

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Managing Transmission Line Ratings

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Docket No. AD19-15-000

**OPENING STATEMENT OF MICHAEL KORMOS, SENIOR VICE PRESIDENT,
TRANSMISSION & COMPLIANCE, EXELON CORPORATION**

Commissioners and Commission staff, I would like to start today by thanking you for the opportunity to speak on behalf of Exelon. I hope that sharing Exelon's experience with implementing ambient-adjusted facility ratings will help to inform the Commission's consideration of the issues that Commission staff set forth in its recent Staff Paper on Managing Transmission Line Ratings, including the transparency of the methodologies used to calculate these ratings.

Exelon believes using ambient-adjusted facility ratings in operations is a cost-effective and sensible means of increasing transmission throughput without unnecessarily diverting resources from other higher priority transmission investments. Exelon has adopted ambient-adjusted facility ratings for the transmission facilities of five of our six utilities, with Commonwealth Edison scheduled to complete the transition to ambient-adjusted facility ratings next year.

- The primary challenge that Exelon has faced in implementing ambient-adjusted facility ratings at our utilities is the need to upgrade our Energy Management Systems to accommodate such ratings, as is the case with Commonwealth Edison.

- Adopting ambient-adjusted facility ratings is a good way to more accurately reflect the capabilities of the transmission system, but moving to dynamic line ratings may not provide much additional benefit, especially given the costs of the equipment necessary to implement it. And incurring costs to implement dynamic line ratings on a widespread basis could displace needed transmission investments (and operational and maintenance resources) that could otherwise be utilized to enhance the reliability and resilience of the transmission system in other important ways. Finally, any additional benefits that a widespread mandate to adopt dynamic line ratings might provide above the benefits achieved through ambient-adjusted facility ratings are limited by the nature of system operations – dispatchers can only move generation so rapidly in response to changing line ratings. In sum, dynamic line ratings might be helpful to reducing congestion for specific, targeted applications, but they are not a panacea; significant benefit is already provided by using ambient-adjusted facility ratings, the incremental benefits of moving to dynamic line rating are not expected to be significant, and investing now in dynamic line ratings could distract resources from higher-priority transmission needs.

Our methodologies for establishing ambient-adjusted facility ratings are governed by not only industry-wide standards (like those established by IEEE), but also NERC rules and compliance processes. So while there is some discretion for utilities to reflect their risk tolerances and knowledge of their systems in their facility rating methodologies, it is limited. Importantly, these methodologies and the facility ratings that they produce are subject to periodic audit by the relevant NERC Regional Entity, with the audit report posted publicly on NERC’s website.

- Per the NERC Reliability Standards, we have documented methodologies for calculating these ratings, including our underlying assumptions, design criteria, methods, and processes. Our documentation must also include, per the NERC standards, our consideration of the equipment rating standard(s) used to develop our methodologies, ratings provided by equipment manufacturers or obtained from equipment manufacturer specifications, ambient conditions, and operating limitations (such as temporary deratings of impaired equipment).
- These methodologies are also generally consistent with guidance that PJM provides to its transmission owners through its Manuals and Transmission Owner Guidelines.
- Additionally, the methodologies used to calculate transmission facility ratings are largely consistent across our six utilities (with some variance in the inputs and assumptions based on each utility's unique system characteristics), and we are working toward even greater consistency where appropriate.
- Again, these methodologies are subject to audit. Specifically, NERC's Regional Entities perform periodic compliance audits to ensure that our facility rating methodologies are documented in accordance with the NERC standards and that the facility ratings that we use are consistent with the methodologies set forth in our documentation. NERC posts the audit reports on its website.
- Moreover, PJM posts the actual facility ratings on its OASIS page, so the ratings themselves are transparent in PJM.

In the notice for this technical conference, FERC staff asks whether the methodologies for calculating transmission facility ratings should be more transparent. I respectfully offer the following thoughts as the Commission considers whether to impose any requirements:

- If the Commission decides to make utilities' methodologies for calculating transmission facility ratings more transparent, it should not require that they be included in utilities' tariffs. Requiring utilities to include their methodologies for calculating transmission facility ratings in their tariffs would be more burdensome than simply requiring that utilities make these methodologies publicly available (such as through posting on a website), with little to no additional benefit. It would require separate tariff sheets for each transmission owner that is part of an RTO/ISO and, depending on the level of detail that utilities are required to provide, could result in frequent filings to modify the methodology as appropriate. But it would not provide additional transparency – as long as utilities are making their methodologies publicly available, whether that methodology appears in the tariff or elsewhere should not matter from a transparency perspective. Nor should it matter from an accountability perspective; again, utilities' facility ratings methodologies and adherence to those methodologies are periodically audited by the relevant NERC Regional Entity.
- And any requirements that would standardize such methodologies would be unreasonable. Transmission line ratings involve some degree of engineering and operating judgment. Utilities are ultimately responsible for the reliability of our assets and for repairing or replacing assets that sustain damage or experience reduced in-service lives due to overloading, so we need some flexibility to incorporate our assessment of the risks associated with asset impairment or failure into the assumptions and inputs that we use in our facility rating calculations. Not only may different utilities have different risk tolerances that they seek to incorporate, but utilities also have the best understanding of their individual systems, including considerations like topology that might affect facility

ratings. For example, some utilities may be comfortable assuming a certain amount of wind when calculating transmission facility ratings based on the location of their facilities, while others may not be.

In addition, staff asks whether these methodologies should be available for Commission audit. Respectfully, such audit would overlap with the audits that the NERC Regional Entities perform. Thus, there should be no need for a separate auditing process. Relatedly, staff asks whether RTOs/ISOs should have any responsibility for verifying dynamic line ratings should a utility adopt them. While Exelon does not oppose PJM validating its ambient-adjusted facility ratings, we offer that imposing such a requirement is unnecessary and would not be the best use of RTO/ISO resources given the periodic NERC audits.

This concludes my opening statement. Again, I would like to thank you for your time today, as well as for your consideration as the Commission continues to explore these issues. I would be happy to answer any questions.