as confidential (excluding items that are expressly categorized by the MISO Tariff as non-confidential or that MISO has an obligation to make publicly available).

Proposal information the Tariff categorizes as not confidential⁸ includes:

- the identity of developers,

⁷ See MISO Tariff, Attachment FF, Section VIII.D.9.a.

⁸ *Id.* at Section VIII.D.9.b.

- the high-level design, estimated cost, and estimated 40-year annual transmission revenue requirement for the project,
- information relating to any cost-containment measures, cost-caps, and rate incentives,
- information about the proposed in-service dates of the project,
- the final evaluation score assigned to each proposal (with the names of the developers masked),
- all timetables and milestones agreed to between the Selected Developer and MISO in the Selected Developer Agreement,
- information that is publicly available, a developer has consented to release, or the Tariff requires MISO to make publicly available.

Communication and Information Protocols

MISO adheres to the following self-imposed protocols throughout the competitive developer selection process:

- **Project Information Kept Confidential:** Information deemed confidential under the Tariff related to competitive projects will be treated as commercially and competitively sensitive.
- **Communications to Be Coordinated:** MISO aims to coordinate all communications with interested stakeholders regarding RFPs, the evaluation process, selection report, and variance analysis. Please refer all questions to MISO Client Relations at CTA@misoenergy.org and not to individual MISO personnel.
- **Questions Will Be Answered Transparently:** MISO will publicly post questions it receives and vetted answers on the Competitive Transmission Administration webpage.
- **Project-Specific Questions to Be Directed to MISO:** Once an RFP is issued for a Competitive Project and until the Selection Report is issued, all questions regarding that project must be directed to MISO and not to interconnecting incumbent transmission owners. MISO will process these questions in accordance with MISO's Business Practices Manual No. 027.

These communication protocols are posted on MISO's public website, were incorporated in part within the RFP and BPM-027, and were included in presentations during public stakeholder meetings.

MISO conducted training for employees and consultants involved with the Competitive Developer Selection Process. MISO emphasized the need for confidentiality and announced the communication protocols at every meeting of MISO staff and the Competitive Transmission Executive Committee where information about the RFP, developers, or their proposals was discussed.

MISO instructed the evaluation team, which was required to protect the confidentiality of all proposals and associated work products, to refrain from discussing any proposal with entities or individuals that were not part of the MISO evaluation team.

All MISO employees and consultants followed the confidentiality and communication protocols established by MISO throughout the competitive developer selection process, and restricted access and discussions about proposals not only as to external parties, but also to other staff members within MISO who were not part of the MISO evaluation team. In addition, to protect the integrity of the evaluation process, MISO has

kept the identities of its independent consultants confidential and required those consultants to attest they did not have a conflict of interest with any project developer.

MISO restricted access to all electronic versions of proposal-related documents. Only members of the MISO evaluation team were allowed access to proposal materials. In addition, before MISO evaluated the proposals, MISO randomly assigned a number to each proposal and a letter to each developer to enable team members to discuss proposals without referring to a developer's name.

Proposal Evaluation

MISO analyzed each proposal in compliance with Attachment FF of MISO's Tariff, Business Practices Manual No. 027 Competitive Transmission Process, and the STIW RFP.

MISO studied each of the four evaluation criteria identified in the Tariff, as well as the enumerated subcriteria. Within each criterion and sub criterion, it considered the cost, risk, certainty, and specificity of the information in each proposal.

Part III of this report, *Comparative Analysis of Proposals*, explains how MISO selected the developer for this project. Each section begins with a summary of the requirements for that section and then discusses the areas in which all developers performed equally and the areas in which they performed differently. Similar performance by all developers is discussed summarily, while differences are explored in greater detail.

This report principally refers to proposals by developer. If a developer submits more than one proposal, the report will only distinguish that developer by proposal when the subject matter is different between that developer's proposals.

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II. Summary of Proposals

The following two figures represent principal components of the STIW proposals by developer. Part III of this report discusses the information in greater detail.

Figure 3. Design characteristics

	A1 / A2	B	C	D (AGDI)
Conductor				
Trade name and type	Tern ACSR	Drake ACSR	Redwing ACSR	Redwing ACSR
Kcmil (Misch alloy core)	6-795 (GA2)	6-795 (GA2)	6-715 (GA3)	6-715 (GA2)
Bundle Spacing	15"	18"	15"	18"
Emergency amps (summer)	5625A	4000A	4098A	4388A
Max. operating temp. (F°)	203°	165°	167°	176°
Max audible noise (dBA)	49.9 / 49.5	50	52.8	51
Surge Impedance (MW)	2430 / 2464	2437	2439	2476
Max electric field in ROW (kV/m)	8.3 / 7.9	9.9	9.8	5.1
Tangent structures				
Lattice Type (primary)	Guyed-V / Guyed-Y	Guyed-V	Self-Supporting	Guyed-V
Material	Galvanized Steel	Galvanized Steel	Galvanized Steel	Galvanized Steel
Insulators	Glass Bell V String	Glass Bell V String	Polymer V String	Glass Bell V String
Foundation	Grillage	Concrete Pedestal	Drilled Pier	Drilled Pier
Total tangents	588 / 612	389	484	478
Deadend structures				
Lattice Type (primary)	Self-Supporting	Self-Supporting	Self-Supporting	Self-Supporting
Deadend Foundations	Drilled Pier	Drilled Pier	Drilled Pier	Drilled Pier
Total Deadends	43	58	47	57
Total Lattice Weight (lbs, millions)	23.7 / 21.8	26.9	33.4	35.7
ROW Width (ft)	200 / 180	250-300	200	200
Typical shielding angle (°)	0°	5°	3°	5°
Mean recurrence interval (yrs)	300	100	100	100
Struct-struct span (avg ft)	1190 / 1154	1576	1384	1414
DE-DE section (avg mi)	3.4	2.4	3.1	2.6

Figure 4. Cost characteristics (\$M) ⁹

	¹⁰ A1 / A2	B	C	D (AGDI)
Estimates				
Revenue requirement (\$M, PV)	\$593 / \$584	\$307	\$705	\$524
Capital cost (\$M, without AFUDC)	\$884 / \$873	\$456	\$909	\$756
Commitments				
<i>Revenue</i>				
Term (ISY, Full years)	Yes, 15	Yes, 40	Yes, 40	Yes, 20
Cap tier 1 (Avg over estimates)	0%	0%	7%	4%
Reduction in Rev. Require.	100%	100%	100%	100%
Defer unused cap	Yes	No	Yes	No
Defer revenue over cap	No	No	Yes	No
Adjustment (add'l route mile)			✓	✓
Adjustment (structure change)				✓
<i>Financing</i>				
Term (Award + ISY, Full years)	Yes, 15	Yes, 40	Yes, 40	Yes, 20
Max equity	45%		45%	
Max ROE	9.80%		9.60%	
Max WACE		3.92%		5.24%
Minimum earnings (Project life)	8.5% ROE	8.0% ROE	7.8% ROE	4.1% WACE
<i>Capital cost</i>				
Term (ISY, Full years)	Yes, 15	Yes, 40	n/a	Yes, 20
Cap (Tier 1)	\$884 / \$873	\$456		* \$605
Cap includes AFUDC	No	No		No
Applicable over Tier 1 cap	0% ROE	0% WACE		* 2.0% WACE
Cap (Tier 2)	\$972 / \$960	\$547		
Applicable over Tier 2 cap	Full ROE	2% WACE		
Adjustments (add'l route mile)				✓
Adjustments (structure change)				✓
<i>Other</i>				
Schedule guar. (Max bp penalty)	30 (ROE)	12 (WACE)	30 (ROE)	15 (WACE)
Guaranteed ISD	April 1, 2034	June 1, 2034	June 1, 2034	June 1, 2034
Term of bp penalty (years)	15	40	40	20
Waive return on CWIP	✓		✓	
<i>Multiple project awards</i>				
Revenue cap reductions		4%	5%	* 5%
Capital cost cap reduction		5%		2%

⁹ Certain information is approximate to either help anonymize the developer or to simplify the table. Asterisks indicate information that needs additional context to be understood. That context is explained in this report.

¹⁰ Unless multiple data is presented, the information relates to both of Developer A's proposals.

III. Comparative Analysis of Proposals

This section explains the criteria MISO must evaluate in each proposal, the weights MISO must assign to the criteria identified in the Tariff, the content of the proposals responsive to the STIW RFP, and the information that strengthened or weakened each developer’s submission.

Because developers sometimes submit multiple proposals, MISO’s practice is to only distinguish between these proposals when the difference is important to mention.

1. Cost & Design

MISO must evaluate each proposal’s electrical design, structural design, estimated capital cost and revenue requirements, and cost containment offers. This evaluation constitutes 30% of MISO’s decision in this project.

In this criterion, MISO determined Developer B was “Best,” AGDI and both of Developer A’s proposals were “Better,” and Developer C was “Good.”

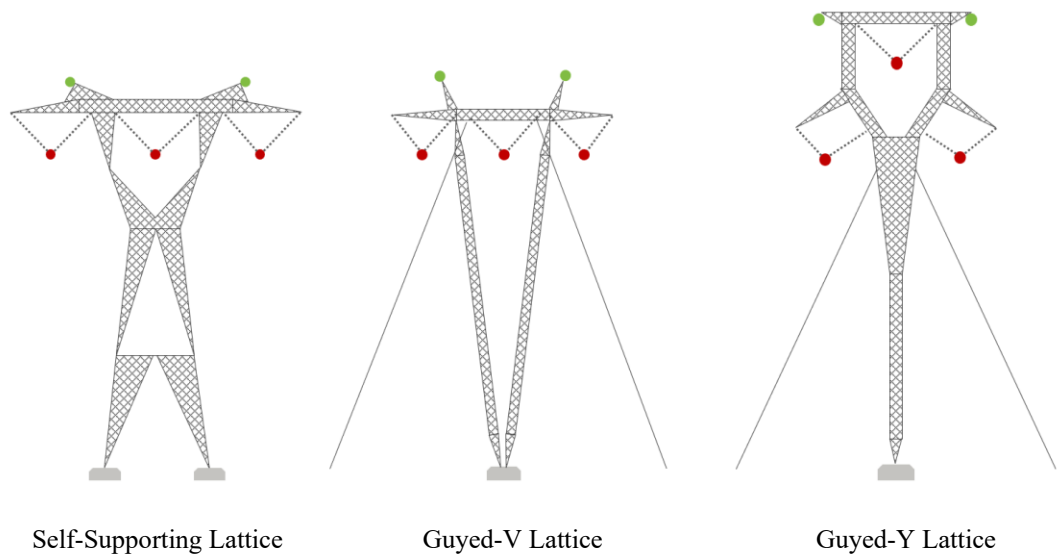
1A. Transmission Line Design

A competitive proposal must describe the characteristics of all proposed conductors, wires, transmission structures, and foundations. It must also explain all grounding, lightning, galloping, and vibration strategies.

All developers adequately described their proposed transmission line designs and evaluated the galloping and vibration performance of those designs. MISO determined all proposed designs will meet the project’s electrical requirements.

Figure 5 illustrates the general structural transmission line designs of the proposed tangent structures.

Figure 5. General Structure Designs



All Developer's created lattice tower families with varying heights and configurations to support the proposed line design. All developers utilized self-supporting lattice structures for their angled and deadend structure types with drilled pier foundations.

An important aspect and element of the STIW project is the consideration of the Mississippi River Crossing. All developers proposed installing structures on an island to minimize span lengths across the Mississippi River. All developers proposed installing structures over 200' above ground height which complicates impacts to Federal Aviation Administration (FAA) requirements. Developers B and C would change their conductors over the Mississippi River. Developer C's Mississippi River conductor was an ultra-high-strength Redwing ACSR. Developer B proposed an ACCC Curlew conductor. All developers researched required elevations and clearances over the Mississippi River and proposed a design that meets those requirements.

Developer A submitted two proposals which were principally different in design. Its first proposal, a guyed-V structure, would be the next design iteration of its existing guyed-V lattice tower. The design of the guyed-V structures would provide flexibility during construction for helicopter installation due to the lower structure weight. Its second proposal was a guyed-Y design that is a new delta structure framing configuration for this developer at 765 kV. The guyed-Y design would have less total lattice steel weight than any of the other developers, which indicates an efficient use of structural material. The guyed-Y design has the narrowest proposed right-of-way (ROW) of 180', 20' less than its guyed-V design and indicates a design that minimizes landowner impact.

Developer B proposed to maximize span lengths between its guyed-V structures, which reduces the number of structures and helped reduce its structure installation costs. The longer spans would blow out more at high wind events and therefore require a larger ROW. Developer B's proposed ROW would fluctuate between 250' and 300' in 10' increments depending on span length. The weighted average of the ROW proposed was 285'. It proposed 180' tall guyed-V structures on average, which were the tallest of all developers and a byproduct of maximizing span lengths due to the increased sag. Its lattice family was only developed up to 180' maximum tower heights which gave this developer less flexibility in design to accommodate any requested changes during project implementation. Its guyed tangent structure passed a full-scale test, validating its proposed structure design.

Developer C proposed a self-supporting lattice design. Developer C's total steel weight is similar to that of AGDI's guyed-V design. Developer C's proposed lattice tower family was not as mature as the other developers' designs. As an example, it displayed the most inconsistencies between its PLS lattice towers it developed and its structure design drawings. Developer C also proposed switching the design to steel H-frames if market conditions later in the project became more favorable for tubular steel. It would utilize a 200' ROW for both self-supporting lattice and H-frame designs.

AGDI proposed a thoroughly developed guyed-V design, though it is the least structurally efficient in terms of total weight for a guyed design. It validated its proposed tangent structures by full-scale testing a guyed-V tangent and a self-supporting tangent, both of which passed. It provided the most relevant discussion about supporting its guyed-V design in the permitting process in Illinois. It proactively reached out to agencies to research the advantages of a guyed design, particularly around cost savings and land use around the guyed structures.

If the entire STIW line, inclusive of Illinois and Iowa segments, needed to be self-supporting structures during project implementation, the total structure weight would increase by about 40% on average across all developers who proposed a guyed design. Changing the design to all self-supporting structures would also require installation of drilled pier foundations for the new structure type, which would further increase material and installation costs.

For the design loads applied to the structures, Developer A has the most robust structure, utilizing a 300-year mean recurrence interval (MRI), whereas Developers B, C and AGDI all utilized a 100-year MRI. Generally, a higher MRI will lead to a more robust transmission line design.

All developers conducted a desktop geotechnical study and created assumed soil profiles that were assigned to each structure to develop preliminary foundation designs. Developer B assumed the most optimistic soil strengths which reduced the size of its drilled pier foundations for angles and deadend structures, and therefore, further reduced its proposed material and installation costs.

All developers studied conductors at various bundle spacings and sizes to optimize their conductor selection. All developers meet the RFP requirements including the surge impedance loading of 2400 MW.

All developers studied and calculated different clearance requirements when implementing the NESC Rule 232.C.1.c, also known as the 5-mA rule. AGDI provided the most thorough investigation when studying agricultural equipment underneath the transmission line in relation to the 5-mA rule.

All developers considered electric and magnetic fields throughout their designs. Electric field limits were generally set at 10 kV/m within the ROW and 5 kV/m at the edge of the ROW based on Institute of Electrical and Electronics Engineers (IEEE) recommendations. Magnetic field and audible noise limits varied amongst developers, but each developer showed they were meeting their proposed design limits.

All developers submitted Power Line Systems - Computer Aided Design and Drafting (PLS-CADD) models. Some developers provided more information than others in their PLS model. MISO was able to clarify that each model was generally meeting its proposed design, and it helped MISO validate the proposed designs.

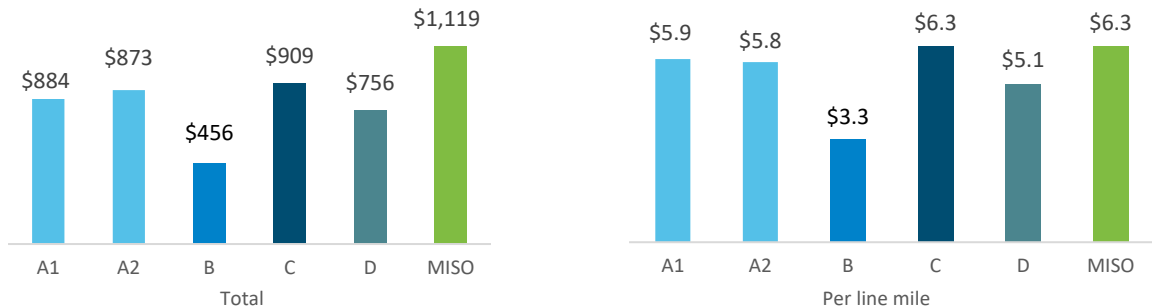
1B. Capital Cost

A developer must detail its estimated capital cost for a project in its Project Cost Workbook (PCW). Although MISO must evaluate the rigor of each cost estimate and any financial assumptions, it recognizes those estimates are not binding without cost containment commitments.

MISO does not include capitalized financing expenses when it compares capital cost because not all proposals may choose to capitalize those expenses. However, the present value of revenue requirement (PVRR) calculation includes a project's financing expenses during construction.

Figure 6 illustrates the estimated capital costs and fully loaded cost per line mile of the proposals. MISO's estimates reflect 2034 dollars while the developers' estimates are the sum of capital spent during the proposed construction periods.

Figure 6. Estimated capital cost (\$M) ¹¹



In this project, MISO requested discrete cost information from the developers. Some developers provided more detailed cost estimates than others. Although this information helped MISO better understand the costs beneath estimates, it reinforced MISO's view that cost containment – as opposed to estimated capital cost or PVRR – best reveals a developer's confidence in the project's estimated costs and future revenue requirements.

Developer B's capital cost estimate was approximately 40% lower than the next lowest. However, several of the assumptions used in its estimate differed significantly from those used by other developers. Notable differences in the assumptions related to land acquisition, steel, access and clearing, and other cost components suggest the cost may may not be achievable which introduced uncertainty regarding its cost advantage.

Section 1D. Cost Containment will discuss the containment offers and explain why the lack of absolute cost containment offered by any developer for this project suggests MISO should not simply favor the proposal with the lowest estimated capital cost or PVRR.

The developers proposed costs of debt during construction of ~4.5% to ~5.1%. Because no developer offered to guarantee its cost of debt during construction, MISO performed scenario analysis using various cost of debt rates.

In future proposals, developers are welcome to offer to explain if their proposed rates are certain, but MISO understands developers may prefer to offer other containment terms that better reflect the costs they can control. A developer could also show how it has regularly obtained prior short-term loans at a comparative spread to then-prevailing short-term interest rates, adjusted for any changes in the credit ratings of the entities that will borrow the capital.

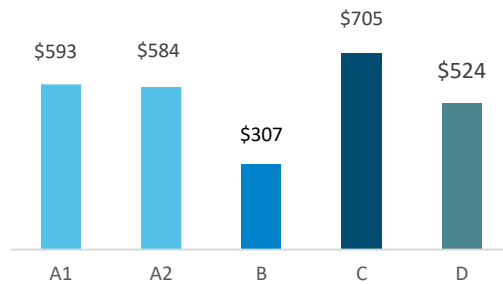
¹¹ The MISO capital cost estimate escalated to the estimated in-service year dollars based on MISO's 2.50% annual inflation rate. The developers' estimates reflect the sum of capital costs in the years in which they were spent.

1C. Annual Transmission Revenue Requirement

A developer must calculate and explain a project's estimated annual transmission revenue requirements (ATRR) for the construction period, the first year of operation, and the next forty years. MISO calculates the PVRR by discounting each ATRR by a 7.1% discount rate. Developers that propose to earn a return on CWIP will have revenues during the construction period.

Like its review of estimated capital costs, MISO recognizes estimated PVRR is mostly determined by the estimated capital cost and is not binding without cost containment commitments.

Figure 7. Estimated PVRR (\$M)



Long-term financing

The developers based their revenue estimates on a mixture of approved and offered capital structures and costs of equity. The effective equity structures in proposals were approximately 40% to 60% and the effective ROEs were approximately 9% to 10%. All developers offered return on equity concessions in their submitted proposals.

Although all developers explained to different degrees how they estimated the long-term debt rates they would be able to obtain, no developer submitted an executed agreement with a commercial bank that supported its estimated rate. Additionally, no developer offered to forfeit recovery of debt expense driven by rates higher than its estimate.

In future proposals, developers are welcome to offer to contain these debt expenses, but MISO understands developers may prefer to offer other containment terms that better reflect the costs they can control. An executed long-term debt rate, an interest rate cap, or a clearly shown pattern of financing similar assets at certain credit spreads can support MISO trusting that an estimated rate is likely to be lower than the rates of its competitors.

1D. Cost Containment

A developer may commit to limit the revenue it will request to recover on a project. Developers often commit to limit the project's total revenue, the project's capital cost upon which certain revenue components are based, individual revenue components, or a combination of these.

Unless stated otherwise, each commitment offered would be enforceable for the project's life, which consists of the construction period, an expected seven-month partial in-service year, and 40 subsequent years. This report provides a summary of cost containment terms but may not necessarily include all terms offered.

This section discusses the significant commitments offered in this project. Figure 4¹² on page 8 summarizes this information.

Minimum Earnings Requirement

Developers have increasingly been stipulating minimum earnings metrics that prevail over all offered cost containment. MISO therefore discusses this term sheet element first.

Developers A, B, and C included minimum ROEs of 8.5%, 8.0%, and 7.8%, respectively, in their term sheets. AGDI will require a minimum WACE of 4.10%.

Competitive developers choose the cost risk they are willing to assume when submitting a proposal. Minimum earnings provisions are a clear and efficient way to mitigate this risk.

Total Revenue Requirement

The most comprehensive single form of cost containment a developer can offer is to cap the revenues it will request to recover from customers. Developers may offer hard caps, which preclude *all* revenue recovery greater than each cap, or soft caps, which may or will preclude *a portion* of revenue greater than each cap. The increased use of minimum earnings metrics means that few developers offered hard revenue caps.

Each developer that offered revenue caps included the in-service year in the capped period. However, not all developers assumed these caps would begin on the project's ISD. MISO prefers that revenue caps applicable in a project's in-service year be based on the ISD identified in the RFP. This makes it easier to compare and describe revenue caps.

Although not all developers discussed how they would adjust their caps in the first year if the project's ISD were to change, MISO understands that such a change is a possibility, and it believes this situation can be resolved predictably and reasonably by using pro rata calculations.

Developer A would cap its revenues for 15 years at its estimates. These caps would not, however, apply to four types of costs: (1) those due to "Change in Law," (2) property taxes greater than estimated, (3) debt expense greater than proposed, and (4) AFUDC greater than estimated. MISO discusses later in this section

¹² The version of this report published on May 15, 2026, incorrectly referenced figure 5, this edit corrects that typographical error to reference figure 4.

the significance of Developer A's AFUDC exemption. It would defer unused cap space for later use, but it would not defer uncollected revenue for later, possible recovery.

The developer's term sheet was generally well-written, but it did not explain its AFUDC cap exemptions well. Because its revenue caps were based on its estimated revenue requirements, which were in part based on its estimated AFUDC, it clarified it intended to only exempt *additional* AFUDC from its revenue caps.

Developer B would cap its revenues for 40 years at its estimates. The developer would also lower each revenue cap by 4% and combine the reduced caps with its WIIL revenue caps if MISO selects it to develop both STIW and WIIL. Developer B would retain the right to shift cap amounts between projects to minimize possible forfeited revenues.

It clearly explained that, e.g., if the project's ISD moved up one month (from June 1, 2034, to May 1, 2034), it would move one month (which MISO presumes to be one-twelfth) of its 2035 revenue cap to its 2034 cap. It would perform the same operation in each subsequent project year to accomplish fair adjustments to its caps. This is an optimal solution for any project with an ISD that could change. It would neither defer unused cap space for later use nor defer uncollected revenue for later, possible recovery. This proposal to forfeit unrecovered revenue or unused cap space reduces the complexity of enforcing Developer B's caps.

In its term sheet, Developer B clearly enumerated additional costs that either would or would not be exempt from its caps. It specifically stated costs attributable to routing, siting, or interconnection point changes, adverse soil, transmission structure changes, commodity cost escalation, law and administrative rule changes, and tariff changes would not be exempt from its caps. However, as discussed previously, a minimum earnings requirement can mitigate or even negate cost containment that initially appears to be comprehensive.

This developer expressed more clearly and succinctly than any other developers how its cost containment would operate. This clarity reduces the risk that its future revenue requirement filings would be challenged based on the language in its term sheet.

Developer C would cap its revenues for 40 years at a ~7% premium to its estimates. It would increase each cap by 0.6% for every mile the total project route exceeded 155 miles. As MISO has stated before, this is an efficient, clear, and reasonable way to mitigate cost risk.

It stipulated that any costs arising from changes to laws, trade tariffs, property tax rates, or administrative rules would not count toward its caps. It would both defer unused cap space for later use and defer uncollected revenue for later, possible recovery. It would forfeit any deferred revenue balance at the end of the project. Developer C's term sheet was also clear and well-written.

AGDI would cap its revenues for 20 years at a ~4% premium to its estimates. If MISO selected it to develop both STIW and WIIL, it would cap its combined revenues for both projects. The combined cap would be approximately 1% less than the sum of its separate cost estimates, but each would remain subject to a minimum WACE of 4.10%.

Financing

Developers may also offer to constrain certain financing expenses or capital structures.

Developer A offered to cap its equity at 45% and its ROE at 9.8% through the first 15 years of operation.

Developer B offered to cap its WACE at 3.92% for the entire project, which was equal to its proposed 40% equity structure and a 9.8% ROE.

Developer C offered to cap its equity at 45% and its ROE at 9.6% for the entire project.

AGDI offered to cap its WACE at 5.24% for 20 years.

MISO prefers that maximum rates of return provisions also apply to a project's construction period. Developers are welcome to clearly stipulate a different treatment if they desire. A developer should always reflect its current capital structure and approved return on equity in its cost estimate and PVRR unless it clearly commits to a different ratio for a period in its proposal.

Capital Cost

Developers may also propose hard or soft caps to a project's capital costs. Hard cost caps preclude all revenue associated with the excess plant while soft cost caps typically preclude some amount of equity return associated with the excess plant. The caps may also apply either to a project's construction cost or its capitalized cost, which may include AFUDC. Like hard revenue caps, hard cost caps are now rare due to the increased use of minimum earnings metrics. No developer offered to fully cap its capital cost.

Developers are increasingly offering to reduce their earnings on project investment greater than stated amounts. In practice, this will require the developer to identify the percentage of total project investment that will earn a decremented return so that percentage can be consistently applied to the project's declining net plant. Because net plant represents almost all a competitive project's rate base, MISO prefers that developers offer to apply the decremented percentages to the entire rate base to make this containment easier to enforce.¹³ Developers are welcome to clearly stipulate a different treatment if they desire.

Developer A offered to forfeit its ROE on the first 10% of capital costs greater than its estimate. It could request full recovery of ROE on capital above 110% of its investment. Like its revenue caps and general financing caps, this commitment would be effective for 15 years.

Developer B offered to decrement its WACE to 0.0% on the first 20% of investment above its capital cost cap and to decrement its WACE to 2.0% on investment greater than a 20% increase. It stipulated this decrement would not apply to AFUDC if FERC rejected its request to recover a return on CWIP. The significance of this exception is discussed later in this section. It offered to reduce by 5% the amount at which it would begin to decrement its WACE if MISO selected it to develop both WIIL and STIW.

Developer C did not base any containment offers on the project's capital cost.

AGDI offered to decrement its WACE to 2.0% on capital costs greater than 80% of its estimated cost through the first 20 years of operation. If MISO selects it to develop both WIIL and STIW, it would reduce the estimated capital cost by 2%.

It would increase its estimate by \$4.6 million in Illinois and \$6.2 million in Iowa for each mile the final route length exceeds its preferred route due to requirements imposed by a governmental authority or a point of interconnection being located outside a specified two-mile range. It would separately increase that estimate

¹³ For example, Accumulated Deferred Income Taxes and a working capital amount typically comprise less than 5% of a project's rate base. If a developer's capital cost containment decreases its average cost of equity from 9.5% to 9.3%, MISO assumes the developer will multiply its project rate base by 9.3% to calculate its equity return.

by \$450,000 for each structure a government authority requires it to change to a self-supporting lattice tower. If it must change every structure to self-supporting, it will alternately increase the estimate by \$128 million in Illinois and \$44 million in Iowa.

Other Aspects

The developers each proposed additional provisions that would offer increased certainty to their revenue estimates.

Schedule Guarantees

Developer A offered to reduce its ROE cap for 15 years by 2.5 basis points for every month, up to 12 months, the project in-service date occurs after 4/1/2034.

Developer B offered to reduce its WACE cap for 40 years by 1 basis point for every month, up to 12 months, the project in-service date occurs after 6/1/2034.

Developer C offered to reduce its ROE for 40 years by 2.5 basis points for every month, up to 12 months, the project in-service date occurs after 6/1/2034.

AGDI offered to reduce its WACE cap for 20 years by 1.25 basis points for every month, up to 12 months, the project in-service date occurs after 6/1/2034.

Exempt costs

Most developers state in their cost containment term sheets that costs they incur due to forces out of their control are not subject to the cost containment they offer. These “Force Majeure” events typically consist of severe geopolitical upheaval, health emergencies (such as COVID-19), changes in laws or regulations (such as building restrictions), and natural disasters. Accordingly, competitive proposals do not typically distinguish themselves in this area.

However, in this project, Developer B elected to waive three common exclusions outside of its control. First, it waived the language in Article 9.2.1. of MISO’s SDA that states the “Selected Developer shall be entitled to seek recovery for costs...to the extent such excess costs result from...(B) a requirement imposed by...a Governmental Authority...”

Second, it waived its right to claim changes or additions to laws after a proposal is submitted by Force Majeure, as is permitted under Section 11 of the SDA. Finally, it waived its right to claim that a delay outside of its control, such as a delay in permitting, is an uncontrollable force.

Developer B also stated in its term sheet it would not seek recovery of incremental costs driven by:

1. Route changes and route mileage increases;
2. Relocation of its proposed interconnection points due to Interconnecting Transmission Owner routing;
3. Adverse soil conditions;

4. Required changes to transmission structures; and
5. Increased commodity cost.

These are valuable statements to MISO because they facilitate clear resolution to foreseeable issues and they were included in the developer's term sheet, which becomes part of the SDA. Developers sometimes characterize their commitments in their proposals in a way that is not as strongly or clearly worded in their term sheets.

MISO is aware, however, that minimum earnings provisions (such as included by Developer B) can significantly dilute otherwise customer-friendly exclusionary language.

Some developers add exceptions to their cost containment offers that they could mitigate but choose not to. MISO understands that, although reduced cost mitigation can decrease risk assumed by developers, it also can increase costs to customers. Therefore, MISO considers the variability of cost outcomes when it reviews exceptions to containment.

Developer A excluded from its cost containment offers project costs due to:

1. Labor shortages and shortages in supply or transportation of materials, which it included in its definition of Uncontrollable Costs;
2. Long-term debt rates and AFUDC rates greater than its proposal assumptions, which it included in its definition of Uncontrollable Costs; and
3. "Actual property taxes assessed and paid greater than its proposal assumptions."

Developer B excluded capital investment after the in-service date other than those identified in its proposal.

Developer C excluded expenses associated with capital investment or improvement after the in-service date other than forecast capital expenditures.

AGDI, would exclude "any costs and expenses associated with any capital investment or improvement occurring after the Combined Project In-Service Date . . . and any . . . O&M and A&G costs that are not incremental to the Combined Project."

Scenario Analysis

Although MISO publicizes in this report the estimated construction cost and PVRR of each competitive proposal it receives, it recognizes these estimates are only binding to the extent that their components are contained by a developer. For example, although Developer B estimated a construction cost that was more than 40% lower than the next lowest estimate, it offered cost containment that would ensure it still earned an 8.0% ROE if the project cost increased.

Therefore, MISO must review each developer's assumptions and understand how a change in those assumptions will affect the revenue the developer may recover.

Construction timing

The financing expense during construction that a developer either accrues as AFUDC or recovers as a return on CWIP is driven by capital structure, costs of capital, investment amounts, and the time between investment and facility energization.

Holding the in-service date of a project constant, a developer that begins construction earlier may have lower direct costs by minimizing inflation but will incur greater financing expense due to the earlier investment of capital. Conversely, a developer that begins construction later may have higher direct costs due to additional inflation but will minimize its financing expense by delaying the investment of capital.

A developer must balance these realities for ratepayers, who desire both affordability and reliability. If it begins construction too early, it will increase its financing expense, which customers must pay for, but it will incur less inflated input costs. If it begins construction too late, it may be able to decrease its financing expense, but it will also increase the risk the project cannot be energized on time, incur more inflated costs, and possibly further increase expenses due to limited supply of labor or equipment.

Developer A and Developer B based their cost estimates on materially later investment than the other developers. Although both developers offered caps related to their capital structure and return on equity rate, neither one committed to contain the total financing expense during construction.

Developer A stipulated that its estimated AFUDC was not included in its capital cost cap, and the revenue requirements associated with any AFUDC greater than that estimate would be exempt from its revenue caps. Developer B will request a return on CWIP, which would allow it to recover its construction financing expense prior to the beginning of its revenue caps. It also explicitly stated its cost cap was “exclusive of CWIP or AFUDC.”

Therefore, either developer, if awarded the project, could build at a more gradual rate, taking advantage of less inflated costs to create room under its cap while significantly increasing its financing expense, which would not be subject to any containment.

Stated differently, developers who have a later construction schedule could increase the PVRR they collect from customers and still report they delivered the project under budget, simply by investing capital at an arguably more prudent rate. For this reason, MISO created scenarios considering alternate timing of each developer’s capital investment.

Analysis

MISO calculated proposal PVRRs using scenarios to assess how various risks may affect the PVRRs. Common scenarios include changes in project cost, return on equity, cost of debt, O&M expense, route lengths, and equity in capital structure, and timing of capital spend as discussed above.

Developer A’s PVRRs were generally third and fourth highest across the analysis. The later timing of its proposed construction expenditure presented a greater comparative risk of increased financing costs compared to its estimate.

Developer B’s PVRRs generally resulted in the lowest costs across the analysis. Its later timing of proposed construction expenditures presented a greater comparative risk of exceeding its financing estimate. Some of the cost assumptions in Developer B’s proposal may not be achievable. In scenarios assuming the award

of both WIIL and STIW, its minimum ROE undermined the benefits of the other improved cost containment, except in lower cost overrun scenarios.

Developer C's PVRRs generally resulted in the highest costs across the analysis.

AGDI's PVRRs generally resulted in the second lowest cost across the analysis. Its containment, if MISO awarded both the STIW and WIIL projects, introduced more significant changes to the WIIL portion of the revenue requirement than to the STIW project. Across many scenarios assuming the award of both projects, the cost containment adjustments did not materially change the PVRR due to the introduction of a minimum WACE in WIIL. The combined containment offered improved value at lower cost overrun scenarios with a tradeoff of offering less value at higher cost overruns.

2. Project Implementation

MISO must evaluate the experience and expertise of each developer's management and construction team, its proposed project transmission routes and sites and how it will obtain the land and permits it will need, how it will build and finance the project facilities, and how it will ensure the safety of its teams. This evaluation constitutes 35% of MISO's decision in this project.

For Project Implementation, MISO categorized Developer C as "Best," AGDI as "Better," and both of Developer A's proposals and Developer B as "Good."

2A. Management Ability

Schedule

A competitive developer must submit a project schedule that illustrates specific activities and the project's critical path. For each activity, it must explain why the time it scheduled for that activity was appropriate and how it has accounted for float (i.e., the amount of time a task can be delayed without causing a delay to subsequent tasks). It also must explain the project's critical path.

All developers provided schedules which highlight key activities and end on proposed in-service dates that are earlier than the project's required in-service date. All developers conducted research, coordinated with regulatory agencies, or utilized prior experience to inform their regulatory timelines. All developers planned to apply for the Illinois Commerce Commission's (ICC) expedited CPCN procedure in accordance with Section 8-406.1 of the Illinois Public Utilities Act.

Developer A has two months of float on its critical path. It demonstrated its extensive experience by explaining how applicable state guidelines and anticipated milestones were represented in its permitting schedule. It cited stocked material availability and ongoing agreements with suppliers, and it included the shortest lead times for key materials with the least supporting documentation from planned providers for those materials. It exhibited some inconsistencies between its proposed schedule and its implementation discussions throughout the proposal.

Developer B has two years of float on its critical path. It discussed conducting research and receiving input from planned contractors and consultants to inform its durations, but its regulatory permitting discussion

included less specificity regarding sequencing, target dates, and durations than other developers. It received lead times from planned manufacturers to add certainty to its procurement timelines.

Developer C has five months of float on its critical path and the earliest proposed in-service date of all developers. It discussed specific opportunities to realize additional float beyond its base assumptions and highlighted atypical durations related to helicopter operations and river crossing activities. It benchmarked durations against comparable experience and met with permitting agencies to develop timelines across all areas of its proposed schedule. Its procurement lead times were received from vendors across key project materials. It extensively and specifically discussed planned construction activity durations, which were based on its planned contractor's crew availability and resource allocation.

AGDI has no float on its critical path, but it did propose an in-service date slightly earlier than the required in-service date and it conducted significant due diligence and explained how its recent experience validated its activity durations. It has prepared primary and secondary routes to add flexibility to its ICC CPCN and Iowa Utilities Commission (IUC) Franchise application timelines. Its durations were determined in coordination with regulatory agencies and its planned contractors and consultants. Its procurement lead times were received from vendors across several material and equipment types. It provided the most specificity in its discussion of construction sequencing of all developers, and its plan is clearly reflected in its project schedule.

Management

A competitive developer must describe how it will manage the project team to meet the proposed schedule. It should describe the qualifications and locations of the management team and the organizational structure of the project's contractors and subcontractors. It must discuss how it will mitigate project risks. MISO's RFP noted that demonstrating the ability to manage the complexities of a large project will be particularly important for the success of the project.

All developers provided organizational charts and summaries of project team members. All developers executed agreements with their planned general contractors or construction managers. All developers have team members with management responsibilities who have previous 765 kV experience.

Developer A provided a letter of intent from its planned construction contractor. It considered an extensive list of varied and specific project risks, though it provided less support than other developers to justify the relationships between each risk's assumptions, mitigations, and assumed impacts to cost and schedule.

Developer B provided a teaming agreement with its planned construction contractor. It considered the fewest project risks, and its discussions of those risks and their mitigations were less specific than other developers'. Potential schedule impacts due to risks are not quantified and some of the risks identified as most significant have less anticipated impacts than other risks. It highlighted risks associated with major river crossings.

Developer C provided a memorandum of understanding with its planned construction contractor. It considered a very comprehensive set of major and minor risks across all areas of project implementation. It provided specific assumptions and direct influences from agency coordination in its discussion of completed and planned mitigations. It highlighted successful management of risks on previous projects which featured major river crossings.

AGDI provided master service agreements with its two planned construction management contractors, each of which has selected construction contractors for the project. It included several detailed discussions of a variety of risks and its related, quantitative assumptions, but its associated contingency assumption was significantly lower than the other developers'. It discussed fewer completed risk mitigations than some developers, though those mitigations it did discuss were significant and impactful to its implementation plan. It provided less justification for some risk probabilities and anticipated cost impacts than other developers.

Experience

A competitive developer must identify the general locations, miles and number of transmission facilities its construction team has built and the developer currently operates and maintains. It must specifically discuss a few of the most relevant facilities and explain the extent to which the teams that built those facilities will be the same as its team on this project. Finally, if it lacks experience executing the types of facilities in this project, it must explain how it will obtain the experience and knowledge to execute this project.

All developers exhibited their project teams' experience constructing, operating, and maintaining extra high voltage (EHV) transmission lines. Developer A demonstrated the most 765 kV experience. Its planned contractor has experience implementing a similar 765 kV transmission line design. It has no experience in Illinois but has prior experience in Iowa. Developer B demonstrated the least 765 kV experience. Its team has prior experience in Illinois and Iowa.

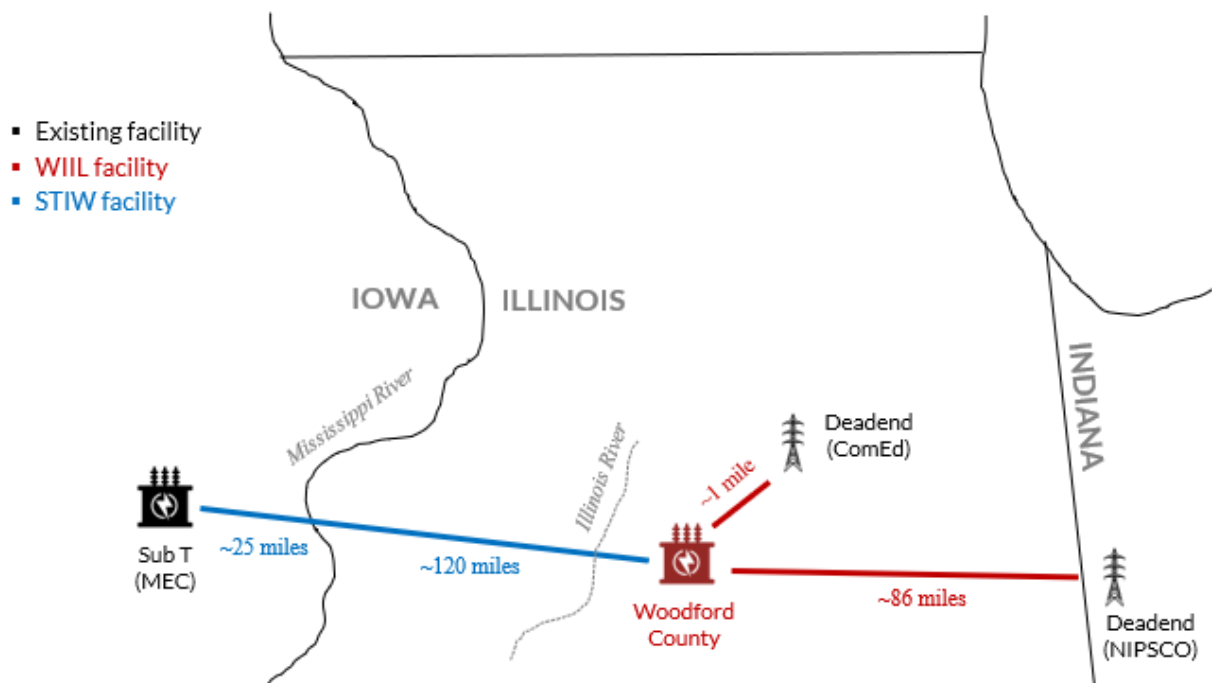
Developer C demonstrated significant, relevant experience, including its affiliate's 765 kV experience. It has extensive experience in Illinois and some experience in Iowa. AGDI demonstrated significant, relevant experience, though its 765 kV experience is minimal. Its construction partners have experience implementing projects which feature crossings of the Illinois and Mississippi Rivers. It has extensive experience in Illinois and some experience in Iowa.

2B. Routing and Siting

A competitive developer must explain where and how it will site each transmission line and substation in the project. It must discuss the constraints in the project areas, explain how each route and site is optimal given those constraints, and explain the remaining work the developer will perform to reduce the risk of the project. It must explain how it will obtain the necessary permits and acquire the necessary land to execute the project.

STIW will consist of two new 765 kV transmission lines. Sub T-IA/IL State Line and IA/IL State Line-Woodford County will be single circuit lines. The facilities will interconnect with facilities owned by MEC and the Selected Developer of WIIL, another competitive project in Illinois.

Figure 8. STIW and WIIL 765 kV facility map



Line Routing

MISO's RFP noted that the strategy for crossing the Mississippi River will be particularly important for the success of the project.

All developers performed or commissioned a desktop geotechnical study to determine that the project area's geotechnical characteristics do not pose significant or atypical risks. All developers conducted site visits with their planned consultants and contractors in addition to desktop research to determine that the project area's topography and related risks, outside of the river crossings, did not significantly inform the proposed routes.

Developer A's routing study included qualitative and quantitative analysis across its alternative routes though it includes less discussion of some constraints than other developers. It includes comparatively minimal discussion of its river crossings. It demonstrated state routing preferences less explicitly than other developers. It provided a KMZ file with a well-developed access plan including matting, pulling setups, and access roads with details about current road conditions. Its proposed routes impact the most Protected Areas Database of the United States (PAD-US) areas (eight total areas). It commissioned a consultant FAA study to identify risks and to create an informed mitigation plan. It spent the least amount of time conducting field visits of all developers and it provided minimal observations or specific findings within its proposal.

Developer B's routing study included the least quantitative analysis across the smallest study area of all developers. It provided less specific insight into its river crossing decisions than other developers. It demonstrated research to understand state routing preferences, but its proposed routes exhibit less adherence to both the ICC's and IUC's preferences and requirements compared to the other developers. Its proposed routes are tied with AGDI's for PAD-US area impacts (six total areas). It demonstrated an intentional plan for minimizing impacts to protected species at river crossings during construction but lacked a discussion of some impacted agricultural operations. Its KMZ files included features that demonstrated planned construction activities such as construction entrances, guard structure locations, and foundation types at each structure location. It conducted field visits and its conclusions were used to inform its construction access plan.

Developer C's routing study included the most rigorous qualitative and quantitative analysis of alternative routes. Its evaluation of river crossings was the most comprehensive of all developers, clearly illustrating the information which informed its proposed crossing locations and what its future risk mitigation strategies will be. It demonstrated research and routing decisions which align with the ICC's and IUC's preferences and requirements more clearly than other developers. Its high level of planning was reflected in its KMZ file which included alternative routes considered, laydown yard (i.e., area used for the temporary storage, receipt, and assembly of materials, tools, and equipment) and fly yard (i.e., area used for the takeoff and landing of helicopters and vertical lift aircraft) locations, and haul routes. It conducted stakeholder outreach which directly impacted its routing and permitting strategies. Its proposed route impacts the fewest PAD-US areas (four total areas) and minimizes impacts to protected species, agricultural lands, and existing and planned wind farms. It did not spend as much time conducting field visits as other developers, but it collected data to better understand project risks and to determine its river crossing strategies.

AGDI's routing study effectually described its iterative process for route selection and includes supporting data for its proposed route. Its river crossing evaluation included significant discussions of why the

proposed crossing locations were chosen, though there was limited quantitative comparison of potential river crossing locations. It demonstrated state routing preferences less explicitly than other developers but highlighted routing decisions which comply with the IUC's requirements. Its KMZ file includes access roads and some construction planning features. It corresponded with wind farm developers and other stakeholders to better understand and mitigate associated risks. Its proposed routes are tied with Developer B's for PAD-US area impacts (six total areas). It spent the most time conducting field visits of all developers, but it determined that there were no findings that affected the proposed route. It collected data at the major river crossings and reviewed potential access during its field visits.

Permitting

All developers utilized prior experience and conducted research to develop certainty surrounding their permitting plans, including the ICC CPCN and IUC Franchise processes.

Developer A provided permit requirements, applicability, expected agency review times, and assumptions related to each permit which indicate readiness for its proposed routes impacts. It discussed fewer state and local permits than other developers.

Developer B provided explanations of required permits as they relate to its proposed permitting plan, as well as schedules highlighting the timeline of planned activities related to each required permit. It conducted research and outreach regarding navigable water and state trail impacts and incorporated its findings into its permitting strategy.

Developer C's coordination with state regulatory agencies added certainty to its permitting plan. Its discussions of permits were wide-ranging and specific, including why permits are or are not expected to be required for the project in relation to its proposed design and routing choices. It provided the most extensive list of anticipated state and local permits and other requirements of all developers.

AGDI provided an extensive breakdown of the ICC's CPCN process as it relates to the project and demonstrated previous, comparable regulatory permitting successes. It conducted outreach to regulatory agencies and other stakeholders to better understand and mitigate risks associated with its permitting plan. It provided detailed summaries of that correspondence and how its decisions were informed related to major permits. It cited specific conclusions regarding river crossing permitting expectations gained through experience and coordination efforts.

ROW and Land Acquisition

A competitive proposal must describe a developer's abilities to acquire ROW and land for the project and the processes it will use to negotiate with landowners, prepare and execute contracts, complete land transactions, and when necessary, use eminent domain to condemn ROW.

All developers demonstrated an understanding of state requirements regarding landowner outreach, land acquisition, and the eminent domain process. All developers commissioned market studies to understand land sales in the area and mitigate associated risks.

Developer A's land acquisition attachments were examples from other projects, but the attachments demonstrated a high level of relevant experience. It commissioned a consultant market study to understand

land sales in the area and mitigate associated risks. Its assumed condemnation rate was higher than its historical average and was the most conservative of all developers.

Developer B's land acquisition attachments were sample forms and templates, but the attachments indicated it had conducted significant research in preparing its plan. It discussed potentially modifying its design in Iowa to meet the condemnable ROW width code. It had a conservative condemnation assumption rate, similar to Developer A's.

Developer C's land acquisition attachments were mostly examples or templates, but the attachments demonstrated a well-regulated approach to land acquisition. Its code of conduct manual for agents illustrated its efforts to maintain consistency across landowner outreach and land acquisition activities. Its assumed condemnation rate was the lowest of all developers, supported by historical rates and planned landowner incentives beyond what is typical.

AGDI provided the most project-specific information in its land acquisition attachments of all developers. Its land acquisition plan was the furthest developed of all developers and it demonstrated the most research and understanding of land acquisition processes in the project area. It assumed a relatively low condemnation rate, citing rates from previous experience.

2C. Construction

A competitive developer must describe its plans for engineering and surveying, material procurement, construction, and commissioning of the project.

Engineering and Surveying

A competitive proposal must discuss a developer's engineering and surveying plans prior to project construction and the labor it will use.

These plans typically include field wetland delineation, utility mapping, and geotechnical and light detection and ranging (LiDAR) surveys on all easements and acquired land. They also should include identification of all line crossings and coordination with line owners on necessary outages or clearances.

All developers plan to collect LiDAR and other surveys, conduct a geotechnical investigation with soil borings, and finalize structure designs if they are awarded the project. All developers described engineering activities which will be completed in coordination with MEC and the WIIL Selected Developer for their interconnections, which MISO's RFP noted would be particularly important for the success of the project.

Developer A completed engineering activities including commissioning a consultant geotechnical study, developing preliminary foundation types for each structure, tower structure family development, and full-scale testing of several structures with more tests scheduled for completion in 2026.

Developer B completed engineering activities and desktop studies, including a conductor study, consultants' desktop geotechnical and environmental studies, and tower structure family development. Its full-scale structure testing was ongoing. Its discussions of completed and planned engineering activities were the least exhaustive and specific of all developers.

Developer C utilized publicly available LiDAR data which it supplemented by collecting aerial imagery and additional LiDAR at river crossings and six existing transmission line crossings. It completed PLS-CADD model development, preliminary foundation sizing, and construction package development. It commissioned consultants to determine assembly geometry feasibility, design its lattice family of structures, conduct wire selection and sizing, and complete a desktop geotechnical report.

AGDI completed engineering activities including tower structure family development, river crossing tower design for the proposed Mississippi River crossing, insulator assemblies development, a consultant's desktop geotechnical study, preliminary foundation design at each structure, PLS-CADD model development, and a conductor selection study. It conducted laboratory testing of hardware from multiple potential manufacturers including Radio Interference Voltage (RIV) testing, Corona discharge assessments, and flash-over evaluations.

Material Procurement

A competitive proposal must describe a developer's plans for purchasing, transporting, storing, and staging all materials for the project.

All developers will utilize procurement teams which have been involved in their previous experience cited. All developers have established qualification procedures to verify vendors' procurement quality, available

production capacity, and pricing. Each developer provided a list of approved vendors for key materials for the project that have been qualified through these procedures.

Developer A will manage procurement using its internal team. It stated that it has existing contractual terms with its planned vendors, but it demonstrated comparative uncertainty by providing fewer vendor and supplier letters of support than other developers and anticipating the shortest lead times for some key materials of all developers. Its laydown yards were sized and spaced to serve the needs of the project and access was developed accordingly.

Developer B will manage the procurement of items with long lead times, and its construction contractor will manage day-to-day procurement activities. It added some certainty to its procurement plan by providing letters of support from transmission line equipment and procurement vendors. It planned on using the fewest laydown yards, but they are positioned to serve the entire project while minimizing haul routes and included provisions for a fly yard near the Mississippi River crossing.

Developer C will manage procurement using its internal team with support from its partners and consultants. It added some certainty to its procurement plan by securing letters of support from transmission line equipment vendors and providing a long-term product supply agreement with a transmission line material vendor. Its laydown yard plan was the most complex of all developers and included a main yard, satellite yards, and several fly yards, but it demonstrated comprehensive planning to implement its strategy which is supported by a logistics provider consultant.

AGDI will manage procurement using its internal team and will assign a single point of contact to directly oversee the project's procurement activities. It provided the highest level of certainty in its procurement plan by providing the most letters of support across transmission line equipment, engineering, surveying, geotechnical services, and land services, some of which include specific lead times, quantities, and services to be provided for the project. It planned to utilize a laydown yard near the project which it already owns, though this main yard is the furthest from its proposed route of all developers. It will establish additional yards and will choose the location of those yards after project award.

Construction

All developers demonstrated that they have quality assurance (QA)/ quality control (QC) programs in place and relevant documents which will be implemented for the project. All developers provided construction standards which will apply to project activities including those related to transmission line construction and restoration.

Developer A's contractor will construct the STIW facilities linearly. It discussed its route and site preparation strategies including clearing, building temporary construction entrances, and matting, but it included minimal discussion in project-specific or quantitative terms. It identified potential foundations based on desktop geotechnical research and will select foundations after the final geotechnical investigation is complete. It provided an extensive summary of transmission line construction activities, but it mostly discussed typical procedures with some discussion of crews and equipment needs. It provided a bill of materials for the project.

Developer B coordinated with its contractor to develop a plan to split into two transmission line crews to build the facilities concurrently. Its construction plan was less developed than some developers' plans, but it included its planned number of mats, a wire pulling plan, and some crew makeups. It developed preliminary

foundations based on desktop geotechnical research and will modify them as necessary after the final geotechnical investigation is complete. It provided bills of materials for each project facility.

Developer C's construction preparation discussion was extensive and included several project-specific observations, such as anticipated impacts to farming operation infrastructure and atypical access requirements for river crossing structures, which demonstrated that it is aware of risks and has a plan to mitigate them. It evaluated three foundation types and found a single solution to be most effective for all transmission line structures based on a desktop geotechnical investigation. It discussed in detail the project area's anticipated soil conditions and geotechnical features which informed its foundation construction plan. It provided a thorough discussion of its helicopter capabilities, experience, and planned activities for the project, as well as wire pulling production expectations.

AGDI provided a highly specific construction sequencing discussion, including crew quantities and makeup, production expectations, and activity milestones. It discussed some construction preparation specifics including anticipated clearing acreage and structure work pads. It based its foundation types on desktop geotechnical research and it provided structure lists for self-supporting and guyed-V structures which include extensive information about each structure's proposed foundation type, foundation dimensions, and drilling volumes. It mentioned potential matting and helicopter use, though its plan demonstrated less certainty than Developer C's plans.

Commissioning

A developer must describe how it will commission and energize a competitive facility. It must identify and explain the qualifications of the internal personnel or contractors that will perform the work. It must discuss equipment testing, coordination with Interconnecting Transmission Owners (ITOs), and final inspection procedures.

All developers adequately described their commissioning processes and identified the personnel who will perform the work. All developers demonstrated the certainty of their established plans by providing procedural commissioning and testing documents.

2D. Financing¹⁴

Ameren Transmission Company of Illinois (ATXI), GridLiance Heartland, LLC (GridLiance), Dairyland Power Cooperative (Dairyland), and Illinois Municipal Energy Agency (IMEA) are proposing to jointly develop this project, with ownership of 43%, 43%, 11%, and 3%, respectively. ATXI and GridLiance are the RFP Respondents.

ATXI is a wholly owned subsidiary of Ameren Corporation. It operates transmission assets in multiple Midwest states, including Illinois. GridLiance is a subsidiary of NextEra, which owns vertically integrated

¹⁴ This section does not anonymize the developers because all content is publicly available and cannot be used to clearly reveal the anonymous information in this report. Additionally, in this section, the developers are organized alphabetically which does not correspond to their randomly assigned letters (i.e., Developer A, B, C, D) used elsewhere in this report.

electric utilities and federally regulated electric generation and transmission development companies across the United States.

Dairyland is a generation and transmission cooperative that provides wholesale electricity to member cooperatives and municipal utilities in Wisconsin, Minnesota, Iowa, and Illinois. IMEA is a nonprofit agency that provides energy to 32 municipal electric systems in Illinois. Dairyland and IMEA are Proposal Participants.

Ameren and NextEra are rated BBB+ and A- by S&P, respectively. Dairyland is rated A3 by Moody's.

InEx Transmission is a partnership between Illinois-headquartered energy companies Invenergy and Exelon. Exelon is one of the nation's largest utility holding companies and transmission operators, and Invenergy is America's largest privately held independent power producer and an independent transmission developer. Exelon is rated BBB+ by S&P. Invenergy is not rated because it is a private company.

Midcontinent Grid Solutions is a transmission development company owned by Transource Energy, LLC, and Berkshire Hathaway Energy U.S. Transmission. Transource is owned by American Electric Power (86.5%) and Evergy, Inc. (13.5%). Transource, American Electric Power, and Evergy are rated A2, Baa2, and Baa2 by Moody's, respectively.

Viridon Midcontinent LLC is indirectly owned by Blackstone, Inc., a privately-owned company. Viridon is directly owned by Blackstone Energy Transition Partners IV LP (BETP IV), one of Blackstone's private equity funds. Blackstone is rated A+ by S&P and BETP IV has a strong, private credit rating from Fitch. NGV U.S. Transmission is a Proposal Participant and would purchase 50% of the project from VMC after project award.

An important aspect of the project is the ability to manage the complexities of a large project from the standpoint of financing. Each of the four development teams that submitted proposals for STIW demonstrated through financial statements, credit ratings, current liquidity, financial guarantees, unfunded capital commitments, and previous projects that they can finance STIW.

2E. Safety

A competitive proposal must describe the general and specific aspects of the project safety plan and include the safety record reports of the entities that will be constructing the project.

All developers submitted the table of contents of their site-specific safety plans and at least five years of safety data of their planned construction contractors. All developers discussed helicopter construction safety plans. All developers will require contractors to meet their safety training and reporting requirements. MISO determined that all developers provided satisfactory safety information.

3. Operations and Maintenance

MISO must evaluate each developer's plan for normal operations, non-normal operations, maintenance, and safety after the competitive project is in-service. This evaluation constitutes 30% of MISO's decision in this project.

All developers demonstrated they would be able to successfully operate and maintain this project.

For Operations and Maintenance MISO categorized AGDI as "Best," Developer A's two proposals, Developer B, and Developer C as "Better" in that order.

3A. Normal Operations

A developer must explain how it will incorporate the competitive facilities into a Local Balancing Authority, monitor and control real-time operations, execute switching activities on project transmission lines or substations, and coordinate planned outages.

Local Balancing Authority Area

A competitive developer must describe how it will incorporate the project facilities into a MISO Local Balancing Authority Area (LBAA). Unless there were existing arrangements among the developers or their affiliates and the Balancing Authority (BA), any new LBAA agreements must be negotiated after the Selected Developer and Alternate Developer are selected.

All developers adequately explained how they would incorporate STIW into an LBAA.

Developer A plans to become registered as a NERC BA, plans to become signatory to MISO's Amended Balancing Authority Agreement, and plans to use its existing control center to provide the operational LBA functions

Developer B will use an O&M provider whose control center currently performs LBA duties in MISO. Developer B plans to become registered as a NERC BA, plans to become signatory to MISO's Amended Balancing Authority Agreement, and plans to have its designated control center provide the operational LBA functions.

Developer C plans to become registered as a NERC BA, plans to become signatory to MISO's Amended Balancing Authority Agreement, and plans to have its designated control center provide the operational LBA functions.

AGDI already operates as a MISO LBA and would include these new facilities in its existing processes.

Real-Time Operations Monitoring and Control

A competitive proposal must describe how the project facilities will be monitored and controlled in real time. It must identify the location and ownership of the control center that will be used as well as the staffing levels and training programs of the center. It must also state the control center complies with all applicable NERC standards, describe how the center will communicate with MISO, other entities, and project facilities,

describe the Supervisory Control and Data Acquisition (SCADA) system that will be used, and describe how the developer will fulfill all the requirements of the NERC Transmission Operator (TOP) for STIW.

All developers adequately explained which control centers they would use to monitor the project and the resources in those control centers. Although the control centers were in different locations and some currently monitor more line miles and substations than others, all developers established they could adequately monitor and coordinate the functions required for the STIW facilities with the controlling LBA. The developers all plan to use existing control centers that already have a functioning SCADA system and are staffed with NERC certified transmission system operators.

The owner of transmission substations typically has the responsibilities for monitoring and the control of the substations and connecting transmission lines which is performed from their primary control centers (PCCs). Since the STIW project is a transmission line only, these functions will be controlled by the LBA at the termination at the ending transmission substation and this LBA will coordinate activities with the Selected Developer.

Although the developers will not have monitoring and control responsibilities, they did provide adequate information related to these capabilities for themselves and/or partnering entities.

Switching and Planned Outage Coordination

A competitive proposal, if the underlying project will require the developer to install either a transmission line switch or a substation on a project facility, must describe the switching activities as well as the labor and resources that will be necessary. A proposal must also identify and describe the labor, expertise, tools, and base of operations for coordinating planned outages for the competitive facilities.

All developers established they can reliably perform switching and coordinate planned outages. Developers provided samples of their switching procedures along with their lockout-tagout procedures. All developers will have internal or contracted field switching personnel located within 30-90 minutes of the project facilities.

All developers have personnel that perform the outage coordination function.

The owner of transmission substations typically has the responsibilities switching and outage coordination for the substations and connecting transmission lines which are performed from their PCCs. Since the STIW project is a transmission line only, these functions will be controlled by the LBA at the ending transmission substation.

Although the developers will have switching coordination and planned outage coordination responsibilities, they did provide adequate information related to these capabilities for themselves and/or partnering entities.

3B. Non-Normal Operations

A competitive proposal must explain how the developer will respond to forced outages, repair equipment during emergencies, and rebuild project facilities destroyed in a catastrophe. Arrival times from the developers shown below are measured to the mid-point of the transmission line.

Forced Outage Response

A proposal must describe how a developer will respond to a forced outage of each project facility.¹⁵

Since the STIW project does not contain a substation, the developers' response time and restoration activities will be coordinated with the controlling PCC. After notification and coordination with the controlling PCC, all developers' first responders (internal or contractors) indicated an initial response time to arrive at the project facilities. The developers indicated that first responders will typically perform initial assessments for line patrols, isolation switching, initial troubleshooting, and minor repairs if possible.

Developer A planned to utilize its crews located in Iowa, Illinois, and Michigan. Its first responders can arrive within 15 minutes, and its emergency repair crews can arrive within six hours to the midpoint of the line.

Developer B planned to utilize its crews located in Illinois, Iowa, and Texas. Its first responders can arrive in one and a half hours, and its emergency repair crews can arrive within three hours to the midpoint of the line.

Developer C arranged with local crews to provide the initial forced outage response. Its first responders and emergency repair crews are located in Iowa under one hour away from the midpoint of the project line. Specialized repair crews are also located within three hours of the midpoint of the project line.

AGDI planned to unitize its crews in Illinois and Missouri. Its first responders can arrive in 30 minutes, and their emergency repair crews can arrive within three hours of the mid-point of the project line.

Emergency Repair and Testing

A proposal must describe how a developer will address emergency repairs and testing on each project facility during a forced outage. It must explain from where and how soon personnel and equipment will respond, establish that the developer will have adequate equipment to repair the facility, and describe how it will minimize the duration of forced outages.

All developers provided the locations of their emergency repair crews for the project facilities and the anticipated travel time as measured to the midpoint of the line.

Developer A's O&M team's emergency outage response will be coordinated through integrated efforts between an internal oversight committee, field operations, and the controlling PCC. Developer A's emergency repair crews are located approximately five hours away.

Developer B's response to an emergency outage of project facilities will proceed in accordance with its transmission system restoration plans and the controlling PCC. Developer B's emergency repair crews are located approximately three hours away.

Developer C's O&M team is responsible for coordinating the response to an emergency outage with the controlling PCC. Developer C's emergency repair crews are approximately three hours away.

AGDI will coordinate all forced outage response activities with the controlling PCC. AGDI's emergency repair crews are located approximately three hours away.

¹⁵ MISO BPM-027 Section 7.4.4.

Major Replacement and Rebuilding

A competitive proposal must describe how the developer will complete any major asset replacement or rebuild because of catastrophic destruction or normal degradation.

All developers explained how they would rebuild STIW if five miles of the line was damaged in a catastrophe.

Developer A stated its response to loss of five miles of transmission line includes an initial assessment followed by a determination of how many “Emergency Restoration Kits” will be needed to complete a permanent rebuild. Developer A indicated that a permanent rebuild is expected to take approximately 10 weeks to complete.

Developer B stated its initial response to loss of five miles of transmission line includes a decision on performing a temporary rebuild or permanent rebuild. Developer B indicated that it prefers a permanent rebuild but would elect a temporary rebuild if there was a critical impact on the MISO system. A temporary rebuild is expected to take approximately seven weeks and a permanent rebuild is expected to take approximately 10 weeks.

Developer C stated its response to loss of five miles of transmission is to construct a permanent rebuild. A permanent rebuild timeframe is approximately 12 weeks utilizing materials specifically stocked for this project.

AGDI indicated that it will perform a permanent rebuild using alternative structure design (modular steel) that will be in stock. AGDI could seek additional equipment and materials through a “Mutual Assistance” program it has established and should take approximately 10 weeks to complete the rebuild.

3C. Maintenance

The proposal must explain how a developer will maintain the project facilities. This includes preventative and predictive maintenance, testing, and material storage and logistics. The STIW RFP listed 765 kV O&M activities as an important aspect and element for the success of the project.

Maintenance and Testing

A competitive developer must describe how it will maintain and test project assets to minimize costs while the asset is in-service. The developer must discuss when, how, and how often it will execute preventative maintenance (such as tree-trimming) versus predictive maintenance (such as equipment testing) and what data will be recorded or used to make maintenance decisions.

It must also describe how it will ensure replacement material for project facilities is timely available if necessary. It must explain what spare parts are necessary, how many it will store in inventory or have available from vendors, the agreements it has with those vendors, where all spare parts will be located, and how quickly the spare parts will be available if needed.

MISO reviewed representative maintenance documents submitted by the developers. All developers provided high-level program documents that outlined maintenance strategies, inspection frequencies, and documentation requirements.

Developer A will inspect using a variety of methods including, but not limited to, aerial, walking, and drone. It will perform aerial inspections of the transmission lines every year. These patrols identify potentially severe conditions associated with a line and its ROW that may affect the performance of the line. It will perform aerial inspections from a helicopter, fixed-wing aircraft, or unmanned aerial vehicles (UAVs).

Developer B will perform LiDAR within six months of energization to establish clearance baselines. Its O&M team will inspect annually using UAVs, helicopters, fixed-wing aircraft, or ground patrols. Every five years, a helicopter climb-down inspection will be performed unless site constraints require substitution with equivalent methods.

Developer C will inspect structures, structure footings, ROW conditions, static wire spans, conductor spans, insulator assemblies, static wire assemblies, conductor spacers, and all miscellaneous components. It stated that a helicopter will travel at an average speed of five knots between structures and stop for approximately one to two minutes at each structure to inspect all components. Quadrennial comprehensive aerial inspections have been effective based on past experience with maintaining transmission assets. Supplemental aerial inspections will be conducted as needed following major weather events.

AGDI will perform aerial inspections once per year, comprehensive ground inspections every five years, and infrared inspection every 15 years. AGDI employs a risk-based, condition-informed approach to determine the appropriate frequency of inspections and maintenance activities.

All developers planned to inspect the project transmission lines at least yearly. However, intervals between ground and aerial inspections of the facilities varied due to coordination with their inspections for vegetation control and management. All developers adequately explained the resources that will perform the preventative maintenance on the project transmission lines utilizing internal and external crews. Developers A, C and AGDI have more mature existing plans and procedures.

Spare Project Material

A competitive developer must describe how it will ensure replacement equipment for project assets is timely available if necessary. It must explain what spare parts are necessary, how many it will store in inventory or have available from vendors, the agreements it has with those vendors, where all spare parts will be located, and how quickly the spare parts will be available if needed.

All developers explained their spare equipment strategy and how they planned to implement these strategies as needed.

Developer A will utilize its affiliate system spare parts program and will utilize its centralized supply chain to make any needed purchases. Various spare parts will be stored within three to eight hours of the project.

Developer B stated that all the spare equipment and parts will be dedicated to the STIW project. Developer B will use its warehouse and storage yard, which is one to two hours away from the project.

Developer C will own all the spare equipment and parts for this project, which will be stored approximately 1.5 to 2.5 hours from the project.

AGDI will store the spare parts and equipment approximately 1.5 to three hours from the project. AGDI's partners will own all spare parts and equipment for this project and will negotiate a "mutual assistance" program among the partners that have similarly owned facilities and equipment needs.

3D. Financial Strategy for Maintenance

A developer must describe how it will finance activities due to normal wear and tear of project assets or catastrophic destruction. All developers established their ability to either hold or raise capital to address project maintenance.

3E. Safety

A developer must describe the general and specific aspects of the project safety plan and include the OSHA/DART reports of the entities that will be maintaining the STIW facilities. It must attach both a table of contents for detailed safety plans and programs and its safety record report.

All developers identified the teams that will oversee and implement safe practices during project maintenance. They adequately explained the teams' experience and qualifications, the safety-related information a contractor must provide to work on project maintenance, and the safety statistics of its proposed maintenance teams. AGDI's incident rates showed improvement through the years. Developers A, B and C had incident rates that varied year-to-year but were at or below the industry average. Since safety is a key aspect for MISO, the safety performance for all entities that will be involved in the project are considered and evaluated.

4. Planning Participation

MISO must base 5% of its evaluation of a competitive proposal on the planning participation of the entities related to that proposal. If it determines any RFP Respondent, Proposal Participant, or any affiliate of either meets the requirements to earn planning participation for the competitive project, MISO must award that proposal the full 5%.

Qualifying participation activities include submitting the results of planning studies or a planning solution to MISO related to the transmission issues addressed by a competitive project. MISO posts a list on its website that identifies each entity that meets the requirement for planning participation related to the competitive projects within each MISO Transmission Expansion Plan.

All developers received planning participation credit for this project.

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Appendix A. Glossary

Any capitalized terms used in this report for which definitions are not provided in this glossary are as defined in the MISO Tariff or the applicable MISO business practices manuals.

For some terms defined in the MISO Tariff, definitions provided in this glossary have been adapted to make them easier to understand when separated from the Tariff, but the formal Tariff definitions are controlling for all purposes.

For readability, many of the terms defined below are not capitalized when used in the body of this report.

Allowance for Funds Used During Construction (AFUDC)

Allowance for funds used during construction refers to a request by the owner of a transmission facility to capitalize financing costs incurred before the owner places the facility into service. An owner will then request to earn a return on the net amount as it is depreciated along with the facility.

Annual Transmission Revenue Requirement (ATRR)

The annual revenue a transmission owner may recover from transmission customers through MISO's Attachment O, GG, and MM for providing transmission service.

Business Practices Manual (BPM)

Document that contains instructions, rules, policies, procedures, and guidelines established by MISO for the operation, planning, accounting, and settlement requirements of the MISO region.

For purposes of the RFP, BPM-027 provides further background information, business rules, processes, and guidelines for the Competitive Transmission Process (including the roles and responsibilities of MISO, Transmission Owners, Members, and any other non-MISO Members and other interested parties).

CPCN

Certificate of Public Convenience and Necessity

CEII

Critical Energy Infrastructure Information, as described in 18 C.F.R. § 388.113(c)(1).

Capital Cost

The cost estimate (in nominal dollars) for fully implementing the proposal and placing the project into service. This cost is calculated in the Proposal Cost Workbook based on required inputs for cost categories explained in Part 2 of the RFP package.

Co-location

Occurs when a transmission line shares the same structures and right-of-way as another transmission line or shares a common right-of-way of another transmission line.

Competitive Developer Selection Process

The process utilized to solicit Proposals, evaluate Proposals, and designate a Selected Proposal and Selected Developer in accordance with the MISO Tariff.

Competitive Transmission Executive Committee (CTEC)

A team of three or more MISO executives, including at least one officer, charged with overseeing MISO staff and consultants involved in implementing the MISO Competitive Transmission Process.

Competitive Transmission Process

The process used to certify Qualified Transmission Developers, identify Competitive Transmission Projects, solicit proposals, evaluate proposals, and designate a Selected Developer and Selected Proposal.

CWIP (Construction Work-in-Progress)

In the context of transmission rate regulation, it refers to a request by the owner of a transmission facility to be allowed to include costs of facility construction in rate base before the corresponding transmission facility has been placed in service. Under FERC rules, CWIP funding is limited to amounts that would otherwise qualify for AFUDC.

DART

Days Away, Restricted, or Transferred is an OSHA safety metric.

EHV

Extra-High Voltage

Evaluation Criteria

The four FERC-approved criteria the Tariff requires MISO to use for the competitive developer selection process: (1) cost and design, (2) project implementation, (3) operations and maintenance, and (4) planning participation.

Evaluation Principles

The four evaluation principles specified in Section 8.1 of BPM-027, which MISO uses to guide and influence the collective application of the MISO evaluation criteria. The evaluation principles are certainty, risk mitigation, cost, and specificity.

Evaluation Team

Designated members of MISO management and staff responsible, together with independent consultants retained by MISO to assist management and staff, responsible for administration of MISO's competitive developer selection process, subject to oversight by the Competitive Transmission Executive Committee.

FERC

Federal Energy Regulatory Commission.

KMZ

KMZ is a file extension for a file type used by Google Earth. KMZ stands for "Keyhole Markup language Zipped," which is a compressed version of a KML (Keyhole Markup Language) file. KML is notation related to geographic display and visualization within Internet-based, two-dimensional maps and three-dimensional Earth browsers.

LiDAR

LiDAR (Light Detection And Ranging) is a surveying method that measures distance to a target by illuminating the target with pulsed laser light and measuring the reflected pulses with a sensor.

Local Balancing Authority (LBA)

An operational entity or a "Joint Registration Organization" (as defined by NERC) that is: (a) responsible to NERC for compliance with the subset of NERC Balancing Authority Reliability Standards defined in the Balancing Authority Agreement for its local area within the MISO Balancing Authority Area, (b) a Party (other than MISO) to the MISO Balancing Authority Agreement, and (c) shown in Appendix A to the Balancing Authority Agreement.

Long Range Transmission Planning (LRTP)

A key initiative of the Reliability Imperative. Long Range Transmission Planning (LRTP) develops regional projects to ensure the transmission system is reliable, economic and compliant in the future based on utility and state goals and policies, projected conditions and industry trends

MISO

Midcontinent Independent System Operator, Inc.

MISO Tariff

MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff (including all its schedules and attachments), as amended from time to time.

MTEP (MISO Transmission Expansion Plan)

A long-range plan used to identify expansions or enhancements to the MISO transmission system to (a) support efficiency in bulk power markets, (b) facilitate compliance with documented federal and state energy laws, regulatory mandates, and regulatory obligations, and (c) maintain reliability.

The MTEP is developed biennially or more frequently, and subject to review and approval by MISO's Board of Directors.

MTEP24

MISO's 2024 Transmission Expansion Plan, the transmission plan in which the project was approved.

NESC

National Electrical Safety Code, which sets the ground rules and guidelines for practical safeguarding of utility workers and the public during the installation, operation, and maintenance of electric supply and communication lines and associated equipment.

Nominal Dollars

Nominal dollars reflect the costs to construct / operate the project at the time the cost is incurred. For example, if an RFP Respondent expects an item will cost \$1,000 in 2028, then the cost estimate in nominal dollars in 2028 will be \$1,000.

NRCS

The Natural Resources Conservation Service.

OSHA

The U.S. Occupational Safety and Health Administration.

Parallel Transmission line

A transmission line that is constructed on its own right-of-way but is adjacent to another transmission line.

Present Value of Revenue Requirements (PVRR)

The present value in 2024, using a discount rate of 7.1%, of the Annual Transmission Revenue Requirements estimated by a developer and included in a competitive project's Project Cost Workbook.

Project Cost Workbook (PCW)

An Excel spreadsheet template, included as part of the RFP materials, for each RFP Respondent to use in submitting financial information for its proposal.

Proposal Participant

For purposes of this project, a Proposal Participant is an entity that is involved in a proposal and is not the RFP Respondent but will co-own the project and rely on the RFP Respondent to be responsible for constructing and implementing the project. A proposal may designate a Proposal Participant as responsible for one or more aspects of operations, maintenance, repair, or restoration, on terms comparable to those that would apply if the RFP Respondent intended to rely on a third-party contractor. Every proposal must

specify whether the RFP Respondent plans to convey any interests in the project to one or more Proposal Participants.

Proposal Submission Deadline

The date and time by which proposals responding to an RFP must be delivered to MISO.

Qualified Transmission Developer

A MISO Transmission Owner, independent transmission company, or non-owner Member of MISO that submits a Transmission Developer Application and is subsequently determined by MISO to meet the minimum requirements for a Qualified Transmission Developer outlined in Attachment FF of the Tariff.

RFP

A request for proposals issued by MISO, which constitutes an invitation (including associated requirements) for Qualified Transmission Developers to submit proposals to construct, implement, own, operate, maintain, repair, and restore a Competitive Transmission Project.

RFP Respondent

A Qualified Transmission Developer involved in a competitive proposal submitted to MISO.

SCADA

Supervisory Control And Data Acquisition.

Selected Developer

The RFP Respondent designated by the Executive Committee as having submitted the Selected Proposal, and therefore selected to implement the project according to the Selected Developer Agreement.

Selected Developer Agreement (SDA)

The agreement, as set forth in Appendix 1 to Attachment FF of the Tariff, to be executed between the Selected Developer and MISO. This agreement establishes the terms and conditions under which the Selected Developer will construct and implement the project as specified in its Selected Proposal.

Selected Proposal

The proposal selected by the Executive Committee (in accordance with the Competitive Developer Selection Process) as the highest-scoring proposal submitted in response to the RFP.

Switching Order

A switching order is a written set of instructions, using three-way communications during implementation, to ensure that an electrical facility is de-energized and put into an electrically safe condition before maintenance is performed. It would typically include (1) switching activities step by step, (2) estimated

times, (3) responsibility assignments, (4) applicable safety measures, and (5) necessary personal protective equipment for each step.

WACE

Weighted cost of equity is the product of the return on equity (ROE) and the equity share of the capital structure (example: $\text{ROE } 10.48\% * 50\% \text{ equity share} = 5.24\% \text{ WACE}$).

Appendix B. Design-Related Terminology

ACSR

Aluminum conductor, steel reinforced. With ACSR conductor, both the primary conducting material (aluminum) and steel strands contribute to overall conductor strength. Because the aluminum is important as a supporting material, system operators must be careful not to allow the conductor to become so hot that the aluminum starts to soften (referred to as annealing). Extended operation at higher temperatures could cause ACSR to start losing its strength, increasing risk of low clearance or conductor failure.

ACSS

Aluminum conductor, steel supported. ACSS conductors use fully annealed aluminum supported on high-strength steel. Because the steel is the primary source of conductor strength, ACSS conductor usually can be operated at higher temperatures than ACSR.

BAAH

A breaker-and-a-half arrangement consists of two main buses, both of which are normally energized. Associated facilities interconnect with the main buses in sets of two positions, and these pairs of positions each have three associated breakers – a center circuit breaker common to the two positions. Each position is therefore associated with one-and-a-half breakers.

Bus

An electrical bus in a substation is a conductor or group of conductors that serves as a collection and transfer point for energy flowing into and out of substation feeders. A bus has an associated arrangement of circuit breakers that allow the bus to be disconnected from individual or sets of positions, so that, with all breakers open, the bus is electrically isolated from remaining power system elements. The number and positions of the circuit breakers vary with different substation designs, as further described in the glossary under the definitions for “DBDB,” “BAAH,” and “ring bus.”

Dead-end structures (also failure containment, containment, or storm structures)

Dead-end or failure containment transmission structures are designed to withstand more mechanical stress than standard “tangent” or “running angle” structures (explained below). They are used at heavy-angle turns along transmission routes (where the forces created by the high degree of the angle in conjunction with the conductor weight and tension make it harder for support structures to remain upright). They are also placed at specified intervals along a transmission line so that, if something seriously damages or destroys some of the supporting structures, the structure failure will not cascade through many miles of transmission line. Instead, the dead-end structures on either side of the damaged area will arrest the structure failures.

Direct embedded

Transmission structures that are direct embedded are generally anchored by extending the structure shaft below grade, relying on the surrounding earth and backfill material for support. To place direct-embedded structures, construction workers excavate a hole of sufficient depth, place the structure in it, and then refill the space around the structure. The fill material may be gravel, engineered material or replacement of the excavated backfill. A bearing plate may be engineered into the design of the foundation as needed.

Drilled pier

A concrete pier foundation with steel reinforcement and anchor bolts. Depending on soil conditions installation may be with or without casing. Either permanent or temporary casing may be used. Installation may require specialized techniques and drilling fluids.

Galloping

Galloping is a term for how overhead power lines will oscillate (generally, but not exclusively, in a vertical direction) in a low-frequency, high-amplitude motion due to wind and the formation of a thin layer of ice on the wire. Sustained or severe galloping can damage or cause failure of transmission line components and supporting structures.

Galvanized steel structure

Transmission structure made of steel coated in zinc to prevent corrosion. This gives it a shiny appearance.

Guying (or guyed)

Practice of attaching tensioned cables (typically steel) to transmission structures to increase their stability.

Kcmil

Abbreviation for thousands of circular mils, a measurement of wire gauge (a mil is 1/1000 inch).

MA2

Core standard-strength steel strands available in ACSS.

MA3

Core high-strength steel strands available in ACSS.

Monopole

A single primary structure (typically wood or steel) that supports an overhead transmission line—as distinguished, for example, from H-frame, three-pole, or lattice tower structures. Tangent monopole structures typically have davit arms or braced post to position conductor assemblies a minimum distance away from the structure.

Optical ground wire (OPGW)

A wire composed of optical fiber surrounded by conductive material (steel and aluminum) used in conjunction with overhead transmission lines to combine the functions of grounding (see the explanation of shield angle below) and communications.

Power Line Systems (PLS)

A suite of software consisting of multiple programs (PLS-CADD, PLS-POLE, PLS-TOWER) used in transmission line design to model conductor behavior, check clearances to various objects such as ground and analyze transmission structure strengths such as a lattice tower or steel monopole.

Ring bus

In a ring bus arrangement, the positions associated with the bus form a closed loop or “ring,” with each position separated by a circuit breaker. The numbers of circuit breakers and positions are equal.

Running angle structure

Structures used for portions of a transmission line route that have light- or medium-angle turns. Typically, the suspension assemblies for attaching the conductor to the structures will permit the insulators to swing away from the support structure.

Shield (or shielding) angle

Position of optical ground wire secured on a transmission structure in relation to the position of the conductor below for which it provides shielding.

Because the optical ground wire is positioned above the conductor, it will attract lightning strikes that might otherwise strike the conductor, and safely conduct the resulting electrical charge along grounding material on the structure to grounding rods or other devices below.

Specifically, shield angle describes the angle between (a) an imaginary vertical line drawn from the attachment point of the optical ground wire and (b) an imaginary line drawn between the attachment point for the optical ground wire and the attachment point (on the same structure) for the shielded conductor. A smaller shield angle more effectively protects the conductor beneath.

Tangent structure

Structures used for portions of a transmission line route that are mostly straight or have very minor turns.

TW (Trapezoidal Wire)

Trapezoidal Shaped Aluminum Strands in conductor construction.

Weathering steel

Weathering steel forms an adherent protective rust that limits further oxidation of the metal. Hot-dipped galvanized steel is produced by dipping bare steel in a bath of molten zinc metal. The resulting metallurgical

reaction between iron and zinc provides both a barrier and cathodic protection that protects steel from corrosion.