Selection Report

Reid EHV to IN/KY Border
345 kV Competitive Transmission Project



July 30, 2025

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Table of Contents

Executive Summary i

I. Competitive Project and Process 1

II. Summary of Proposals 7

III. Comparative Analysis of Proposals 9

1. Cost & Design 9

1A. Transmission Line Design 9

1B. Capital Cost 12

1C. Annual Transmission Revenue Requirement 13

1D. Cost Containment 13

2. Project Implementation 16

2A. Management Ability 16

2B. Routing and Siting 18

2D. Construction 20

2E. Financing and Capital Resource Plan 21

2F. Safety 21

3. Operations and Maintenance 22

3A. Normal Operations 22

3B. Non-Normal Operations 23

3C. Maintenance 25

3D. Financial Strategy for Maintenance 26

3E. Safety 27

4. Planning Participation 27

Appendix

Appendix A. Glossary 29

Appendix B. Design-Related Terminology 35

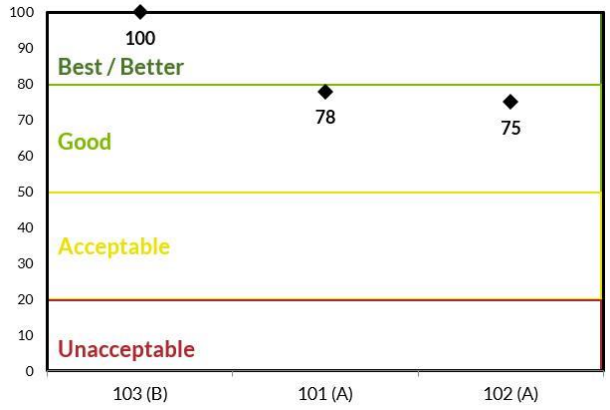
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Executive Summary

MISO has chosen Republic Transmission LLC to be the Selected Developer for the Reid EHV to IN/KY State Border 345 kV Competitive Transmission Project (RIKY).

Republic was one of two developers to submit a proposal for RIKY. Republic submitted Proposal 103.

Figure 1. Proposal Scores



This report explains MISO's competitive developer selection process and the RIKY project, summarizes the three proposals MISO received from two transmission developers to build and operate RIKY, and explains why MISO selected Republic to develop RIKY.

On December 12, 2024, MISO's Board of Directors approved the Long-Range Transmission Planning Tranche 2.1 portfolio for inclusion in the 2024 MISO Transmission Expansion Plan (MTEP24). Tranche 2.1 included Project 35, which consists of 28 new or upgraded transmission facilities in Northern Kentucky and Southwest Indiana.

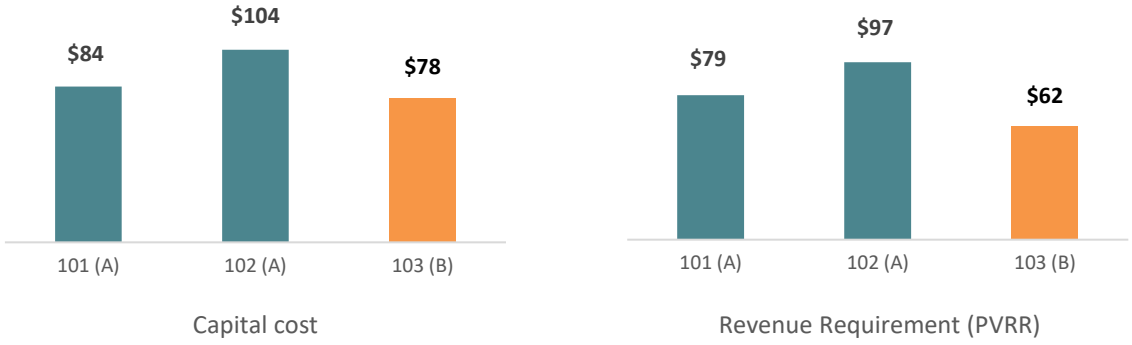
One of Project 35's facilities is Facility 51103, a new single-circuit 345 kV transmission line that will begin outside Big Rivers Electric Corporation's (BREC) Reid EHV Substation in Northern Kentucky and cross over the Ohio River north into Indiana, where it will interconnect with CenterPoint Energy Indiana's (CPEI) transmission system. MISO titled this project "RIKY" and is administering it as a Competitive Transmission Project.

MISO issued a Request for Proposals (RFP) for RIKY on January 31, 2025. On May 1, 2025, two developers submitted a total of three proposals. Figure 1 identifies the total score and final categorization MISO awarded to each RIKY proposal.

All three 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 and present value of the 40-year revenue requirements submitted by the developers for RIKY.

Figure 2. Proposed capital costs and revenue requirements ($M)



Developer A proposed to principally run double-bundled 1113 kcmil Finch ACSS conductor on weathering steel H-frame structures directly embedded in the ground. Its first proposal included a 23.4-mile route through mostly agricultural land and its second proposal included a 30.6-mile route that would mostly parallel an existing transmission line.

Republic proposed to principally run double-bundled 954 kcmil Cardinal ACSS conductor on spun concrete monopoles directly embedded in the ground. It proposed a 25.5-mile route.

MISO determined Proposal 103, which was submitted by Republic, and Proposal 101, the first proposal submitted by Developer A, were the most competitive proposals, respectively. Unless otherwise stated, this report refers to Proposal 101 when it discusses Developer A.

Figure 3. Evaluation Scores

Proposal	Cost and Design – 30% (Proposal rank)	Project Implementation – 35% (Proposal rank)	Operations and Maintenance – 30% (Proposal rank)	Planning Participation – 5%	Final Score
103 (B)	Best (1)	Best (1)	Best (1)	✓	100
101 (A)	Good (2)	Good (2)	Better (2)	✓	78
102 (A)	Good (3)	Good (2)	Better (2)	✓	75

Republic's combined Cost and Design was better than that of Developer A . This criterion accounted for 30% of MISO's decision.

Republic's estimated present value revenue requirement (PVRR) was less than that of Developer A . This was due to its lower estimated capital cost, its lower cost of debt and equity, and its increased leverage in its capital structure. Its cost containment package was superior to that of Developer A.

Republic committed to cap its annual recoverable revenue for the project's first 40 full calendar years at 5% greater than the annual revenue it estimated. It stipulated those annual caps would increase by 4% for every mile the final route exceeded a length of 28 miles. It also committed to cap its total return on equity at 9.8%.

Developer A committed to cap the equity in its capital structure at 50% and to cap its base return on equity at 9.8%. It also committed to decrease that base return if its project costs in Kentucky increased beyond certain levels.

MISO used each developer's cost commitments to model its PVRR under different cost and financing scenarios. Republic's PVRR remained superior to that of Developer A in all scenarios MISO evaluated.

Republic's design for RIKY was slightly better than that of Developer A. Republic provided more support for its design but all designs met MISO's requirements.

Republic's project implementation plan for RIKY was better than that of Developer A. Republic explained its proposed route better than Developer A, which increased MISO's confidence that Republic could construct the transmission line at the capital cost Republic estimated. Both developers established they had significant experience building and operating high-voltage transmission lines.

Republic's operations and maintenance (O&M) plan for RIKY was marginally better than that of Developer A. Both developers proposed using electric utilities with service areas close to the project to operate and maintain it. Both proposed O&M partners operate and maintain high-voltage transmission lines and are strategically located to offer these services efficiently on this project. Republic explained how its O&M provider will execute these services more clearly than Developer A.

All developers earned the full 5% for Project Participation.

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

Reid EHV to IN/KY Border 345 kV Competitive Transmission Project Selection Report

I. Competitive Project and Process

This report explains MISO's decision to select Republic to develop the RIKY Competitive Transmission Project and the process MISO used to reach its decision.

Competitive Project

On December 12, 2024, MISO's Board of Directors approved the Tranche 2.1 Long-Range Transmission Planning portfolio for inclusion in the 2024 MISO Transmission Expansion Plan (MTEP24). Tranche 2.1 includes Project 35, which consists of 28 new or upgraded transmission facilities in Northern Kentucky and Southwest Indiana.

One of Project 35's facilities is Facility 51103, a new single-circuit 345 kV transmission line that will begin outside Big Rivers Electric Corporation's (BREC) Reid EHV Substation in Webster County, Kentucky, and cross north over the Ohio River into Indiana. This facility is formally called the Reid EHV – IN/KY State Line 345 kV transmission line facility and is referred to as "RIKY."

MISO's Competitive Transmission Administration (CTA) team determined, pursuant to the MISO Tariff, that RIKY is a Competitive Transmission Project. The Selected Developer for RIKY must place the project into service by June 1, 2032.

RIKY will interconnect with BREC's transmission system at a deadend structure just outside of the Reid EHV Substation. It will also interconnect with CenterPoint Energy Indiana's (CPEI) transmission system at a deadend structure on the Indiana side of the Ohio River in Warrick or Spencer County, Indiana. CPEI is the parent company of Southern Indiana Gas & Electric Co.

As part of Tranche 2.1, CPEI will build a new single circuit 345 kV transmission line from its Culley Substation in Southwest Indiana to the deadend structure in Indiana. BREC will also upgrade certain facilities at Reid EHV Substation. RIKY does not include those facilities.

Request for Proposals

MISO issued a Request for Proposals (RFP) on January 31, 2025, to solicit proposals from Qualified Transmission Developers (QTDs) to build and operate RIKY. 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.[1]

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 three aspects of the project may be particularly important. MISO encouraged developers to consider:

1. **Point of Interconnection Flexibility:** The point of interconnection will be a location on the Indiana side of the Ohio River in Warrick or Spencer County, Indiana. 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 Transmission Owner that will influence and ultimately define the geographic location of the point of interconnection.
2. **Ohio River Crossing:** The competitive project includes the portion of the transmission line that crosses the Ohio River to a location on the Indiana side of the Ohio River in Warrick or Spencer County, Indiana. An important aspect of the project is the strategy for crossing the Ohio River, and how that affects the transmission line design, project implementation plans, and eventual maintenance for the new transmission line.
3. **Coordination with Interconnecting Transmission Owners:** The Reid EHV to Indiana/Kentucky State Border transmission line facility is only a segment of the Culley 345 kV to Reid EHV transmission line. An important aspect of the project will be the planned coordination with interconnecting Transmission Owners on various regulatory, permitting, design, construction, and operations and maintenance activities.

Submitted Proposals

On May 1, 2025, two developers submitted three total proposals for RIKY. This report anonymizes those developers as A and B, and those proposals as 101(A), 102(A), and 103(B), when it communicates proposal content MISO may include in this report but not directly associate with the developer that proposed the information.

Developer A submitted two proposals. The first proposal planned a shorter, mostly greenfield route. The second proposal followed a longer route that would mostly parallel an existing transmission line. Except for the costs associated with these two proposals, their remaining content was similar. Republic submitted a single proposal.

Proposal Clarification and Validation

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. Both developers responded to MISO requests for clarification or cure, and neither developer subsequently withdrew a proposal.

[1] https://www.misoenergy.org/planning/competitive-transmission-administration/

On June 19, 2025, MISO announced it had received three valid and complete proposals from two developers: PPL TransLink, LLC and Republic Transmission, LLC.

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 RIKY RFP was the first RFP for MISO's Tranche 2.1 competitive projects and the first 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 RIKY proposals validated 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 err 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:

- Two PCWs – one for Indiana and one for Kentucky – without submitting a file with the total costs and revenues. This developer should have provided a single file with total costs as requested and then included additional tabs with costs separated by state. Prior to submitting proposals in response to a MISO RFP, developers should use CTA's public Question and Answer process to inquire if variations such as this are acceptable. MISO also reviews developers' questions for opportunities to make its RFPs clearer.
- A slightly altered study after being asked to clarify the results of the study in its proposal. CTA did not review the revised results because it contained information beyond the scope of the clarification. Although MISO understands clarifications allow developers to provide information after the proposal date, it must ensure that information does not improve or change proposals beyond what is noted in its information request.
- Content with multiple errors or conflicting information that required MISO to request numerous clarifications. These errors reduced the quality of the proposal.
- Statements on cost containment that were confusing and therefore required clarification.

MISO also identified minor issues in proposals that did not require clarifications but did affect its view of those proposals. These issues included not providing round numbers in tables as requested, grammatical and punctuation errors that suggested content was not closely reviewed, and submission of certain documents more than once.

Although these minor 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.

CTA 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.

To comply with these requirements, MISO identifies developers that were not selected as A, B, C, etc. when it describes confidential information.

Communication and Information Protocols

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

- **Project Information Kept Confidential:** Information deemed confidential under the Tariff related to competitive projects will be treated as commercially and competitively sensitive.
- **Communications to Be Coordinated:** MISO aims to coordinate all communications with interested stakeholders regarding RFPs, the evaluation process, selection report, and variance analysis. Please refer all questions to MISO Client Relations at CTA@misoenergy.org and not to individual MISO personnel.
- **Questions Will Be Answered Transparently:** MISO will publicly post questions it receives and vetted answers on the Competitive Transmission Administration webpage.

- **Project-Specific Questions to Be Directed to MISO:** Once an RFP is issued for a Competitive Project and until the Selection Report is issued, all questions regarding that project must be directed to MISO and not to interconnecting incumbent transmission owners. MISO will process these questions in accordance with MISO's Business Practices Manual No. 027.

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

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

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

All MISO employees and consultants followed the confidentiality and communication protocols established by MISO throughout the competitive developer selection process, and restricted access and discussions about proposals not only as to external parties, but also to other staff members within MISO who were not part of the MISO evaluation team. In addition, to protect the integrity of the evaluation process, MISO has kept the identities of its independent consultants confidential and required those consultants to attest they did not have a conflicts 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.

Comparative Analysis

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

Figure 3 identifies the four evaluation criteria and respective weights identified in the tariff, and MISO's categorizations. All proposals earned the full 5% in Planning Participation. The figure also identifies how each proposal ranked in each criterion.

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.

II. Summary of Proposals

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

Figure 4. Design characteristics

	101A /102A	103B
Conductor		
Trade name and type	Finch ACSS	Cardinal ACSS (TW)
Kcmil (Misch alloy core)	2-1113 54/19 (MA2)	2-954 20/7 (MA3)
Summer emerg. rating > RFP (3000)	27%	16%
Emergency amps (summer)	3810	3468
Max. operating temp. proposed (F°)	356°	392°
Transmission structures		
Type	H-frame	Monopoles
Material	Weathering steel	Spun concrete
Total structures	127 / 162	169
Deadends (Angled & non-Angled)	26 / 31	24
Backfill around direct embed tangents	Crushed rock	Concrete
Deadend foundation	Drilled Piers	Direct embed, guy, drilled pier
Circuit capability	Single	Single
Tangent insulators	Polymer I-String	Polymer Braced Post
Max/avg feet between structures	2,714’ / 967’	2,639’ / 802’
Deadends (max miles between)	3.2 / 2.9	4
Deadends (avg miles between)	0.9 / 1.0	1.1
Typical shielding angle (degrees)	9	24
River Crossing		
Total structures	2	2
Type	H-frame	Steel Lattice
Material	Weathering steel	Galvanized steel
Backfill	Concrete	Concrete
Foundation	Drilled pier	Helical pile cap

Figure 5. Cost characteristics

	101A / 102A	103B
Estimates		
Capital Cost ($M, without AFUDC)	$84 / $104	$78
Revenue Requirement ($M, PV)	$79 / $97	$62
Equity in capital structure	50%	45%
Finance costs during construction	AFUDC	AFUDC
Commitments		
Annual revenue caps (full years)		40
Max base return on equity	9.8%	
Max total return on equity		9.8%
ROE decrement on capital increases	✓	
Equity in capital structure	50%	

Figure 6. Project Implementation characteristics

	101A /102A	103B
Proposed in-service date	June 30, 2031	Dec 16, 2031
Guaranteed in-service date		June 1, 2032
Penalty for exceeding ISD		ROE bp/mo
Route mileage	23.4, 30.6	25.5
Parcels, landowners	63, 49 / 124, 106	88, 64

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

1. Cost & Design

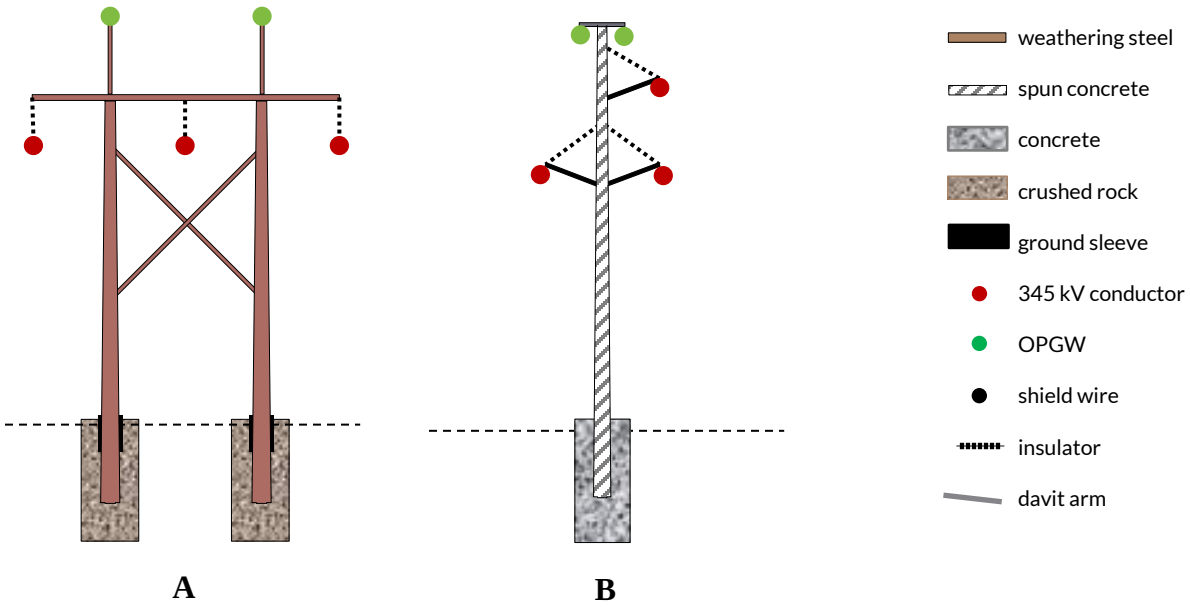
MISO must evaluate each proposal's electrical design, structural design, estimated capital cost, and estimated annual transmission revenue requirements. This evaluation constitutes 30% of MISO's decision in this project.

For Cost and Design, MISO categorized Republic as Best and Developer A as Good.

1A. Transmission Line Design

Figure 7 illustrates the typical electrical and structural transmission designs of the tangent structures proposed by the developers.

Figure 7. Proposed tangent transmission designs



Electrical Design of Transmission Lines

A competitive proposal that includes a transmission line must describe the characteristics of all proposed conductors, ground wires, and communication wires.

Developer A proposed to use double-bundled Finch 1113 54/19 ACSS conductor with an MA2 core for the majority of RIKY. It collaborated with a manufacturer to design a specialized conductor to cross the Ohio River because this conductor would allow it to keep the height of the structures on either side of the river under 200 feet. It would operate both conductors at a maximum planned operating temperature of 356 F°.

Republic proposed to use double-bundled Cardinal 954 20/7 ACSS TW conductor with an MA3 core for RIKY. It would use double-bundled Canvasback 954 30/19 ACSS conductor with an MA5 core to cross the Ohio River. This conductor will require structure heights of almost 300 feet on either side of the river. It would operate both conductors at a maximum planned operating temperature of 392F°.

MISO determined both proposed electrical designs will meet RIKY's electrical requirements. Both developers used Option 2 as specified in BPM-029 to determine the normal and emergency ampacity ratings for their proposed conductors.

MISO also determined the proposed conductors will not exceed the Environmental Protection Agency's guidelines for audible noise. The developers stated there are no federal, state, or local noise regulations with which this transmission project must comply.

Developer A proposed to use two 48-fiber OPGW cables for line shielding and relay communication. Republic proposed to use two 72-fiber OPGW cables. The RIKY line will not be long enough to need a repeater station to boost fiber optic signals.

Structural Design of Transmission Lines

A competitive proposal that includes a transmission line must describe the design attributes of the tangent, running angle, and dead-end structures that will support the conductors. It must also explain all grounding, lightning, galloping, and vibration strategies.

Developer A proposed to use H-frame structures made with weathering steel for tangent structures. It stated these structures will be shorter than monopoles and reduce foundation sizes in poor soil conditions. The structures will be directly embedded in the ground with ground sleeves and a protective coating and then backfilled with aggregate. If certain soils create a high risk of corrosion, it may use galvanized poles in those areas. The structures will support a horizontal phase configuration with steel crossarms and polymer suspension insulators.

It will use self-supporting H-frames on drilled piers for its deadend structures and two custom steel H-frame suspension structures to cross the Ohio River.

Republic proposed to use pre-stressed spun concrete poles for tangent structures. It stated concrete poles reduce contractor labor, have shorter lead times, and are less expensive than steel poles. The poles will be directly embedded in the ground and backfilled with concrete. These structures will not need corrosion protection. It proposed to principally use guyed concrete poles for its deadend structures.

It will use two lattice structures to cross the Ohio River.

Both developers explained there will be no need for transposition on RIKY due to its line length.

Developer A will protect RIKY from lightning with two OPGW cables and a 9-degree shielding angle on tangent structures. Republic will protect RIKY from lightning with two OPGW cables and a 24-degree shielding angle on the tangent structures. It performed a rolling sphere analysis and confirmed that its design offers adequate lightning protection.

Both developers evaluated the galloping and vibration performance of their proposed lines, and all studies included adequate buffers between the ellipses.

Each developer stated it has obtained or reasonably expects to obtain all necessary authority to develop and operate the RIKY facilities.

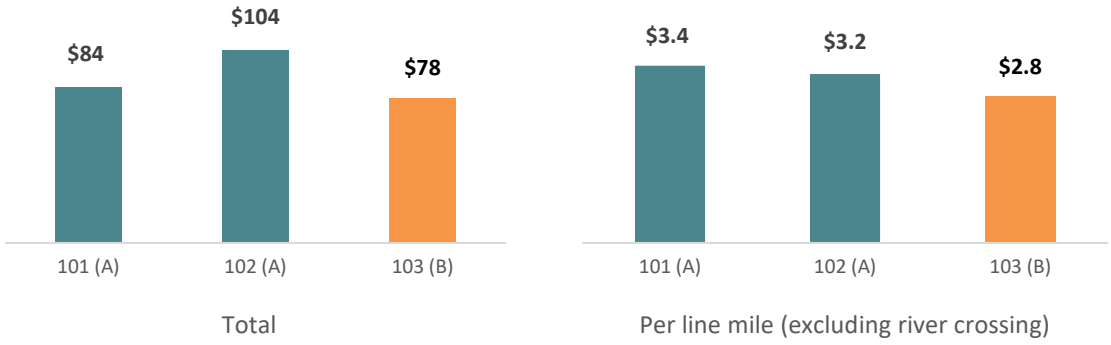
1B. Capital Cost

Each proposal included a completed Project Cost Workbook (PCW), which allowed MISO to understand the details of the proposal's estimated capital costs. 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.[2]

Both developers intend to accrue an allowance for funds used during construction (AFUDC) and then capitalize the total as plant when the project goes into service. MISO removes AFUDC from project capital costs when comparing estimates since developers may ask FERC to recover a return on Construction Work in Progress (CWIP) instead of capitalizing constructing financing costs as AFUDC. The cash flows related to a developer's chosen method for recovering financing costs incurred during construction are included in each proposal's present value of revenue requirement (PVRR), which is discussed in the next section.

Figure 8 illustrates the estimated capital costs of the RIKY proposals. The second chart identifies the cost per line mile exclusive of the Ohio River crossing.

Figure 8. Estimated capital cost ($M)



Developer A estimated a capital cost of $84 million for Proposal 101, which was predominantly based on Finch ACSS conductor, directly embedded weathering steel H-frame structures with crushed rock backfill, and a 23.4-mile route through mostly agricultural land. It estimated a capital cost of $104 million for Proposal 102, which was based on the same design as Proposal 101 but would run more toward the east, parallel an existing high-voltage transmission line, and be 30.6 miles.

Republic estimated a capital cost of $78 million for Proposal 103, which was predominantly based on Cardinal ACSS conductor, spun concrete structures with concrete backfill, and a 25.5-mile route.

[2] Attachment FF. Section VIII.E.1.1(a)

1C. Annual Transmission Revenue Requirement

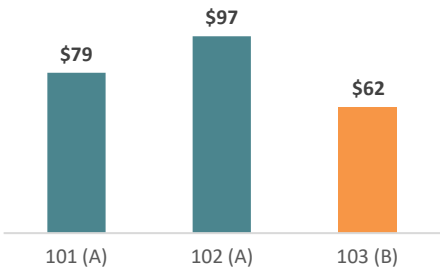
A competitive developer must estimate an annual transmission revenue requirement (ATRR) for the first partial year the project will be in service and each of the next forty years. MISO calculates the present value of those revenue requirements (PVRR) by discounting each ATRR by a 7.1% discount rate.

Subject to FERC approval, a developer may expense or capitalize carrying costs it incurs prior to placing a competitive facility into service. If the developer expenses those costs, it will report them as a "return on construction work-in-progress (CWIP)" and recover them in its revenue requirement prior to placing the asset into service.

If the developer capitalizes those costs, it will record them as "Allowance for Funds Used During Construction" and then add them to the facility's gross plant when it places the facility into service. Both developers proposed to capitalize those costs as AFUDC and then depreciate the balance over the project's lifetime.

Figure 9 illustrates the 40-year PVRR of each proposal.

Figure 9. Estimated 40-year PVRR of RIKY proposals ($M)



Both developers stated their proposals either had or may have a "proposal participant." However, MISO's tariff defines this term as an entity that will co-own a competitive project and will rely on the developer to construct and place the project into service. Because a developer may not change its proposal after the date the proposals are due, this agreement between the two owners must be executed when the proposal is submitted. Neither developer had a Proposal Participant with their submitted Proposal.

1D. Cost Containment

A competitive developer may commit to limit the revenue it will request to recover on a project.

Developer A, in both of its proposals, committed to:

1. Cap its base return on equity at 9.8%, "not inclusive of potential ROE adders." Because FERC's current ROE adder for transmission owners that are part of an RTO is 0.50%, Developer A could earn an ROE on RIKY of at least 10.30%.

2. Reduce its base ROE to 9.15% or 8.50% if the capital cost, exclusive of AFUDC, of the project assets in Kentucky exceed certain amounts. In Proposal 101, these amounts are $80 million and $85 million, respectively. In Proposal 102, these amounts are $100 million and $106 million, respectively. It stipulated it would also recalculate the project's entire AFUDC balance if spending surpassed these amounts.
3. Cap the equity in the project's capital structure at 50%.
4. Not request a return on CWIP but instead accrue AFUDC.

Republic committed to:

1. Cap its total return on equity at 9.8%.
2. Cap its recoverable revenue for each of the project's first 40 full calendar years at 5% greater than the annual revenue it estimated for the project. It stipulated each annual cap could be increased by the amount by which the adjusted cap exceeded its eligible costs the previous year. However, each annual cap could not be increased by any amount by which its eligible costs exceeded its adjusted cap the previous year.

   It stipulated there will be no cap in the project's first year if RIKY is not placed into service on January 1 of that year. It also stipulated each annual cap will increase by 4% for every mile the final RIKY transmission line, which is estimated at 25.5 miles, exceeds 28 miles.
3. Reduce the project-specific ROE by 0.025%, to a maximum of 0.30%, for every month it cannot place the project into service past June 1, 2032, for reasons not listed as exclusions in its cost containment attachment.
4. Not request a return on CWIP but instead accrue AFUDC.

Figure 10 summarizes these commitments.

Figure 10. Cost commitments

	101 (A) / 102 (A)	103 (B)
Annual revenue caps (full years)		40
Cap adjustment based on mileage		✓
Max base return on equity	9.8%	
Max total return on equity		9.8%
ROE adjustment based on capital cost	✓	
Equity in capital structure	50%	

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, and equity in capital structure. MISO applied all proposed cost caps in each scenario. Republic's estimated PVRRs were less than those of Developer A across all evaluated scenarios due to its strong annual revenue caps.

MISO determined Republic's proposed cost containment was significantly better than that of Developer A. Republic's commitment to cap the revenue it could recover for the project in each of the project's first 40 full calendar years at 5% greater than its estimated annual expenses provided MISO a clear benchmark against which to compare other proposals.

Republic's stipulation that those annual caps would increase by 4% for every mile the project transmission line exceeded a length of 28 miles created a logical and measurable relationship between routing and permitting risk and customer value. This stipulation also reduced the risk of its proposal by providing cost clarity if a regulator required it to alter its proposed route. It further decreased the risk of its proposal by stipulating that cost increases due to poor subsurface conditions would not be excluded from its proposed caps.

These types of commitments – base annual revenue caps combined with clear treatment of additional expenses due to state regulatory proceedings and common risks – help MISO understand the risk and return associated with a competitive proposal.

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.

For Project Implementation, MISO categorized Republic as Best and Developer A as Good.

Both developers established they have significant and sufficient high-voltage transmission construction experience. Developer A has transmission assets in Northern Kentucky and will use a local utility to operate and maintain RIKY. Republic has transmission assets in Indiana and has previously partnered with Indiana utilities and contractors. MISO determined that both developers are equally capable in management and experience.

Although both developers demonstrated they have the ability and experience to complete the project, MISO determined Republic's implementation plans were more certain and risk averse.

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.

If the developer can have the project ready for service before the date identified in the RFP, it should state that date and explain how it can achieve it. However, a project can only go into service early if MISO and all interconnecting transmission operators agree on the earlier date. The RFP stated a developer must be able to place the project into service by June 1, 2032.

Developer A stated it could energize RIKY as early as June 1, 2030, but based its two proposals on a June 30, 2031, in-service date. It demonstrated a 71-month critical path to place the project in service. It did not clearly identify the float in its schedule.

Republic stated it could energize RIKY as early as June 1, 2031, but based its schedule on a December 16, 2031, in-service date. It offered to reduce its return on equity by 0.025%, up to a maximum of 0.3%, for every month it is not ready to energize the facilities beyond the June 1, 2032. It demonstrated a 77-month critical path to place the project in service.

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 's principal management team will be in Pennsylvania. Its team will work with personnel from its O&M contractor in Kentucky. It will rely on consultants to manage the project in the field.

Republic's principal management team will be in Missouri. It will contract with a well-known electric infrastructure contractor to build the project. This contractor has successfully constructed several transmission lines for Republic, including the Duff-Coleman transmission line in Indiana, which was MISO's first competitively administered project. Its management will be based in Kentucky. Republic will oversee the contractor and will have a field manager in Kentucky.

Developer A attached a risk register that identified 16 risks to the project in six categories. The descriptions of risk and the planned mitigation were not very detailed. MISO is concerned about the lack of differences between the developer's risk register for its greenfield route and the register for its brownfield route. It stated that it weighted the contingency identified in its risk register into its proposed "declining ROE cost containment structure" rather than carrying contingency dollars in its project estimate.

Republic attached a risk register that identified 63 risks to the project in four categories. It ran a Monte Carlo analysis that established 75% of the simulated outcomes resulted in less than the $5.5 million contingency it added to its proposed capital cost. MISO saw a clear relationship between the risk register and many decisions in this developer's proposal. MISO determined this risk register was the best submitted.

MISO recognizes that the quality of a risk register is not absolutely related to the number of items identified. One developer may combine similar risks into a single category in its risk register while another may break down risks into more detail. Furthermore, one developer may reduce risk through futures contracts while another may maintain a certain exposure to risk, which could both positively and negatively affect transmission customers through falling or rising cost inputs.

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 explained it operates almost 700 miles of 345 kV transmission lines in Kentucky. Its O&M contractor currently operates 82 miles of 345 kV line in Kentucky. This contractor owns and maintains the 3.3-mile Kentucky portion of the 31-mile Duff-Coleman 345 kV line, which was the first competitive project MISO administered. Developer A established that its team for RIKY is substantially the same as the teams that have built its recent projects.

Republic explained its owners have in total built and currently operate over 500 miles of 345 kV transmission lines in Indiana, Texas, and New York. It discussed three 345 kV lines, each over 25 miles in length, its owners had recently built, and it stated its construction contractor was a part of all three projects. It also stated that its project director for RIKY directed two of the projects.

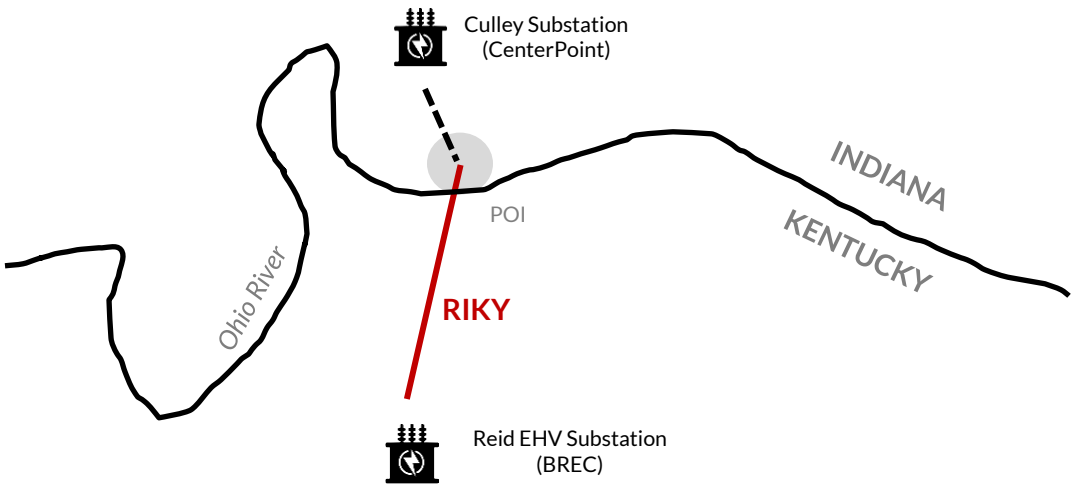
Developer A and Republic have built and currently own and operate enough transmission assets in the region and around the country to establish the ability to execute RIKY. MISO did not conclude that either developer has a material advantage over the other in management ability.

2B. Routing and Siting

A competitive developer must explain the prudence of each proposed transmission line route and substation site included in the project. It must discuss the constraints in the project areas and explain how each route and site is optimal given those constraints. It must also discuss the due diligence the developer performed to reduce the risk of the project. Finally, it must explain how the developer will obtain the necessary permits and acquire the necessary land to execute the project.

Figure 11 illustrates the general relationship of the existing and proposed transmission assets relevant to RIKY. RIKY will be a new single-circuit 345 kV transmission line between BREC's existing Reid EHV Substation in Northern Kentucky and a dead-end structure on the Indiana side of the Ohio River. At this structure, RIKY will interconnect with a 345 kV line CenterPoint will build from the structure to its Culley Substation.

Figure 11. RIKY 345 kV facility map



The RFP stated cost certainty, design flexibility, and schedule impact mitigation regarding the point of interconnection with CenterPoint is an important aspect of the project.

Line routing

Developer A first proposed a 23.4-mile route with a 150-foot ROW that runs straight between Reid and the POI. It separately proposed a 30.6-mile route with a 150-foot ROW that jogs east to parallel and share ROW with an existing transmission line for 22 miles. The portion of the route that would parallel the existing line would only require the developer to acquire an incremental 87.5-feet of ROW.

It visited the project site multiple times and explained how its field and desktop research supported its proposed routes. It identified three areas that represent critical siting constraints: congestion around Reid substation, crossing the Green and Ohio rivers, and pivot irrigation between those rivers. Although

Developer A stated "siting structures outside of the pivot sweep is a critical path constraint," MISO observed multiple structures on Developer A 's KMZ file that were within a pivot sweep.

It consulted with USACE (Louisville District) regarding the project's section over the Ohio River and with the Kentucky Siting Board.

Republic proposed a 25.5-mile route that runs toward the west of the project area. It drove the site twice and its construction contractor flew over the site once prior to submitting its proposal. Although one of its key conclusions from those visits was the presence of subsurface drainage systems in agricultural fields, it did not explain how that affected its routing strategy.

Like Developer A , it consulted with USACE, but it also consulted six other federal, Kentucky, and Indiana agencies. It stated its experience building another transmission line over the Ohio River was valuable to understanding clearance requirements.

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.[3] Both developers demonstrated knowledge of and experience with the Kentucky procedures for siting a transmission line. MISO determined both are equally qualified in this respect.

ROW and Land Acquisition

A competitive proposal must describe a developer's abilities to acquire right-of-way 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 right-of-way.[4]

Developer A 's first proposal would require purchasing 63 parcel easements from 49 landowners. Eight of the properties already have transmission lines traversing them. Its second proposal would require purchasing 124 parcel easements from 106 landowners. 102 of the properties already have transmission lines traversing them. Republic's proposal would require purchasing 88 parcel easements from 64 landowners.

Both developers established they have the experience and resources to acquire ROW and land for the project. Both adequately summarized the strategies they will use to inform and negotiate with landowners, and both demonstrated an adequate understanding of Kentucky's and Indiana's eminent domain laws.

[3] RIKY RFP Part 2, page 21

[4] MISO BPM-27 Section 7.3.5

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 RIKY 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.[5]

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.

Both developers identified the internal teams and external consultants that will complete project engineering and surveying. Both developers stated they have completed up to 60% of the project engineering. MISO observed Developer A had a more complete 60% package which included a steel pole vendor calculation package.

Material Procurement

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

Both developers identified the principal contractors they will use to manage project procurement. Both contractors have worked for the respective developer on previous transmission projects.

Both developers provided the preferred suppliers and expected lead times for the major material they will use for the project. They both provided adequate letters of support from their material vendors and explained how the float in their project schedules would allow them to manage construction if a lead time became unusually long.

Both developers identified potential material laydown yards and explained how they chose those locations and how they would manage the material.

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.[6]

[5] MISO BPM-27 Section 7.3.6

[6] MISO BPM-27 Section 7.3.8

Developer A will use a contractor to implement QA/QC for the project. Its contractor is currently implementing QA/QC across Developer A 's entire system. It will work independently from Developer A 's proposed electrical contractor, and Developer A listed the critical hold points it will inspect.

Republic will similarly depend on a contractor to construct the project and implement QA/QC. It verified its contractor worked on all the projects identified previously.

Both developers submitted examples of the QA/QC forms they will use for the project.

Commissioning

A developer must describe how it will commission and energize a competitive facility.[7] It must identify and explain the qualifications of the internal personnel or contractors that will perform the work. It must discuss equipment testing, coordination with interconnecting Transmission Owners, and final inspection procedures. Both developers adequately described their commissioning processes, identified personnel who will perform the work, and discussed necessary coordinated procedures.

2E. Financing and Capital Resource Plan

A competitive developer must describe the capital it will use to fund the project. It must discuss expected cash flows, significant expenditures, sources of emergency capital, and credit ratings, and it must provide financial statements.[8]

Both developers submitted financing and capital resource plans that demonstrated their individual ability to fund the construction of the RIKY project. They both proposed corporate financing through construction by funding the project from cash on hand and the existing credit facilities.

2F. Safety

A competitive proposal must describe the general and specific aspects of the project safety plan and include the OSHA/DART reports of the entities that will be constructing the project.[9]

All developers submitted the table of contents of their site-specific safety plans and at least five years of safety data of their primary construction contractors. MISO determined all proposals contained satisfactory safety information.

7 MISO BPM-27 Section 7.3.9

8 MISO BPM-27 Section 7.3.10 through Section 7.3.16

9 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. The RIKY RFP stated operations and maintenance coordination is an aspect of RIKY MISO anticipates may be particularly important.

Both developers established that their chosen O&M providers have significant experience operating and maintaining high-voltage transmission in the project area.

Although the degree to which the developers will rely on contractors, will use established field offices, and explained certain procedures varied by proposal, MISO concluded the differences were not enough to be a significant factor in selecting the RIKY developer.

For Operations and Maintenance, MISO categorized Republic as Best and Developer A as Better.

3A. Normal Operations

This O&M topic consists of a developer's plans for incorporating the competitive facilities into a Local Balancing Authority, monitoring and controlling real-time operations, switching activities on project transmission lines or substations, and coordinating planned outages.

Local Balancing Authority Area

A competitive proposal must describe how the project will be incorporated into a MISO Local Balancing Authority Area (LBAA).[10] Once the RFP was issued, developers were asked to direct all questions related to RIKY and the RFP to MISO.[11] Unless there were existing arrangements among the developers or their affiliates and the Balancing Authority, any new LBAA agreements must be negotiated after the Selected Developer and Alternate Developer are selected. Both developers explained how they would incorporate RIKY into an LBAA.

Real-Time Operations Monitoring and Control

A competitive developer must describe how it will monitor project transmission lines and monitor and control project substations 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,

[10] MISO BPM-027 Section 7.4.1

[11] MISO BPM-027 Section 5.7

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 RIKY.[12]

Developer A will contract with a local utility to monitor RIKY. This utility currently operates a primary control center in Kentucky that monitors 1,300 miles of transmission (82 miles at 345 kV) and 29 substations in MISO. It also has a backup control center nearby that can operate and maintain its assets if necessary. Its electronic and physical transfer times between its primary and backup control centers meet NERC standards.

Republic will also contract with a separate local utility to monitor the RIKY line. This utility currently operates a primary control center in Indiana that monitors 1,700 miles of transmission (88 miles at 345 kV) and 28 substations in MISO. It also has a backup control center nearby that can operate and maintain its assets if necessary. Its electronic and physical transfer times between its primary and backup control centers meet NERC standards.

MISO determined that both control centers are currently adequately staffed with NERC-certified system operators. Each developer identified the SCADA system it will use to monitor and control project facilities. Both developers adequately explained the qualifications and training of the control center staff they would rely on.

Switching

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. The switching activities may include writing orders, issuing tags or clearances, and switch execution in the field.[13]

RIKY will not require the developer to install a field-mounted switch on a project facility. However, the O&M providers the developers will use for RIKY already perform switching activities on some of their transmission assets and MISO determined those providers could successfully perform switching if needed.

Planned Outage Coordination

A competitive developer must identify and describe the labor, expertise, tools, and base of operations for coordinating planned outages for the competitive facilities. All developers provided sufficient information in this area that demonstrated their abilities to meet this requirement as required in the RFP.

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. MISO determined that Developer A is slightly better positioned than Republic to perform non-normal operations for RIKY.

[12] RIKY RFP, Part II, page 30

[13] MISO BPM-27 Section 7.4.3

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] RIKY does not include a substation.

Developer A will use its O&M contractor to respond to forced outages. That contractor will respond from its new operations center nearby in Kentucky, which will be a 20-minute drive from the farthest point of RIKY. Developer A identified the contractor's forced outage response personnel and the procedures they will execute.

Republic will use its O&M contractor to respond to forced outages. That contractor will respond from its local dispatch centers, which are a 1–2-hour drive from the farthest point of RIKY. Republic identified the contractor's forced outage response personnel and the procedures they will execute.

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.

Developer A stated that its O&M contractor will be principally responsible for emergency repair. It identified the personnel and subcontractors that would respond if RIKY were to be forced offline.

The contractor is a member of a large cooperative. This cooperative procures labor and equipment from regional cooperatives when one of its members needs assistance. Developer A cited major ice storms in Kentucky in 2021 as an example of how the cooperative can mobilize resources across the region. The contractor will use a subcontractor if live-line maintenance is necessary.

Republic stated that its O&M contractor will be principally responsible for all repair and restoration. It identified the personnel and outside contractors that would respond if RIKY were to be forced offline. It will use a contractor if live-line maintenance is necessary.

Republic's O&M contractor is not a member of an electric utility mutual assistance group. Although it stated its strategic partnerships and contracts ensure scalable and dependable emergency response without reliance on formal group membership, it did not provide support for those statements.

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.

Both developers explained how they would rebuild RIKY if five miles of the line was damaged in a catastrophe. They adequately explained under what circumstances they would temporarily rebuild RIKY to

[14] MISO BPM-027 Section 7.4.4

[15] RIKY RFP Part II, page 32

get the line in-service more quickly and they demonstrated it has the procedures, personnel, and materials in place to accomplish this.

3C. Maintenance

A 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 explained its O&M contractor will conduct all maintenance for RIKY. That contractor currently maintains over 1,300 miles of transmission in Northern Kentucky, including transmission adjacent to its proposed routes. RIKY would add between 23 and 31 miles of 345 kV transmission maintenance to the 82 miles of 345 kV transmission the contractor already maintains.

Developer A submitted several maintenance procedures that its O&M contractor already follows and will continue to follow for this project. The contractor will integrate maintenance for RIKY into its current operations. Its maintenance team will operate from its Kentucky operations center, 20 minutes from RIKY. Developer A reported the planned frequency with which the contractor will monitor and maintain RIKY aerially and on the ground. It also reported that the contractor's 345 kV system has experienced 0.83 outages per mile on a 100-year basis.

Republic explained its O&M contractor will conduct all maintenance for RIKY. This contractor currently maintains over 1,700 miles of transmission in Indiana, including transmission in the project area. RIKY will add 26 miles of 345 kV maintenance to the 88 miles of 345 kV transmission the contractor already maintains.

Republic submitted several maintenance procedures that its contractor already follows and will continue to follow for this project. The contractor will integrate maintenance for RIKY into its current operations. It will manage project maintenance from its headquarters in Indiana, and its maintenance personnel will be principally based at its locations in Southern Indiana. Republic reported the planned frequency with which the contractor will monitor and maintain RIKY aerially and on the ground. It also reported that the contractor's 345 kV system has experienced 0.55 outages per mile on a 100-year basis.

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

[16] MISO BPM-27 Section 7.4.8

will be located, and how quickly the spare parts will be available if needed.[17] A developer must also describe any spare parts with a lead time of at least one year that would need to be studied as part of TPL-001-4.[18]

Developer A identified the quantity and location in Kentucky, Maryland, and Pennsylvania of the spare parts it will own and have available for RIKY. It also identified the quantity and location in Kentucky of the spare parts its O&M contractor will own and have available for RIKY. It explained the entities that will manage the storage facilities and the inventory. It explained the time it would take to deliver the parts from each location.

Developer A stated the number of steel structures to be used for the project and the number of "pole sections" that will be available as spares, but it did not provide additional information on the ratios of all other material to the planned inventory amounts.

It stated failures of 345 kV transmission are infrequent and its affiliates rarely draw from its large supply of inventory. It stated the only parts it will capitalize as plant prior to being put into service for RIKY are one reel of its principal ACSS conductor and one reel of OPGW. Finally, it provided the expected life of each major part and explained how its spare material strategy minimizes the risk that the spares would not be available for RIKY if needed.

Republic identified the quantity and location in Indiana of the spare parts it will own and have available for RIKY. It also identified the quantity and location in New York and Texas of the spare parts its majority owner LS Power will own and have available for RIKY. It explained the entities that will manage the storage facilities and the inventory. It explained the time it would take to deliver the parts from each location.

Republic showed the number of each type of major part to be used for the project and the number of those types that will be available as spares and calculated each ratio. It then explained why each ratio was prudent for the project. It stated the only parts it will capitalize as plant prior to being put into service for RIKY are its spare structures. Finally, it provided the expected life of each major part and explained how its spare material strategy minimizes the risk that the spares would not be available for RIKY if needed.

3D. Financial Strategy for Maintenance

A competitive proposal must describe how the developer will finance activities due to normal wear and tear of project assets.[19] Both developers will fund the project operations and maintenance by maintaining cash reserves sufficient to fund immediate needs. If additional major financing needs arise, credit facilities will be available. Both developers established their ability to raise capital to replace facilities lost due to catastrophic destruction.

[17] MISO BPM-27 Section 7.4.7

[18] RIKY RFP, Part II, page 34

[19] MISO BPM-27 Section 7.4.9

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 RIKY facilities.[20] It must attach both a table of contents for detailed safety plans and programs and its safety record report.

Both 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.

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.

Both developers received planning participation credit for this project.

[20] MISO BPM-27 Section 7.4.10

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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).

CCN

Certificate of 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. The MISO Tariff provides that the Executive Committee has exclusive and final authority to approve or reject Transmission Developer Applications and certify Transmission Developer Applicants as Qualified Transmission Developers.

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, all in accordance with the MISO Tariff. The competitive transmission process includes the competitive developer qualification process and the competitive developer selection process.

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 Implementation Cost

For purposes of this report, project implementation cost (or simply "PI cost") refers to the cost estimate (in nominal dollars) for fully implementing the proposal and placing the project into service. Project implementation cost is calculated in the Proposal Template Workbook based on required inputs for cost categories explained in Part 2 of the RFP package.

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.

Cardinal

Cardinal is a trade name for a conductor variety of a specific gauge (as measured in kcmil), with a particular combination of steel and aluminum strands—in this case, 954 kcmil 20/7, denoting 20 aluminum strands surrounding seven steel strands in each conductor bundle for the trapezoidal shaped conductor.

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.

Finch

Finch is a trade name for a conductor variety of a specific gauge (as measured in kcmil), with a particular combination of steel and aluminum strands—in this case, 1113 kcmil 54/19, denoting 54 aluminum strands surrounding 19 steel strands in each conductor bundle.

Galloping

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

Galvanized steel structure

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

Guying (or guyed)

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

Kcmil

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

MA2

Core standard-strength steel strands available in ACSS.

MA3

Core high-strength steel strands available in ACSS.

Monopole

A single primary structure (typically wood, steel, or concrete) that supports an overhead transmission line. Tangent monopole structures typically have davit arms or braced post to position conductor assemblies a minimum distance away from the structure.

Optical ground wire (OPGW)

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

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.