Document Accession #: 20220930-5432 Filed Date: 09/30/2022

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Transmission Planning and Cost Management	)	**Docket No. AD22-8-000**

PRE-TECHNICAL CONFERENCE STATEMENT OF PALLAS LEEVANSCHAICK ON BEHALF OF POTOMAC ECONOMICS

PANEL 5: LOCAL AND REGIONAL RELIABILITY TRANSMISSION PLANNING CRITERIA AND COST MANAGEMENT

We appreciate the Commission's efforts to improve the processes for adopting transmission solutions to address reliability needs at the local and regional levels. Unlike generation, which is compensated in the wholesale market for energy, ancillary services, and capacity, most areas rely on centralized transmission planning processes and regulated cost-recovery to guide investment. Ideally, such processes should facilitate competition among transmission developers and identify efficient transmission investments when they are more cost-effective than generation and storage solutions.

The Commission has required ISOs and RTOs to implement processes for identifying reliability needs and adopting solutions, working toward making these processes more transparent, non-discriminatory, and competitive. Ideally, reliability needs are evaluated periodically in public assessments based on transparent reliability criteria at the regional level and local level. These public assessments provide information about where generation and

storage may be located to satisfy reliability needs and when it may be necessary to solicit proposals for transmission solutions (because generation and/or storage solutions are not forthcoming).

Notwithstanding, reliability planning processes should evolve to be more transparent and competitive, especially as the pace of resource mix changes increases the need for new transmission. Rapid changes in the resource mix will require more frequent reliability assessments, creating more circumstances when efficient transmission projects are justified by a combination of benefits, including reliability, congestion relief, and environmental policy. This will require reliability need assessments to be more transparent. It will also be essential to quantify benefits that can be compared to competing technologies and/or other transmission solutions that could fulfill the same reliability need. This is complicated by the fact that some of these alternatives would provide a different package of benefits. In addition, since many projects provide multiple benefits, it will be important to evaluate these transparently so that the cost allocation can be more straightforward and less contentious.

In this technical conference, the Commission seeks input to increase transparency, oversight, and cost effectiveness through enhanced cost management measures and processes. These comments provide several recommendations to enhance existing processes.

I. Cost Management through Better Identification of Needs and Project Selection

We recommend the Commission require enhancements to the reliability planning processes that reduce costs by increasing transparency and opportunities for competition among solution providers. Specifically, each reliability planning study should provide comprehensive information regarding modeling assumptions, the reliability criteria driving the need, the size and timing of the need, and whether the underlying reliability criteria is reflected in the pricing and

compensation of existing wholesale market products. Furthermore, each assessment of potential solutions should provide a comprehensive estimate of the benefits of each solution, including benefits compensated through the wholesale market and benefits not reflected in the wholesale market. These changes would also tend to make cost allocation fairer, more efficient, and less contentious.

Planning reliability need studies should provide comprehensive information regarding modeling assumptions and the reliability criteria driving the need. This information will enable the planner to discuss the size and timing of the need and how it would be affected by the entry of new resources and/or retirements of existing resources. This would also allow stakeholders to consider whether the a reliability need will likely be addressed by market-based investment or if it will require a non-market transmission solution. This is important because it is highly desirable to avoid causing non-market transmission solutions to inefficiently preempt market-based investments that would address the same needs.

Since this may be impossible to avoid entirely, planners should provide detailed information about the underlying reliability criteria and assumptions driving needs that will allow generation developers to make better investment decisions. This will also allow planners and stakeholders to better anticipate whether market-based investment is likely to address future reliability needs or if they will likely require regulated transmission solutions.

When evaluating competing solutions to a reliability need, the planning study should provide a comprehensive assessment of the benefits of each proposed solution. Narrow assessments of the reliability benefits that do not quantify the capacity value, congestion relief, and reliability benefits of each solution are likely to select solutions that are sub-optimal. Rather, the planning study should assess the net cost of each solution, which equals the cost of the

project minus the wholesale market value of capacity and congestion benefits from the project. Many environmental benefits are indirectly reflected in wholesale market prices because of the effects of emission allowance prices and REC prices on LMPs. Planners must avoid double counting such benefits, although any additional environmental benefits could be quantified for consideration by stakeholders.

Under this approach, the planner would estimate the net cost of each proposed solution, which would equal the projected cost of the project minus the net present value of projected congestion revenues the day-ahead and real-time markets and marginal reliability value over the economic life of the project. Sound capacity expansion modeling must be used to ensure reasonable benefit estimates for future periods because assumptions regarding where new generation is entering the system and where existing generators are retiring can have pivotal effects on the estimated benefits.

Estimating these benefits accurately is key because projects with higher capital costs may ultimately have the lowest *net costs* if they generate large market benefits. Therefore, robust methods for estimating the wholesale market benefits of each proposal are key. This is increasingly important as intermittent renewables are located outside load centers and additional transmission investments for reliability will tend to make renewables more deliverable.

For most efficient transmission projects, the project costs will be fully or mostly defrayed by the projected wholesale market revenues, resulting in a net cost that is small relative to the overall project cost. This would reduce the amount of costs that must be allocated to specific load customers. Thus, better recognition of the wholesale market benefits of reliability solutions would streamline cost allocation by making it fairer.

II. Enhanced Transmission Oversight

The supplemental notice for the technical conference suggests that the Commission is considering whether independent transmission monitoring would improve transparency and cost-effectiveness. As the independent market monitor for four of the nation's RTOs/ISOs, we have extensive experience monitoring a wide array of transmission issues and have a unique perspective on the value of independent monitoring. We believe that a similar function performed within the transmission planning processes would help ensure that the Commission's transparency goals are met.

We recommend establishing requirements in RTO/ISO markets for independent transmission system monitoring of the transmission planning process and related costs. First, it would help validate and provide transparency regarding the identification of reliability needs and the calculation of benefits. These areas depend on a wide range of assumptions. The effects of the assumptions increase the further into the future the planning study extends. Hence, requiring an independent review of these assumptions and of the sensitivity of the planning results to them would be highly valuable.

Second, an independent transmission monitor would also help ensure that the most economic investments are identified. A consistent monitoring process would mitigate any biases in the process. The transmission planning processes will have substantial economic implications for different classes of customers, some of which are far more influential in the RTO than others.

Third, since many involved in the planning process have strong economic incentives to build transmission projects whose cost recovery is guaranteed, and since RTO's have incentives to satisfy their transmission-owning members, an independent transmission monitor can help protect customers from uneconomic transmission investment.

Fourth, an independent monitor would be able to identify valuable recommendations for improvements in the modeling, project identification, and would be able to identify issues in the planning processes and inconsistencies with other processes including the generation interconnection process.

Finally, in non-RTO/ISOs areas, a monitor would bring transparency and independent review and reporting/recommendations where none exists today. We believe, as it has in RTO markets, independent monitoring of the transmission planning process would enhance transparency, confidence, and improve the outcomes. Hence, we encourage the Commission to require independent transmission monitoring in all planning regions.

The Role and Deliverables of an Independent Transmission Monitor

Independent monitors would provide regular evaluations of the planning processes and outcomes and would identify issues. This independent monitor would prepare reports that would contain the findings of its evaluation and recommendations. Requiring monitors to make specific recommendations and issue reports that would prioritize the recommendations would also be valuable.

A monitor would provide the most benefit by providing detailed and ongoing reviews of the planning processes and outcomes. It is likely that this ongoing review will facilitate essential improvements in the planning models and/or processes. In non-RTO/ISO markets, these recommendations would be made directly to FERC and the transmission customers. In RTO/ISO markets, these recommendations would be made to the RTOs and its participants in a manner analogous to the current market monitoring recommendations.

To enhance the effectiveness of the independent monitor, it should have access to the planning models and data to develop independent scenarios for comparison. These scenarios

would inform recommendations by the monitor for improving the modeling and processes, as well as improvements in the identification and evaluation of competing transmission projects. Results and conclusions from these analyses would be included in reports to transmission customers, market participants, regulators, and other stakeholders.

Transmission Cost Monitoring

The independent transmission monitor would first develop detailed benchmark or "reference" cost components for each identified technology evaluated in the planning process or through independent reviews. This would be based on historical project costs and verifiable estimates of new technologies where historical data is unavailable. A transmission project cost database would be developed and used to compare to assumptions used in the planning process. In addition, monitors could use this transmission cost data to monitor for and flag significant variances between reference costs and encumbered costs of ongoing projects. The transmission monitors could, similar to the review of SSR Costs in MISO, help review and validate costs incurred prior to a project's completion.

Independent monitor review and advice on the design and implementation of planning and cost allocation would likely enhance transparency and efficacy of the processes. As part of this process, the monitor should produce specific recommendations to improve the modeling to account for wider variation in system conditions and new technologies, as well as improvement in process and rules to facilitate more efficient outcomes.

Transmission monitors could help ensure that criteria for determining and allocating costs for local and regional transmission projects are performed accurately. Reliability needs and benefits should inform classification and cost allocation and independent monitors could review project classifications and report on projects where results deviate from recognized principles.

The categorization and allocation may deviate from reliability and benefit principles and yet have broad stakeholder support.

III. Conclusion

We greatly appreciate the Commissions goals in this proceeding. Efficient investment in transmission facilities will be key as the generation portfolio in many regions undergoes a rapid transition. We support the Commission's efforts to increase transparency and reduce costs in the planning processes and strongly believe independent monitoring will help accomplish these objectives, both within RTO/ISOs and in non-RTO/ISO areas. This will lead to informed recommendations for improvements consistent with the Commission's goals.

This concludes our comments.

Respectfully submitted,

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September 30, 2022

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