

Statement of Kenneth Seiler, Vice President of Planning, on Behalf Of PJM Interconnection, L.L.C.

FERC Technical Conference on Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection

Docket No. RM21-17-000, Panel #2: Consideration of Longer-Term Futures Scenarios in Regional Transmission Planning Processes
November 15, 2021
For Public

For Public Use



On behalf of PJM Interconnection, I appreciate the opportunity to participate on this panel to share PJM's perspective on the issue of long-range planning raised in the Commission's Advance Notice of Proposed Rulemaking (ANOPR) – *Building for the Future*.

My name is Ken Seiler. I currently serve as Vice President of Planning for PJM. I have attached to this testimony my background and work history in the industry. As part of my work for PJM, I am responsible for activities related to resource adequacy, generation interconnection, and regional and interregional transmission planning, including the development of the Regional Transmission Expansion Plan (RTEP).

From its inception, the PJM planning process has had both a short-term and long-range planning component. PJM's published RTEP includes a fifteen-year forward-looking forecast and analysis of transmission system needs. Such a forward-looking approach was necessary at the time so that PJM could meet an annual load growth (both real and projected) of over two percent and ensure the reliability of the transmission system. This need formed the basis for PJM to direct the building of a number of multi-state high voltage transmission lines, each of which helped to resolve what was, if not addressed through new generation or demand response, projected to be continued reliability issues and congestion across the PJM West to East interface. Those lines included:

- Trans-Allegheny Interstate Line (TRAIL): An approximately 200-mile 500kV line traversing from Southwestern Pennsylvania to West Virginia to Northern Virginia, which substantially alleviated both actual and projected increases in congestion in the Baltimore/Washington D.C. area;
- Susquehanna/Roseland Line: A 45-mile 500 kV line spanning portions of Pennsylvania and New Jersey that substantially alleviated both actual and projected increases in congestion in the Northern New Jersey area; and
- Carson-Suffolk Line: A 59.6-mile 500 kV line in southeastern Virginia that helped to alleviate constraints and allow "bottled" nuclear generation to become more available to serve customers in the Tidewater areas of Virginia

There is no doubt that the impact of low load growth, combined with policy decisions to decarbonize the grid, has led fossil fuel generation units to retire. The planning process has had to shift its focus to address near-term reliability issues resulting from these occurrences. Moving forward, although PJM can forecast "at risk" generation, it may be risky to consumers to order construction of new transmission based on a simple future prognostication that generation might retire. For example, we have seen generator units submit retirement notices and then reverse their decision. Moreover, we need to be conscious not to let the planning process effectively preempt market decisions by ordering transmission facilities that would create a "self-fulfilling prophecy" of ensuring that the generation unit was no longer economic. On the other hand, PJM believes that there *is* value in planning forward based on a clear record of future customer trends and needs along with policy developments.

To find the "sweet spot" between simply usurping the role of the market and engaging in a form of integrated resource planning disguised as transmission planning on the one hand, and not taking into account longer-term customer needs and policy trends on the other hand, PJM set forth in its Initial Comments in this docket a concept of developing a 15-year forward Master Plan with appropriate reviews by planners and regulators at regular intervals.



As proposed, the Master Plan would be developed using:

- Scenario planning combined with a probabilistic analysis to analyze future scenarios and transmission needs associated with those future scenarios; and
- Development of a clear record of customer trends and needs, through confidential surveys and other means, to clearly document the purchasing plans of customers as diverse as those entering into long-term power purchase agreements to meet corporate sustainability for customers looking to develop distributed resources through municipal or private aggregation.

We would urge the Commission to provide support for requiring this kind of initiative by all planning authorities with the specific details to be addressed in individual compliance filings.

Although the Master Plan concept is one element of reform that PJM believes would promote the Commission's goals, PJM urges the Commission to not simply dictate the development of such plans without first addressing the following three very difficult, but fundamental, implementation questions:

- **1** After all the scenarios are laid out, *who decides* which scenario (or set of scenarios) should be chosen by the RTO as the basis to order construction of new transmission?
- **2** Once the final decisionmaker is identified, *what criteria* should be used to determine whether the chosen scenario is the one upon which customer money should be pledged in the form of new transmission?
- **3** What kind of *regulatory affirmations and processes* can be established along the way to course-correct for changing circumstances without running the risk of prudence reviews, growing abandonment costs and the difficulties of withdrawing a previously approved transmission line where siting and the exercise of eminent domain may well be underway?

PJM's Master Plan concept attempts to address the criteria issue (listed as Question #2 above) by having the transmission planner develop a clear and transparent record of customer needs and trends rather than having the transmission planner choose a specific policy outcome.

Additionally, PJM's proposal for regulatory affirmation at the eight-year mark is designed to address Question #3 regarding how best to establish clear provisions to course-correct. But the "who decides" issue (listed as Question #1 above) remains an issue that is particularly challenging especially in a multistate regional transmission organization (RTO), like PJM, where state policy choices may differ. We humbly suggest that this Commission, given its statutory charge to oversee planning to meet the needs of load serving entities per Section 217 of the Federal Power Act, should have that responsibility – but only after taking into account all of the views of states and stakeholders and the expert analysis of the independent planning authorities.

Unfortunately, some of the ANOPR comments focus on mandating 15-, 20- or even 30-year forward planning without answering any of the above questions. The ground is littered with past transmission projects that were developed around well-intended future forecasts that were proven not to be long lasting due to changing conditions. For example, 16 years ago in Docket No. AD05-3-000, this Commission sent a clear signal of its interest in developing regional transmission solutions to:



[F]acilitate fuel diversity including increased integration of coal-fired resources to the transmission grid¹

In the "conference on coal"² held in that docket in Charleston, WV, on May 13, 2005, the Commission inquired, among other things, into:

[T]he current transmission planning efforts and public policy issues from a state and federal level, including how the current processes address the potential for coal power projects and the identification of obstacles to coal development.³

We point out this 2005 docket not to take a position on the merits of the issues the Commission was exploring at the time but instead to show that policy goals, including those of this Commission, can change radically over a very short period of time. Clearly, had RTOs "doubled down" on developing new transmission to support the further export of coal, as the Commission explored back in 2005,⁴ customers would have paid for costly new transmission facilities that were totally at odds with the policy preferences of many states today. A 15-year forward planning horizon based on the 2005 Commission inquiry would have yielded results that would have been very costly and unnecessary and would not have withstood the test of time.

It is for this reason that PJM has suggested in its ANOPR comments, as one of the drivers in the Master Plan proposal, that the Commission remain focused on its core mission – which does not change over time (i.e., the need to ensure the reliability of the grid). And, it is for this reason that PJM suggested Commission-backing of transmission planning drivers based on increased interchange capability between regions and resilience, rather than a driver-anchored movement of one particular type of generation. The record developed through a Master Plan, coupled with a Commission-directed planning driver to increase interchange capability and resilience, will ensure that the development of future transmission will withstand the challenge of changing policies and policymakers while remaining anchored in serving the needs of customers in the region, including their desire for cleaner renewable generation options.

PJM believes that marrying these two elements of its Master Plan proposal will work to develop that "sweet spot" as to the appropriate role and "swim lane" of all parties including the Commission, transmission planners and policymakers that can withstand the test of time.

¹ Promoting Regional Transmission Planning and Expansion to Facilitate Fuel Diversity Including Expanded Uses of Coal-fired Resources, Notice of Technical Conference, Docket No. AD05-3-000 at 1 (Feb. 16, 2004).

² Promoting Regional Transmission Planning and Expansion to Facilitate Fuel Diversity Including Expanded Uses of Coal-fired Resources, Transcript of May 13, 2005, Technical Conference, Docket No. AD05-3-000 at 2:6 (May 13, 2005) ("May 13 Transcript").

³ Promoting Regional Transmission Planning and Expansion to Facilitate Fuel Diversity Including Expanded Uses of Coal-fired Resources, Second Supplemental notice of Technical Conference, Docket No. AD05-3-000 at 2 (May 5, 2005).

⁴ For example, at the May 13 Technical Conference, PJM spoke about a new initiative labeled Project Mountaineer that was being evaluated under PJM's RTEP process "to explore ways to further develop an efficient transmission super highway ... to deliver the low-cost coal resources in [the West Virginia region] to market." May 13 Transcript at 61.