Selection Report

Bell Center–Columbia–Sugar Creek–IL/WI State Line 765 kV Competitive Transmission Project

January 6, 2026

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Executive Summary

MISO has chosen Transource, Inc. to develop the Bell Center–Columbia–Sugar Creek–IL/WI State Line 765kV Competitive Transmission Project (BECI).

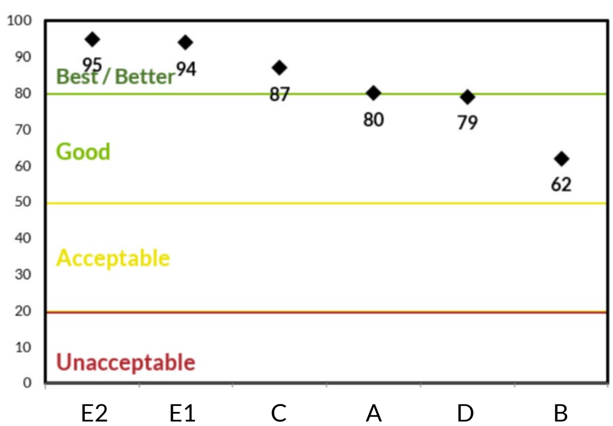
This report explains MISO's competitive developer selection process and the BECI project, summarizes the six proposals MISO received to build and operate BECI, and explains why MISO selected Transource to develop BECI.

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 LRTP Projects 26, 30, and 31, which consist of 16 new or upgraded transmission facilities in Minnesota, Wisconsin, and Illinois.

MISO determined that three 765 kV single-circuit transmission lines within these projects were eligible for its Competitive Transmission Process. MISO grouped these three facilities and titled them the Bell Center – Columbia – Sugar Creek – IL/WI State Line 765 kV Competitive Transmission Project and refers to it as "BECI." BECI must be placed into service by June 1, 2034.

MISO issued a Request for Proposals (RFP) for BECI on February 27, 2025. On August 11, 2025, five development teams submitted a total of six proposals. Figure 1 identifies the score and categorization MISO awarded to each BECI proposal – Transource is Developer E in this report.

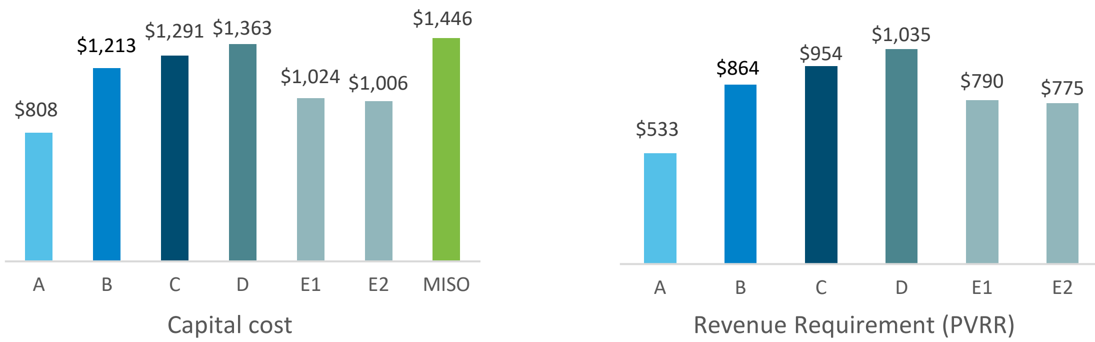
Figure 1. Proposal Scores



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.

Figure 2 shows the estimated capital costs exclusive of AFUDC and present value of the 40-year revenue requirements submitted for BECI.

Figure 2. Proposal Cost ($M)[1]



Developer A proposed to run Drake ACSR conductor on galvanized steel lattice structures over a 185-mile route. It has an executed agreement with a general contractor. It cited some team members' 765 kV experience. It would outsource the O&M function to a local company.

Developer B proposed to run Drake ACSR conductor on weathered steel H-frame structures over a 213-mile route. It will select a general contractor to implement the project. It cited some team members' 765 kV experience. It would use a local utility to perform O&M.

Developer C proposed to run Redwing ACSR conductor on galvanized steel lattice structure over a 192-mile route. It has executed agreements with two general contractors to implement the project. It demonstrated some of it and its team members' 765 kV experience. It would perform O&M itself.

Developer D proposed to run Cardinal ACSR/TW conductor on galvanized steel H-frame structures over a 215-mile route. It will select a general contractor to implement the project. It demonstrated some of it and its team members' 765 kV experience.

Transource, which was Developer E, submitted two proposals. It first proposed to run Tern ACSR conductor on galvanized steel guyed-V lattice structures over a 188-mile route. Its second proposal changed the guyed-V structures to guyed-Y structures, which would require 20 less feet of right-of-way and 5% less steel. It will execute a contract with its planned contractor to implement the project. It demonstrated significant 765 kV capabilities by it and its team members. MISO ranked Transource's second proposal (E2) higher than its first proposal (E1).

[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 nominal costs in the years in which they were spent.

Figure 3 identifies the four evaluation criteria and respective weights identified in the tariff, and MISO's categorizations. The figure also identifies how each proposal ranked in each criterion.

Figure 3. Evaluation Scores

Proposal	Cost and Design 30%	Project Implementation 35%	Oper & Maint. 30%	Planning Participation 5%	Score
E2 (Transource)	Best	Better (2)	Better (4)	✓	95
E1 (Transource)	Better (2)	Better (3)	Best	✓	94
C	Good (4)	Best	Better (3)	✓	87
A	Better (3)	Good (5)	Better (5)	✓	80
D	Good (6)	Better (4)	Better (2)	✓	79
B	Good (5)	Acceptable (6)	Good (6)	✓	62

MISO determined Transource and Developer C submitted the most competitive proposals, respectively.

Transource demonstrated the most 765 kV capabilities of all developers and it will partner with a strong contractor to operate and maintain the project after it is complete. Although its estimated PVRRs were not the lowest submitted, it demonstrated reasonable cost estimates and offered reasonable cost containment.

Developer C proposed a design substantially like that of Transource. It submitted the best implementation plan for the project and the third best O&M plan. However, it estimated the second highest cost and PVRR, and its cost containment was not as effective as other developers. Its estimated equity structure, return on equity, and weighted average cost of capital were all the highest used.

MISO and Transource will execute the Selected Developer Agreement within 60 days of the public release of this report.

Bell Center–Columbia–Sugar Creek–IL/WI State Line 765 kV Competitive Transmission Project Selection Report

I. Competitive Project and Process

This report explains MISO's decision to select Transource, Inc. to develop the BECI Competitive Transmission Project and the process MISO used to reach its decision.

Competitive Project

On December 12, 2024, MISO approved the Long-Range Transmission Planning Tranche 2.1 portfolio for inclusion in the 2024 MISO Transmission Expansion Plan (MTEP24). Tranche 2.1 includes Projects 26, 30, and 31, which consists of many new or upgraded transmission facilities in Wisconsin.

MISO determined three 765 kV single-circuit transmission lines in these projects are eligible for its Competitive Transmission Process:

- Bell Center– Columbia
- Columbia – Sugar Creek
- Sugar Creek – IL/WI State Line

MISO grouped these three facilities together as the Bell Center–Columbia–Sugar Creek–IL/WI State Line 765 kV Competitive Transmission Project and refers to this project as "BECI." The BECI facilities must be placed into service by June 1, 2034.

Request for Proposals

MISO issued a Request for Proposals (RFP) on February 27, 2025, to solicit proposals from Qualified Transmission Developers (QTDs) to build and operate BECI. MISO held a public meeting on March 17, 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.[2]

[2] 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 four aspects of the project may be particularly important. MISO encouraged developers to consider:

1. **765 kV Transmission:** 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. **Point of Interconnection Flexibility:** The point of interconnection for one of the BECI transmission line facilities will be at the Illinois and Wisconsin State Line in Rock County, Wisconsin. An important aspect of the project is to plan for cost certainty, design flexibility, and schedule impact mitigation given possible regulatory requirements and coordination with the interconnecting Transmission Owner that will influence and ultimately define the geographic location of the point of interconnection.
3. **Project Scale and Scope:** The project is relatively large, with a MISO-estimated cost exceeding $1.2 billion. An important aspect will be to demonstrate the ability to finance and manage a large project.
4. **Coordination with Interconnecting Transmission Owners:** The project will connect to facilities owned and operated by multiple, separate Transmission Owners. An important aspect of the project will be the planned coordination with these Transmission Owners on various regulatory, permitting, design, construction, and operations and maintenance activities.

Proposal Receipt

On August 11, 2025, five developers submitted proposals for BECI. One developer submitted two proposals. 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.

On October 1, 2025, MISO announced it had received six valid proposals from five development teams: Longview Infrastructure Midwest LLC with Great River Energy as a Proposal Participant, LS Power Grid Wisconsin Inc, Transource LLC, and Viridon Midcontinent LLC submitted proposals. American Transmission Company (ATC), Ameren Transmission Company of Illinois (ATXI), Dairyland Power Cooperative (DPC), and GridLiance Heartland jointly submitted a proposal.

Proposal Quality

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

The BECI RFP was the third RFP for MISO's Tranche 2.1 competitive projects and the third RFP that used MISO's new approach for Part 2. Proposal Template. This approach consists of specific questions instead of broader requests for information and simplifies MISO's comparison of proposals.

The BECI proposals continued to validate this new approach. Most answers were concise and directly answered the questions asked. The developers correctly followed MISO's attachment naming format, which allowed MISO to easily identify and understand the additional documents attached to proposals. Some answers did include information already stated in previous answers, but MISO understands that competitive developers will typically error on the safe side when deciding how to answer questions.

MISO did identify aspects of the proposals that complicated its review or did not align with the RFP's directions. MISO observed that one or more developers submitted:

- Redacted attachments that required MISO to spend time requesting unredacted versions. Although MISO's tariff states it will protect confidential information and CEII submitted by developers through the competitive transmission process, MISO recognizes the project's RFP did not remind developers of this protection. MISO has revised its future RFPs to state this.
- Project cost workbooks with incorrect equation changes. MISO's review process identified one developer, although with good intentions, incorrectly changed an equation. MISO had to request a revised workbook from this developer.

Although these issues did not result in a change in any proposal's comparative ranking, MISO expects future competitive projects to have closer rankings, and a failure to scrutinize proposal documents or follow the RFP could jeopardize a proposal's success.

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 confidential 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 confidential includes:

- the identity of developers,
- 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 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 BECI 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 figures represent principal components of the BECI proposals by developer. Part III of this report discusses the information in greater detail.

Figure 4. Design characteristics

	A	B	C	D	[3] E1, E2 (Transource)
Conductor					
Trade name and type	Drake ACSR	Drake ACSR	Redwing ACSR	Cardinal ACSR/TW	Tern ACSR
Kcmil (Misch alloy core)	6-795 (MA2)	6-795 (MA2)	6-715 (MA2)	6-954 (MA3)	6-795 (MA2)
Bundle spacing	15”	15”	18”	15”	15”
Emergency amps (summer)	4000A	5741A	4063A	6258A	5625A
Max. operating temp. (F°)	165°	212°	170°	212°	203°
Max design temp. (F°)	212°	212°	170°	212°	203°
Max audible noise (dBA)	50	51	52	53	50, 49.5
Surge impedance (MW)	2480	2435	2476	2430	2426, 2463
Structures					
Type (Tangent)	Guyed V Lattice	H-frame	Guyed V Lattice	H-frame	1: Guyed V lattice 2: Guyed Y lattice
Material	Steel	Steel	Steel	Steel	Steel
Finish	Galvanized	Weathered	Galvanized	Galvanized	Galvanized
Tangent foundations	Pedestal & Drilled Pier	Drilled pier	Drilled Pier & Pedestal	Drilled pier	Grillage
Total tangents	550	698	625	636	738, 728
Type (Deadend)	Lattice	Lattice	Lattice	3-pole tubular	Lattice
Deadend foundations	Drilled pier	Drilled pier	Drilled pier	Drilled pier	Drilled pier
Typical shielding angle (°)	5°	5°	5°	17°	0°
Mean recurrence interval (yrs)	100	300	100	300	300
Struct–struct span (avg ft)	1340	1200	1375	1325	1150
Avg DE-DE section (avg mi)	1.8	1.2	2.9	1.4	2.4

3 Transource submitted two proposals that were different in one significant aspect – structure type. Its first proposal (E1) uses a Guyed V design. Its second proposal (E2) uses a Guyed Y design.

Figure 5. Cost characteristics[4]

	A	B	C	D	E1, E2 (Transource)
Estimates					
Revenue requirement ($M, PV)	$533	$864	$954	$1,035	$790, $775
Capital cost ($M, without AFUDC)	$808	$1,213	$1,291	$1,363	$1,024, $1,006
Commitments					
Revenue					
Calendar year commitment	ISY + 40	20		40	ISY + 14
Cap tier 1 (Avg over estimates)	5%	[5] -4%		7.5%	0%
Reduction in revenue.	100%	20%		50%	100%
Cap tier 2 (Avg over estimates)		17%			
Reduction in revenue		100%			
Defer unused cap	No	No		Yes	Yes
Defer revenue over cap	Yes	No		No	No
Financing					
Calendar year commitment	ISY + 40	40	CWIP + 20	40	ISY + 14
Max equity					45%
Max ROE					9.80%
Max weighted ROE	3.92%	4.275%	5.31%		
Max WACC				8.00%	
Minimum ROE	8.20%	7.65%			8.50%
Capital cost ($M)					
Calendar year commitment	ISY + 40		40	40	ISY + 14
Cap amount	$808		$1,291	$1,540	$1,199, $1,176
Cap includes AFUDC	No		No	Yes	Yes
WACC over cap				6.00%	
ROE over cap					[6]0% (until +13%)
Weighted ROE over cap	2.80%		3.57%		
Other					
O&M (years)	n/a	n/a	n/a	n/a	n/a
Schedule guarentee	✓	✓	✓	✓	✓
Route Changes	✓	✓	✓	✓	
Waive return on CWIP	✓			✓	✓

4 Certain information is approximate to either help anonymize the developer or to simplify the table.

5 The revenue cap is approximately 4% lower than the proposed amount.

6 Transource will forgo an ROE on the first $155m (13%) and $153m (13%) by which its capital cost exceeds its cap.

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 BECI RFP, and the information that strengthened or weakened each developer's submission.

1. Cost & Design

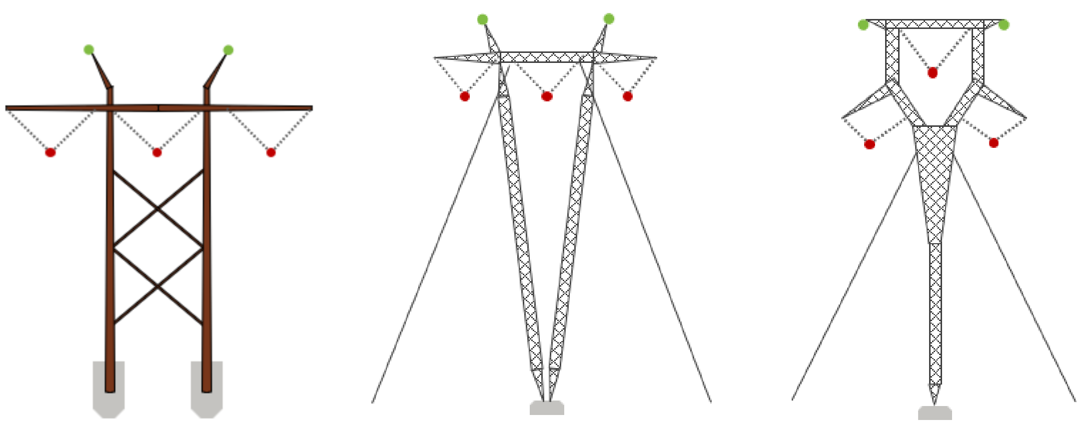
MISO must evaluate each proposal's electrical design, structural design, estimated capital cost, and annual transmission revenue requirements, and cost containment. This evaluation constitutes 30% of MISO's decision in this project.

For Cost and Design, MISO categorized Transource's second proposal as Best, Transource's first proposal and Developer A as Better, and the rest of the proposals as Good.

1A. Transmission Line Design

Figure 6 illustrates the general structural transmission designs of the proposed tangent structures in BECI.

Figure 6. General structure designs



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.

Transource 2's guyed Y lattice tower design is the lightest structure on average when compared to the guyed V designs of Developer A, Developer C and Transource's first proposal. Amongst the guyed-V lattice proposals, Transource was able to achieve the lightest structures by having the shortest average span and shortest average structure height. These lighter structures are also advantageous for helicopter installation providing flexibility for construction. Transource's guyed Y design is about 30-35' taller than Transource's guyed V design due to the compact design of the phases. Transource's second structure design will stay below 200' above ground height to mitigate FAA lighting requirements.

Amongst the lattice tower proposals, Transource's second design would require 30 million lbs. of lattice steel overall, Transource's first design would require 32 million lbs. of lattice steel, Developer C would require 39 million lbs. of lattice steel and Developer A would require 49 million lbs. of lattice steel plus 4 million lbs. of tubular steel for some unique crossing locations. Developer B would require 57 million lbs. of tubular steel and 36 million lbs. of lattice steel. Developer D would require 98 million lbs. of tubular steel.

Regarding structurally loading the structures, Developer A and Developer C designed for at least a 100-year mean recurrence interval (MRI) weather event. Developer B, Developer D and Transource designed for a 300-year MRI weather event. Generally, a higher MRI will lead to a more robust transmission line design.

Developer A proposed a right-of-way (ROW) at a 250' corridor. Developer B and Developer D's ROW varied from 225' to a 250' corridor depending on the line segment. Developer C and Transource's first design ROW proposed is a 200' corridor. Transource's second design ROW proposed is an 180' corridor. A 765 kV transmission line is a relatively new voltage for many utilities and developers, the ability to maintain design parameters such as the NESC 5mA rule, electric and magnetic fields, audible noise, and blowout within a narrower proposed ROW can be beneficial to reduce overall project impacts.

MISO specified a surge impedance loading (SIL) requirement of 2400 MW in the RFP. All developers stated they meet the SIL requirement. Developer C and Transource considered and calculated the SIL when selecting a conductor. Developer A, Developer B and Developer D did not specifically consider the SIL when selecting a conductor. MISO is concerned Developer A and Developer B may not meet the required SIL requirement upon final engineering, which may necessitate design changes.

Developer C and Transource acquired and incorporated LiDAR survey data into their design for the proposed route. This survey data minimizes risk to their design by having the most accurate and up to date information when performing the line design.

All developers proposed adequate shielding angles with Developer D having the largest angle at 17° and Transource providing the lowest shield angle at 0°. All developers performed lightning studies.

Galloping was checked amongst all developers but did not control phase spacings or conductor selection in the design due to the large phase spacings of the 765 kV structures. Vibration calculations were also calculated amongst all developers.

The NESC 5mA rule was considered for all developers and each developer calculated various ground vertical clearances required for different travel ways such as agricultural areas, roads, and highways.

All developers considered electric and magnetic fields throughout their designs with varying electric and magnetic fields limits proposed. All developers proposed audible noise limits for the proposed designs and calculated audible noise within their acceptable limits at the edge of the ROW.

While all developers submitted proposals that meet the RFP, the designs from Developer C and Transource stand out as the most mature, structurally efficient and well developed.

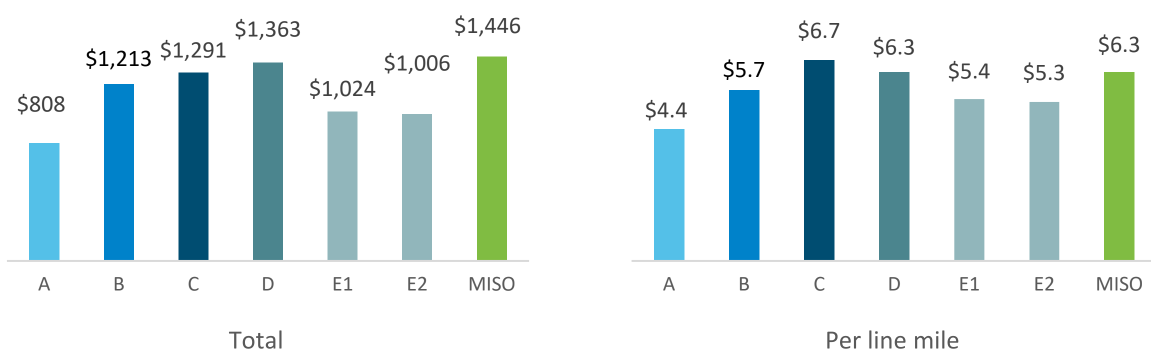
1B. Capital Cost

A competitive proposal must detail the capital cost it estimates for the 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 measures.

MISO does not include capitalized financing expense 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 all developers' financing expenses during construction.

Figure 7 illustrates the estimated capital costs and fully loaded cost per line mile of the proposals. MISO's estimates are in 2034 dollars while the developers' estimates are the sum of capital spent during the proposed construction period.

Figure 7. Estimated capital cost ($M) [7]



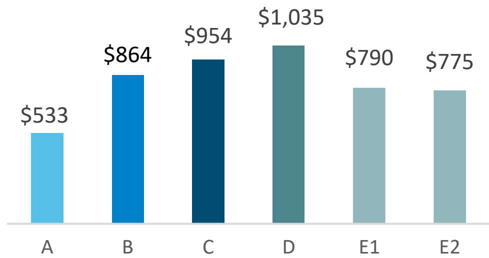
Although Developer A estimated a capital cost that was about 20% below the next lowest estimate, that cost may not be achievable given the significant difference between its estimates for right-of-way, steel, condemnation, and other costs and those of the other developers, a few of which demonstrated previous work in the project area. Developer A's cost containment was sufficient to ensure its proposal would likely have the least cost to ratepayers in the scenarios MISO considered, however the combination of estimated capital costs and design features proposed by Transource (Developer E) was a greater overall value.

7 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.

1C. Annual Transmission Revenue Requirement

A competitive proposal must show in detail the project's estimated annual transmission revenue requirements (ATRR) for the first partial year and the next forty years. MISO calculates the present value of a project's revenue requirements (PVRR) by discounting each ATRR by a 7.1% discount rate.

Figure 8. Estimated PVRR of BECI proposals ($M)



Developer A estimated a PVRR that was more than 30% lower than that of the next lowest estimate. This was primarily due to its very low estimated capital cost and the lowest weighted average cost of capital.

Developer B estimated the third highest PVRR. This was primarily due to its estimated capital cost, which was also the third highest proposed.

Developer C estimated the second highest PVRR. This was primarily due to its estimated capital cost, which was also the second highest, as well as its decision to use the least debt in its capital structure and to request the highest ROE and WACC.

Developer D estimated the highest PVRR. This was primarily due to its estimated capital cost and O&M expense, which were both the highest proposed, and its high reliance on equity in its capital structure.

Transource (Developer E) estimated PVRRs were lower than all other developers except for Developer A.

1D. Cost Containment

A developer, to make its proposal more competitive, may commit to limit the revenue it will request to recover on a project through the end of the 40th full calendar year of operation. MISO refers to this as the "project life" in this section. Developers often commit to limit the project's total revenue, the project's capital cost upon which revenue components are based, individual revenue components, or a combination of these. Unless stated otherwise, each commitment offered would be enforceable for the full project term.

Figure 5 on page 8 of this report presents the cost containment offers of each proposal.

Total Revenue Requirement

The most comprehensive single form of cost containment a transmission developer can offer is to cap the revenues it will request from FERC to recover annually. Developers may offer hard caps, which preclude all revenue recovery greater than each cap, or soft caps, which preclude a portion of revenue greater than each cap. No developer offered hard revenue caps in this project.

Developer A would cap its annual revenues at approximately 5% greater than its estimates plus any revenue necessary to earn a minimum ROE of 8.2%. If MISO also selected it to develop WISE, a 345 kV competitive project in Wisconsin that MISO is concurrently administering, Developer A would remove the 5% increment on its caps, but it would retain discretion to allocate its recoverable expenses on one project to the other project to minimize revenue it would otherwise have to forfeit. MISO recognizes that this discretion would allow Developer A to hedge the increased cost risk it would accept if it removed the 5% increment.

Developer B offered two soft cap tiers for the project's first 20 calendar years. The caps would not apply to the project's partial, first year of operation. It set its first soft caps at an average of 4% less than its estimates. It would only recover 80% of revenue greater than those caps. It set its second soft caps at an average of 17% greater than its estimates. It would not recover any revenue above its second caps unless that revenue was necessary for Developer B to earn a minimum ROE of 7.65%.

If MISO also selected Developer B to develop WISE, in lieu of the revenue requirement caps offered for WISE and BECI individually it would commit to two soft cap tiers for both projects collectively. The first tier would be set at an average of approximately 14% below the estimated revenue requirement of WISE and BECI collectively for 40 years. For the first 20 years, it would only recover 80% of revenue greater than those caps. For the next 20 years, it would recover 95% of revenue greater than those caps. It set its second tier at an average of approximately 10% above the estimated revenue requirement of WISE and BECI collectively for 20 years. It would not recover any revenue above its second caps unless that revenue was necessary for Developer B to earn a minimum ROE of 7.65%.

Developer C did not offer to cap its total revenue.

Developer D would cap its annual revenue for the project's first 40 calendar years at an average of 7.5% greater than its estimates. The caps would not apply to the project's partial, first year of operation. It would only recover 50% of revenue greater than those caps. It did not hedge these revenue caps with a minimum ROE.

Transource would cap its annual revenues through the end of the project's 14th calendar year at its estimates. It would not recover any revenue above those caps unless that revenue was necessary for Transource to earn a minimum ROE of 8.50%.

Financing Expenses

The developers also offered cost containment that would only apply to certain financing expenses.

Developer A offered to cap its weighted cost of equity at 3.92% for the project term.

Developer B offered to cap for the project's first 40 full calendar years its weighted cost of equity at 4.275%. It also offered to cap ROE at 8.95% for recovery during construction and for any costs caused by Force Majeure events under section 11.1 of MISO's Selected Developer Agreement.

Developer C offered to cap its weighted cost of equity at approximately 5.31% during construction and for the first 20 years following the project's in-service date.

Developer D offered to cap its weighted cost of capital at 8.00%.

Transource offered to cap its equity structure at 45% and its return on equity at 9.80%.

Capital Cost

Developers may also propose to fully or partially cap a project's capital costs. The caps may either include or exclude AFUDC.

Developer A offered to reduce its maximum weighted cost of equity from 3.92% to 2.80% on capital costs greater than its estimate. The cap would exempt AFUDC. It would also reduce its cap by 7% if MISO selected it to develop both BECI and WISE.

Developer B did not offer to cap its project cost.

Developer C offered to reduce its maximum weighted average cost of equity (WACE) from 5.31% to 3.57% on capital costs greater than its estimate. This cap would exempt AFUDC. It also stipulated that the capital cost cap would increase (decrease) by $6.75 million for every mile the actual route exceeded (fell below) its proposed mileage.

Developer D offered to reduce its maximum WACC from 8.0% to 6.0% on capital costs greater than its estimate. This cap would include AFUDC.

Transource offered to apply a 0% ROE on the first 13% of capital costs over its estimate - $155m for proposal E1 and $153m for proposal E2 - through the end of the project's 14^{th} calendar year. These caps would include AFUDC.

Other Aspects

The developers each proposed additional provisions that would increase the certainty of their revenue estimates.

Developer A offered to not adjust its revenue requirement and capital cost cap for route increases up to a length of 203 miles, which is approximately 10% above its proposed route length. For each mile the route length exceeds 203 miles, the revenue requirement cap would increase by 0.4% and the capital cost cap would increase by $4.2m. It also proposed to not recover any additional cost related to a change in a project interconnection point up to 500 feet from the location identified in the RFP, except for the interconnection point at the Illinois state line, which it proposed to not recovery any additional costs provided it is within 2 miles east or west along the proposed location.

It would also reduce its weighted average cost of equity cap by 0.01% for every month, up to 12 months, its actions result in a delay to the final energization of a project facility. Developer A estimated AFUDC during construction and committed to not seek a cash return during construction or apply for the CWIP incentive. It stipulated that it would defer unrecoverable expenses without a return and request to recover those expenses in any year in which there was room under its caps. Its revenue requirement cap amount would be adjusted by month based on the actual in-service date. Finally, if FERC does not permit this treatment, it would increase all revenue caps by 0.5% and increase each cap by any unused cap space in the previous year.

Developer B's schedule guarantee offer was identical to that of Developer A's. It also stipulated that it would not seek additional revenue for any change orders under section 9.2.1B of MISO's Selected Developer Agreement, unless caused by defined excluded causes. Finally, it stipulated it would not seek to recover more than $3 million related to pre-selection development costs.

Developer C offered to reduce its weighted cost of equity, for the first 20 years following the in-service date, by 0.0125% for every month, up to twelve months, if its actions result in a delay to the final energization of a project facility beyond 6/1/2034 for the Bell Center– Columbia and Sugar Creek – IL/WI State Line segments and 6/1/2033 for the Columbia – Sugar Creek segment. The weighted cost of equity cap reduction from a delay would not apply during construction or to costs above its capital cost cap.

Developer D offered to reduce its ROE by 0.025% for every month, up to 12 months, its actions result in a delay to the final energization of a project facility. It offered to not increase its revenue requirement or capital cost caps provided Bell Center– Columbia route length was within 94 miles, the Columbia – Sugar Creek route length was within 98.1 miles, and the Sugar Creek – IL/WI State route length was within 44.5 miles. Its revenue requirement and capital cost caps would increase by 0.5% for each mile any segment exceeded these lengths. Finally, Developer D included AFUDC during construction and committed to not seek CWIP recovery.

It also proposed to not increase its caps for a change in interconnection point provided at the Illinois state line or within 500 feet of the identified in the RFP for other interconnection points, unless the change also resulted in route length increases above its defined limits. Additionally, Developer D would increase its revenue requirements and capital cost caps if there was an increase in the Handy-Whitman Index for Total Transmission Plant in the North Central Region by more than 20% between July 2025 and January 2033. If this occurred, the revenue requirement and capital cost caps would increase by any incremental percentage change in the index beyond 20%.

Transource offered to reduce its ROE cap by .025% for every month, up to 12 months, its actions resulted in a delay beyond 1/1/2034, 6 months prior to the in-service date specified in the RFP, to the final energization of a project facility. Transource's containment offer is also contingent on the authorization from FERC for an abandonment incentive to allow recovery of 100% of prudently incurred cost if the project is cancelled or abandoned. It estimated AFUDC and committed to not seek CWIP recovery, unless it is ready to energize the project before the incumbent transmission owner terminal upgrades are completed.

Scenario Analysis

MISO also calculated proposal PVRRs in different scenarios to understand how those scenarios would 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. The BECI project had no developer offer hard annual revenue caps for the projects' lives.

Developer A's PVRR remained the lowest in all scenarios despite its ROE floor of 8.20%. This was due to its revenue and WACE caps, and its WACE decrement on excess capital costs, all of which would be effective for the project life.

Developer B performed well in some scenarios but, due to its tier 2 ATRR cap being set approximately 17% above its estimates, its cost containment was not as strong as that of Developer A.

Developer C's WACE cap and its decremented WACE on excess capital costs were not strong enough to change its competitive positioning.

Developer D had the most effective cost containment relative to its own estimates in high cost increase scenarios due to the absence of an overriding minimum ROE stipulation. However, its high starting cost coupled with revenue caps that only reduced additional revenue by 50% limited its competitiveness.

Transource's PVRRs were second only to those of Developer A in most scenarios. This was due to revenue caps for the first third of the project life subject only to a minimum ROE of 8.50%. It included AFUDC in its capital cost caps and capped its equity structure at 45% and its ROE at 9.8%.

2. Project Implementation

A competitive proposal must explain the experience and expertise of its 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.

All development teams demonstrated relevant experience owning, building, or operating transmission assets. They also all established they will be partnering with other utilities and contractors to strengthen their plans.

For Project Implementation, MISO categorized Developer C as Best, Transource's two proposals and Developer D as Better, Developer A as Good, and Developer B as Acceptable

2A. Management Ability

Schedule

A competitive developer must submit a project schedule that illustrates eight named 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. It also must explain the project's critical path.

Developer A mitigates schedule risk by providing project-specific support for its conservative durations and including intermittent float for added flexibility. It effectively provides rationale for sequencing decisions and effectively demonstrates critical path relationships.

Developer B demonstrated significant research into the project area to provide certainty related to land acquisition and material procurement. Its schedule was riskier than other developers' due to having the most aggressive durations along with the least amount of flexibility by only including schedule float at the end, not tied to specific activities.

Developer C's schedule provides certainty through high levels of relevant experience, project-specific due diligence, and a two-contractor construction approach. It demonstrated scheduling efficiencies gained through previous experience in Wisconsin. Its durations are reasonable and well-supported, and it has the most risk-averse approach of all developers to schedule acceleration.

Developer D provides the most schedule flexibility with clearly defined activity relationships and varying float throughout the schedule including on the critical path. It did not provide means of additional schedule acceleration beyond its one- to two-year early in-service dates already planned, instead providing a means to resequence facilities in coordination with interconnecting transmission owners (ITOs).

Transource's schedule is informed by its unique 765 kV experience and project-specific efforts completed to mitigate routing and engineering risk. It is the only developer that does not discuss receiving vendor quotes and lead times for key BECI materials, though it has available stock and has secured production slots for these materials, adding certainty to its durations. Its plan to accelerate its schedule as necessary is optimistic compared to other developers' plans.

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.

Developer A has a clear reporting structure and an agreement in place with its general contractor (GC), adding certainty to its management plan. Its approach to project risks is optimistic.

Developer B presents some risk to BECI in its approach to bid out GC duties after project award, though it has standing agreements with potential contractors. It demonstrates clear relationships between completed mitigation methods and the impact of risks on the project.

Developer C has agreements in place with its two planned contractors and provides clearly defined roles and responsibilities, adding certainty to its management structure and mitigating decision-making risk related to its partnership committees. It provided less discussion of unique project risks than other developers.

Developer D takes a conservative approach to project risk mitigation, demonstrating a high level of due diligence to mitigate project risks. Its GC arrangement is less certain than other developers' which have agreements in place.

Transource plans to use a contractor with 765 kV experience and will self-perform engineering activities, mitigating some management risks. It has broad but conservative assumptions related to project risks.

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.

Developer A and its contractor, which is under agreement, have significant experience working on similar projects. It cited some team members' 765 kV experience. It cites some team members' experience from previous companies, which provides less certainty compared to other developers.

Developer B demonstrated relevant experience including its team members' experience in Wisconsin and some team members' 765 kV experience. It cited some team members' experience from previous companies, which provides less certainty compared to other developers.

Developer C demonstrated the most relevant experience in Wisconsin and has agreements with two experienced contractors, though its team has less direct experience with 765 kV.

Developer D and its team demonstrated significant relevant experience, including some team members' 765 kV experience, though it has no experience in Wisconsin.

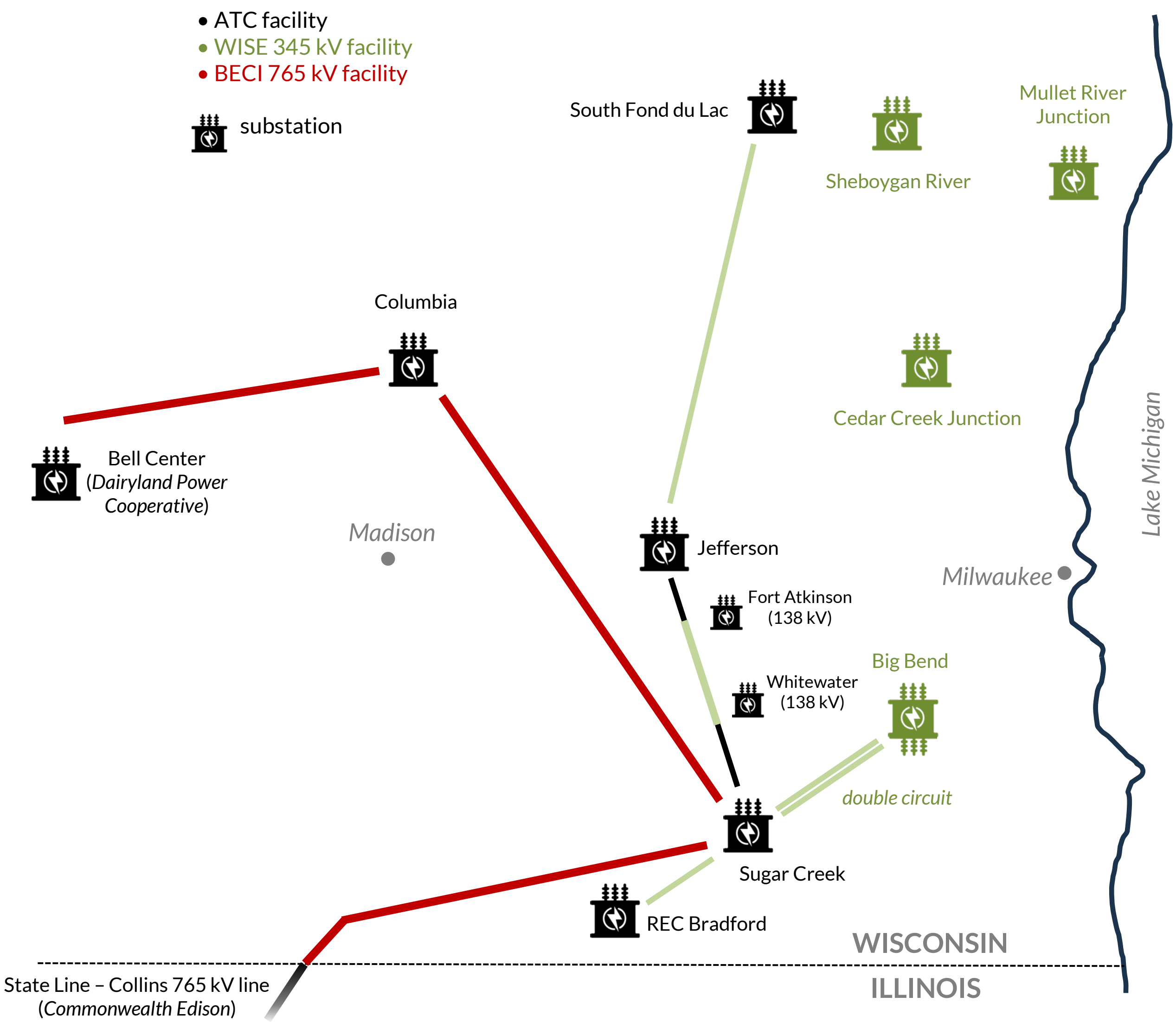
Transource and its project team demonstrate the most relevant 765 kV experience. It has previously completed a project with similar 6-bundle conductor and stringing methods, demonstrating the ability to implement BECI with the most certainty of all developers.

2B. Routing and Siting

A competitive developer must explain where and how it will site each transmission line and substation included 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. Finally, it must explain how it will obtain the necessary permits and acquire the necessary land to execute the project.

Figure 9 illustrates the existing and proposed transmission assets relevant to BECI. BECI will consist of three new single-circuit 765 kV transmission lines. The four new 345 kV substations and four new 345 kV transmission lines associated with MISO's competitive WISE project are shown in green for context. The BECI facilities will interconnect with facilities owned by ATC, Dairyland Power Cooperative, and Commonwealth Edison.

Figure 9. BECI 765 kV facility map



Line Routing

Wisconsin Statute 1.12(6) establishes routing and siting guidelines for new electric transmission facilities, including high-voltage transmission lines. According to these guidelines, referred to as Wisconsin's siting priorities, the following corridors should be utilized in the following order of priority: existing utility corridors, highway and railroad corridors, recreational trails, and new corridors.

Developer A does not mention routing in accordance with Wisconsin's siting priorities which creates some risk, though some of its routing criteria aligned with Wisconsin's guidelines. Its routing study included thorough discussions of the process to choose the proposed routes, but it made riskier routing decisions than most other developers regarding water crossings and impacts to forested areas. Its proposed routes are tied with Developer C's for most U.S. Geological Survey (USGS) Protected Areas Database of the United States (PAD-US) impacts (seven). It discussed significant efforts put forth by its team to conduct site visits, but its stated conclusions were high-level and do not add certainty to the proposed routes. Its proposed routes have well-developed access plans.

Developer B cited some Wisconsin policies as guidance for its routing decisions, though it creates some risk by not explicitly referencing Wisconsin's siting priorities or how they relate to the proposed routes. It demonstrated significant agency outreach and illustrated how that correspondence influenced its proposed routes. It provided less insight than other developers did into how its site visits impacted routing, what decisions were made to minimize impacts to constraints such as protected species, and ultimately why the proposed routes were chosen over alternatives.

Developer C routed in accordance with Wisconsin's siting priorities, mitigating some risk. Its routing study thoroughly explains its process for choosing proposed routes, and it includes more supporting information for each primary alternative route than other developers, which adds regulatory flexibility. It provided the most extensive summary of how completed correspondence influenced its proposed routes and it has prepared several project-specific studies and materials such as its Tribal Outreach Letter Template. It demonstrated a thorough understanding of constraints such as wetlands and natural habitats and clearly demonstrated how those understandings influenced its proposed routes. Its proposed routes are tied with Developer A's for most PAD-US impacts (seven), though the impacts are typically smaller and are accomplished through permitting rather than acquisition.

Developer D routed in accordance with Wisconsin's siting priorities, mitigating some risk. Its routing study is the most thorough of all developers, providing extensive qualitative and quantitative analysis that led to proposed routes which have well-developed access plans and minimized impacts to environmental constraints. Its discussion of site visit conclusions was comparatively brief but provided high levels of specificity regarding routing constraints such as river crossings and current industrial activity, and how its chosen routes mitigated risks related to those observed constraints. It demonstrated less due diligence than other developers by lacking studies related to natural habitats or unique social and cultural constraints.

Transource does not mention routing in accordance with Wisconsin's siting priorities, which creates some risk, though some of its routing criteria aligned with Wisconsin's guidelines. Its proposed routes have the fewest PAD-US impacts (two), its routes have well-developed access plans, and it demonstrates a high level of planned construction logistics (wire pull locations, structure weights, etc.), all increasing the certainty of its proposed routes. It lacked specificity compared to other developers regarding takeaways from agency correspondence, impact constraints such as wetlands, and anticipated mitigation requirements due to routing near an airport. It made a riskier routing decision regarding impacts to a forested area than most other developers. Transource's second proposal's proposed routes are less impactful to routing constraints than those of Transource's first proposal.

Permitting

A competitive proposal must describe how the developer will obtain regulatory permits necessary for the project. A developer must also discuss recent projects that demonstrate its capabilities to obtain the necessary permits.

All responses demonstrated significant research and experience which lead to certainty surrounding each developer's permitting plan.

Developer A conducted agency outreach to understand the PSCW CPCN process and demonstrated how that understanding impacted its permitting plan. Its discussion of environmental permit expectations is project-specific, addressing the potential presence of endangered or protected species like whooping crane and bat hibernacula.

Developer B conducted agency outreach to understand the PSCW CPCN process and demonstrated how that understanding impacted its permitting plan. It demonstrates a clear relationship between regulatory outreach it conducted and the anticipated permit requirements and durations.

Developer C demonstrated the most certainty surrounding its regulatory permitting plan, supported by ongoing correspondence with the PSCW. Some of its discussions about planned federal and state environmental permits are high-level, and related correspondence will be completed post-award, introducing some risk to the BECI project.

Developer D conducted agency outreach to understand the PSCW CPCN process and demonstrated how that understanding impacted its permitting plan. Its discussion of anticipated environmental permits was the most project-specific of any developer, including details such as water bodies crossings that will trigger permits for navigable waters and anticipated bat compensatory mitigation.

Transource conducted agency outreach and utilized affiliates' experience to understand the PSCW CPCN process and demonstrated how that understanding impacted its permitting plan. It provided a list of typical environmental permit requirements, but it lacks specificity compared to other developers.

ROW and Land Acquisition

A competitive proposal must describe a developer's abilities to acquire right-of-way (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.[8]

Developer A's land acquisition process is optimistic, including the longest scheduled acquisition duration and the lowest condemnation assumption. It provides historical context for its condemnation assumption but lacks specificity regarding how its plan for BECI will achieve similar results. It will take a proactive

[8] MISO BPM-27 Section 7.3.5

approach to informing landowners about the project by providing a landowner rights brochure and it discussed its plan to dialogue with several local groups regarding the project's land acquisition.

Developer B provided an overview of its land acquisition plan for BECI including templates that will be used. It demonstrated a knowledge of the land acquisition regulations and process in the project area, but it provided less specific information about how that process relates to its own plan. It will host open houses prior to its CPCN application to gather input from community leaders and landowners. Its planned quantity of ROW agents is minimal given the scope of work required.

Developer C demonstrated the most extensive knowledge of all developers regarding the applicable regulations and the process to acquire land in the project area as well as the land parcel needs and ownership types. It presented the most land acquisition-related files that will be used for BECI including a land acquisition plan, a public project brochure, and a ROW consultant manual, all full of project-specific information which adds certainty to its plan. It has a conservative approach towards potential condemnation while clearly demonstrating its plan to first seek voluntary acquisitions. It emphasized allowing landowners to have a voice in the project by initiating negotiations prior to filing for the CPCN. It will de-risk schedule durations related to land acquisition by deploying three firms to negotiate and purchase easements.

Developer D emphasized high standards of professionalism and ethics when engaging landowners and it provided a public outreach plan detailing the processes that will be used to achieve those standards. The materials it has developed for BECI such as a land valuation analysis, land acquisition templates, and ROW acquisition and procedures manual all provide certainty in its land acquisition plan.

Transource took a proactive approach and developed a public packet to describe the project's land acquisition process, which it will distribute to landowners beyond the PSCW-required limits to spread awareness and promote landowner cooperation. It committed to combining traditional (news releases, advertising, mailing) and modern (interactive maps, website, communication outlets) means of informing the public about the project. Transource's guyed-Y proposal requires less ROW acquisition than Transource's guyed-V proposal.

2D. Construction

A competitive developer must describe its plans for engineering and surveying, material procurement, construction, and commissioning of the project. It must include a construction plan. Each developer sufficiently explained how it would construct the BECI facilities.

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.[9]

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.

Developer A has completed tasks to mitigate engineering and surveying risk including developing a tower family, developing full-scale structure testing plans, and conducting a desktop environmental survey. Its description of engineering levels is less specific than other developers, which makes its stated completion level difficult to confirm. Developer A's plan is supported by its team's 765 kV design experience.

Developer B has completed fewer engineering and surveying tasks than other developers and its level of engineering completion is comparatively overstated. It has similar remaining tasks to some other developers such as LiDAR and geotechnical borings collection, though its engineering level definitions lack specificity, so its overall engineering and surveying plan is less certain than other developers'.

Developer C has mitigated significant risk related to engineering and surveying by performing extensive work including LiDAR collection, tower family development and ongoing testing, and commissioning an FAA study. Its remaining engineering and surveying work is clearly defined and less extensive than other developers' who have conducted less due diligence, making its plan more certain than other developers'. It highlighted benefits of its BECI engineering and surveying team working on similar projects. It provided a detailed breakdown of activities that will require coordination with interconnecting transmission owners and stated each activity's current development status. It is well-positioned according to its completed work and engineering level definitions to gather input from ITOs, landowners, and local agencies to advance its implementation plan.

Developer D has completed tasks to mitigate engineering and surveying risk including developing structure loading and framing, designing structure-specific foundations based on desktop geotechnical studies, and developing PLS-CADD models. The relationship between Developer D's stated level of design completion and its planned remaining activities, such as geotechnical borings collection, is less specifically defined than other developers'.

Transource has mitigated significant risk related to engineering and surveying by performing extensive work including LiDAR collection, tower family development and testing, and using historical data to analyze its proposed 6-bundle conductor configuration. Its remaining engineering and surveying work is clearly defined and less extensive than other developers' which have conducted less due diligence, making its plan more certain than other developers'. It is well-positioned according to its completed work and engineering

[9] MISO BPM-27 Section 7.3.6

level definitions to gather input from ITOs, landowners, and local agencies to advance its implementation plan, though it lacks specificity regarding TO coordination at points of interconnection.

Material Procurement

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

Developer A will manage key materials, and its contractors will manage minor materials. It provided letters of support to add certainty to its planned material vendors. Its proposed laydown yard plan is designed to efficiently serve the project and has been supported by site visit observations.

Developer B will manage key materials, and its contractors will manage minor materials. It plans to reserve production capacity early in its schedule to mitigate lead time risk. It provides fewer vendor and supplier letters of support than other developers, only one of which is for key materials mentioned.

Developer C will manage key materials, and its contractors will manage minor materials. It provides the highest level of certainty in its procurement plan by providing the most letters of support across engineering, construction, materials, and land acquisition, with specific roles and responsibilities for BECI. It plans to reserve production capacity early in its schedule to mitigate lead time risk. It proposed the most and smallest individual laydown yards across the project which will require significant logistical effort, though those logistical efforts are thoroughly addressed in a material procurement attachment provided.

Developer D will have internal procurement oversight, and the contractor will manage execution of major material contracts. It provided letters of support to add certainty to its planned material vendors. It included float at the key material level to add schedule flexibility if long lead times are encountered.

Transource's planned procurement responsibilities are less clear than other developers. Its internal procurement team is referenced but a distinction between key materials and other materials is not discussed. It demonstrates less certainty than other developers regarding its planned vendors and suppliers by not providing any letters of support and instead discussing supplier relationships, forecasted demand, and capacity reservations which show that there is sufficient production capacity for BECI.

Construction

A competitive proposal must describe a developer's construction abilities and plan for the project. The developer must discuss approved contractor lists in the relevant state, if they exist, requirements and standards for contractors, the anticipated staff and contractors it will use for the project, their base of operations during construction, their experience and expertise, and the safety programs to be used.[10]

Developer A's plan to divide its GC into three teams to build all facilities concurrently which could introduce some risk, though its construction plan was developed by its GC. Its construction plan contains some project-specific information such as wire pulling plans and proposed helicopter scope. It provided a bill of materials for each project facility.

[10] MISO BPM-27 Section 7.3.8

Developer B's construction sequencing discussion is minimal compared to other developers'. Its construction approach is more aggressive than the other developers' with short durations and concurrent construction of multiple facilities. It discussed walkthroughs to identify environmentally sensitive areas or areas with protected species or habitats and cited Wisconsin Statute 182.017(c) clearing requirements.

Developer C's two-GC approach is the most risk-averse of all developers and is well suited to its schedule. Its construction plan was developed by both of its planned contractors and contains extensive project-specific information such as quantified matting strategies, crew and equipment makeup for construction activities, and wire pulling plans.

Developer D proposed rolling crews to construct lines sequentially and will start with what it anticipates to be the most complex segment, Bell Center to Columbia, choosing to potentially face productivity or schedule risks early in the project. It takes a conservative approach to foundations, specifying one design for all structures which will be sufficient or robust. It effectively demonstrated its plan for construction activities by providing a table with each activity's crew size and quantity, equipment, and production rates. It quantified project-specific plans for tree clearing and matting for each line.

Transource proposed rolling crews to construct lines sequentially and mitigates some ROW acquisition risk by providing a larger schedule cushion for the likely more challenging Bell Center to Columbia line. Its planned contractor has experience implementing a 6-bundle 765 kV design like BECI's, adding certainty to its construction plan. Its discussions of construction activities focus on high-level aspects of construction activities that could be applied to most projects.

Commissioning

A developer must describe how it will commission and energize a competitive facility.[11] 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 ITOs, and final inspection procedures.

All developers adequately described their commissioning processes, identified personnel who will perform the work, and discussed procedures which will require coordination with interconnecting TOs. Developer D cited knowledge of the project area and ongoing relationships with ITOs as support for its commissioning plan. Transource's commissioning plan is supporting by 765 kV commissioning experience and it demonstrated a knowledge of ITO coordination requirements.

2E. Financing

A developer must demonstrate it can finance construction of the project. This section does not anonymize the developers because all content is either publicly available or permitted to be included 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, E) used elsewhere in this report.

[11] MISO BPM-27 Section 7.3.9

Each of the five development teams that submitted proposals for BECI demonstrated through financial statements, credit ratings, current liquidity, financial guarantees, unfunded capital commitments, and previous projects that it can finance BECI.

American Transmission Company (ATC), Dairyland Power Cooperative, Ameren Transmission Company of Illinois (ATXI), and GridLiance Heartland, LLC (GLH) created a development team for this project. ATC is a transmission company owned by utilities, municipalities, municipal electric companies and electric cooperatives in Wisconsin, Michigan and Minnesota. Dairyland is a generation and transmission cooperative that provides wholesale electricity to member cooperatives and municipal utilities in Wisconsin, Minnesota, Iowa, and Illinois. ATXI is owned by Ameren Corporation and owns transmission assets in MISO. GridLiance is indirectly owned by NextEra Energy, Inc.

ATC, Dairyland, ATXI, and GridLiance will own 30%, 25%, 22.5%, and 22.5% of BECI, respectively. Each company either holds an investment-grade credit rating or is owned by a company with such a rating.

Longview Infrastructure Midwest, LLC is indirectly owned by Stonepeak Partners, LP., a privately-owned company. Longview will finance BECI with capital commitments from one of Stonepeak's global energy investment funds. Great River Energy is a wholesale electric cooperative that serves 26 member distribution cooperatives in Minnesota and Wisconsin. Great River Energy is rated A- by S&P. Great River Energy will own at least 1% of BECI and may purchase up to 49% of the project.

LS Power Grid Wisconsin, Inc. is indirectly owned by LS Power Associates, LP., a privately-owned company that owns and operates transmission assets in Indiana, California, Texas, and other states. LSPA does not hold a public credit rating, but it provided a private credit rating in its proposal.

Transource is owned by American Electric Power (86.5%) and Evergy, Inc. (13.5%). Transource develops and invests in competitive transmission projects in the U.S. 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 is rated AA+ from Fitch.

2F. 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.[12]

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. MISO determined all proposals contained satisfactory safety information.

12 MISO BPM-27 Section 7.3.17

3. Operations and Maintenance

MISO must evaluate each proposal's plan for normal operations, non-normal operations, maintenance, financial strategy, 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 Transource's first proposal as Best, its second proposal and Developers A, C, and D as Better, and Developer B as Good.

3A. Normal Operations

This O&M topic includes incorporating the competitive facilities into a Local Balancing Authority (LBA), monitoring and controlling real-time operations, switching activities on project transmission lines or substations, and coordinating 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).[13] Unless there are existing arrangements among the developers or their affiliates and the Balancing Authority, any new LBAA agreements must be negotiated after this report is issued. All developers adequately explained how they would incorporate BECI into an LBAA. The developers provided detailed plans including the roles and responsibilities of the functions.

Developer A will use an O&M provider whose control center currently operates as a LBA in MISO. Developer A provided their plans to become signatory to MISO's Amended Balancing Authority Agreement and have their designated control center provide the operational LBA functions.

Developer B already operates as a MISO LBA and would include these new facilities in their existing processes.

Developer C plans that existing MISO LBA's would provide LBA services for the new facilities.

Developer D provided two LBA options, the first option being to develop agreements with existing MISO LBA's with the second option of becoming signatory to MISO's Amended Balancing Authority Agreement and having their designated control center provide the operational LBA functions.

Transource will become a MISO LBA no later than 60 days before the Project in service date and is in discussions with applicable organizations regarding the requirements to become an LBA.

[13] MISO BPM-027 Section 7.4.1

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 BECI.

The BECI project only includes transmission line facilities and does not have any substation facilities. The owners of these transmission lines will coordinate with the owners/controllers of the substations where the lines terminate.

All developers adequately explained the control centers they would use to monitor their projects and the resources they have 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 control the BECI facilities.

Switching and Planned Outage Coordination

A competitive proposal, if the underlying project will require the developer to install a field-mounted switch 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.

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. The BECI project is part of the development of a "backbone" 765 kV system that transfer large quantities of power across large regions. Due to this fact, a non-planned outage would have grid wide reliability impacts and the response to non-normal operations would be critical to maintaining the integrity of the grid.

Forced Outage Response

A proposal must describe how a developer will respond to a forced outage of each project facility.[14] If the project includes a substation, a developer must discuss how long it will be able to monitor and control each substation if that substation loses its off-site AC station power source, and it must explain its plans to control the substation using only DC battery power.[15]

Since BECI is a transmission lines only project, first responders (assessors) would likely not have the capabilities to make most repairs. These responders would determine the problem and assess what types of

[14] MISO BPM-027 Section 7.4.4

[15] BECI RFP Part II, page 32

crews would be needed to implement corrections. All developers indicated acceptable times for first responders to show up.

Developer A's O&M team maintains a tiered emergency response structure, differentiating between immediate first responders and specialized emergency repair crews. First Responders are planned to be located in the project vicinity with repair teams further away. Dedicated crews were identified in Wisconsin, and in nearby states.

Developer B's emergency repair and test will first deploy from a field office in the project vicinity to assess the condition. Full repair teams will predominately come from a neighboring state. For emergency response, this provides for personnel within a three-to-six-hour drive to the furthest location and response time of under two hours to every point on the line.

Developer C's first responders are nearby with response times of about a half hour plus and have an average of over 20 years' experience. The emergency repair team is staffed by internal resources and has existing agreements in place with contractor partners as needed.

Developer D will use internal personnel to manage emergency responses, including serving as first responders and performing emergency repairs. The response field staff will be in a neighboring state. The estimated driving time from each emergency repair team location to the midpoint of each transmission line segment in the project is between three quarters of an hour to approximately four hours.

Transource will use staff stationed in a neighboring state and will open a local office near the project that will serve as the first responders/assessors for troubleshooting, while the first backup for emergency response and major repairs will come from further away. All trained transmission mechanics and telecom technicians are trained to act as first responders and perform emergency repairs, with no differentiation within the existing crews. A list of all approved contractors, staffing and locations was provided. Travel times from various locations to the project range from two-and-a-half hours to seven hours away.

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. The developers will have transmission line crews between 70 miles and 300 miles from Madison, Wisconsin, which MISO used as a proxy for the middle of the project. Developer C and Developer D would be more strategically positioned to repair facilities in an emergency. All developers indicated that they had strategies, plans and contractors in place to perform this function as needed.

Developer A's O&M team's emergency outage response will be coordinated through integrated efforts between an internal oversight committee, field operations, and control center support staff. The field response team's location is at their O&M service center, which has a dedicated staff with a response time of approximately one and a quarter hours to line midpoints. 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. The location, staff size, average relevant experience and employers of the teams responsible for coordinating were provided and were adequate. Developer B's emergency repair crews are located approximately four hours away.

Developer C's O&M team is responsible for coordinating the response to an emergency outage using its control center operations group, which operates two fully staffed, 24/7 control centers. Its field maintenance and response teams include dedicated staff as well. Developer C's emergency repair crews are located approximately one hour away.

Developer D will use internal operations team and field staff to perform and manage all forced outage coordination for the project located at its control center. Their internal local field staff will perform and manage emergency response and repair services. Developer D's emergency repair crews are located approximately two and a half hours away.

Transource's staff supporting the response to forced outages will consist of employees located in a nearby state. They will be backed by staff from other nearby states. To supplement their capability, Transource will also employ a local response team in the project area that will operate as a hybrid team, trained and equipped to perform both inspections and preventative maintenance. In the event of a forced outage at the BECI facilities, this team would troubleshoot the issue and determine the next appropriate steps. Transource's emergency repair crews are located approximately two-and-a-half hours to seven hours away.

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 a line segment of the BECI project should five miles of the line become damaged in a catastrophe. They adequately explained under what circumstances they would rebuild the BECI project's line segment to get the line in-service more quickly and they demonstrated it has the procedures, personnel, and materials in place to accomplish this.

Developer A's O&M team prioritizes a temporary rebuild when the following conditions are present: urgency for service restoration; material availability; extent and type of damage; site accessibility constraints; safety considerations. An indicative timeline for a temporary rebuild is approximately 3 weeks. In other scenarios, they will consider a permanent rebuild, with an estimated timeline of 7-9 weeks.

Developer B provided sufficient spares to rebuild any dead-end to dead-end segment of the project, including 18 H-Frame and lattice structures and 40 reels of conductor. If weather destroyed a dead-end to dead-end transmission line segment, the team expects to be able to rebuild the segment in 5 to 10 weeks.

Developer C will temporarily rebuild a line segment when multiple structures are damaged and where permanent repairs would require extended outages. Their expected plan for a 5 mile rebuild is to use temporary structures and after 35 days replace with permanent guyed tangent V; replace self-supporting lattice towers in about 47 days or 62 days if using tubular steel H frame and 3 pole dead-end structures.

Developer D does not anticipate the need for a temporary rebuild, even under extreme damage scenarios and would make permanent repairs. The rebuild timeframe estimate for a five-mile section can be completed in approximately 5 to 15 weeks. Their approach will include: inspect and scope (1-5 days), develop rebuild plan, mobilize, demolition, and access (1-5 days), secure resources (1-3 weeks), construct and restoration (5-10 weeks), return to service (1-2 days).

Transource's emergency restoration structure program will stock all applicable equipment in kits. In their experience, a permanent solution is as fast as the temporary fix, and approximately 22 towers are needed in a five-mile segment. Currently they have 17 - 765 kV structures in stock and two line miles of conductor and OPGW. Within the next 10 years, they plan to stock an additional 5-10 structures. To replace the additional conductor, they have 4 domestic suppliers to supply conductors in two weeks. Total restoration time is about 10 weeks to rebuild 5 miles of transmission line. Transource demonstrated the highest capabilities with 765 kV transmission repair and rebuild in their proposal.

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.

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.[16]

Developer A provided numerous policies to demonstrate their maintenance and testing plans. They plan to integrate the project maintenance into their internal established maintenance program customizing project-specific requirements. The integration enables immediate application of high-voltage maintenance best practices and optimized resource deployment.

Developer B provided their maintenance procedures currently being used by their internal teams. The existing procedures provided are being updated to incorporate operation of the 765 kV system and will be fully prepared for 765 kV operation by the time the project is in-service. They plan to establish a field office to support the project with dedicated employees. The maintenance activities for BECI will be an extension of existing maintenance practices. The project does permit live-line maintenance and Developer B will have a live-line program prior to the in-service date for the project.

Developer C will leverage existing operations procedures. Internal staff maintenance teams will oversee the maintenance work plans provided to a contracted workforce and plan to use similar contractors as previous projects. Developer C provided a list of contractors with their location, scope of work, years of experience. Structure designs fully support energized maintenance for insulator bell replacement, insulator string testing/washing/replacement, hardware and clamp component replacement, corona ring replacement, spacer damper replacement, and conductor repair or replacement. Its primary contractor is certified in live-line maintenance for outages including for structure replacement or new conductor installation. During emergency situations, Developer C uses live-line capabilities when safe and practical, minimizing outage duration and maintaining system reliability.

Developer D provided existing procedural documents that will be followed to maintain the project facilities, and the procedures will be updated to reflect project specific requirements. Developer D will support the

[16] MISO BPM-27 Section 7.4.8

maintenance of project facilities with field staff that have experience in 765 kV transmission line maintenance. Identified management team located in a nearby state and internal teams will also oversee contractors who perform maintenance services. Live-line maintenance will only be performed when system conditions prevent taking an outage to complete necessary maintenance activities. In such cases, Developer D will engage one of its qualified “major” rebuild contractors, which are certified to perform live-line work on EHV facilities:

Transource provided existing maintenance procedures with its proposal, all of which are in use today. Its transmission line, forestry and telecom teams will maintain the project. The combined internal transmission line team members currently maintain over 600 miles of 765 kV and use contractors as needed such as for vegetation management. Live line work would only be performed if it could be done safely from a helicopter with a non reclose, such as hardware replacements, broken or flashed insulator bells, patch rod on wire or spacer replacements. If a situation is declared an emergency, it usually necessitates de-energizing the line and live line work would not be done.

Transource has multiple transmission line contracts approved for live-line work at 765 kV. All transmission line personnel must be certified to complete live-line maintenance up to 765 kV and will have training experience to oversee the work completed by a contractor. Transource’s second proposal (Guyed Y transmission structure design) utilized a new triangle design that is more difficult to perform maintenance, especially “live wire,” than the horizonal designs offered by the other developers and their first proposal (Guyed V transmission structure design). Due to this new design difference and from an O&M perspective, Transource’s second proposal was ranked lower than the others for operations and maintenance.

All developers adequately explained how they would maintain and test the project facilities and the differences between the developers’ plans were insignificant.

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 adequately explained their strategy for spare equipment.

Developer A will have a primary location for storing spare parts at their project O&M service center, warehouse/storage facility. Spare parts delivery times to site could range over one hour. The spare part overall strategy contemplates planned spare quantities against total project components. All spare parts purchased for this project will only be used on this project, eliminating risks associated with parts availability.

Developer B will purchase, own and store sufficient equipment to replace any dead-end-to-dead-end segment of the project. This includes a total of 18 H-Frame and lattice structures and 40 reels of conductor and attendant insulators, hardware, and OPGW. Spares will be stored at a laydown yard in the project area, and in a maintenance facility in a nearby state. Spare parts from the local laydown yard can be delivered within two hours anywhere on the project. The spare parts identified will be available only for this project which ensures they are available in case of an emergency.

Developer C's spare parts will be located within two to four hours driving distance from the Project. This includes spare parts located at existing maintenance facilities in the project area. Several transmission line structure hardware and wire reels will be stored between a half-an-hour to two-hour drive to any part of the project. Developer C conducted a study to determine the number of spares required for the Project and determined 2.5 miles of parts were needed. The spare parts inventory outlined is exclusively dedicated to the project and will remain available when needed for emergency restoration activities.

Developer D will repurpose its construction laydown yard into a maintenance material yard for long-term storage of major spare parts. The facility will store five miles of direct replacement spare parts and estimates up to six hours for pre-delivery preparation of spare parts, depending on the size and type of component. Spare parts will be included in storage, and are based on a combination of project-specific engineering and resiliency under extreme conditions. Spare parts identified are solely dedicated to this project and will not be available for use by affiliates or unrelated parties on other facilities.

Transource plans to use its internal spare parts inventory. It will store two line miles of conductor and OPGW will be in-stock, and to replace the additional conductor, the developer will rely on four domestic suppliers in about 2 weeks. Spare parts can be delivered to the project site in approximately three to five hours, and Transource will use its project-specific stock of spare parts, before procuring any additional from vendors. Internal teams can mobilize structure parts and kits to any project location within one to two days for major restoration efforts.

3D. Financial Strategy for Maintenance

A competitive proposal must describe how the developer will finance maintenance activities due to normal wear and tear and major repair. All developers established their ability to raise capital to replace facilities lost due to catastrophic destruction.

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 BECI facilities.[17] 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.

[17] MISO BPM-27 Section 7.4.10

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).

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: (1) certainty, (2) risk mitigation, (3) cost, and (4) 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

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. The focus of LRTP is to improve the ability to reliably move electricity across the MISO region from where it is generated to where it is needed, at the lowest possible cost.

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 as 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

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.

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.

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.

Grillage

A shallow foundation system that is typically pyramid shaped with a wide base and narrow top extending above grade. The grillage serves as a connection point for lattice transmission structures, elevating them above ground level to reduce corrosion risk. Grillage foundation systems are composed of a network of steel beams arranged in layers, typically perpendicular to each other.

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 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.

Pedestal

A shallow foundation system with a wide concrete base with a narrower concrete section extending above grade. The pedestal serves as a connection point for lattice transmission structures, elevating them above ground level to reduce corrosion risk. These foundations are constructed using reinforced concrete and can be either pre-cast or poured in-place.

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.