June 7, 2016

PJM Transmission Expansion Advisory Committee
Attn: Paul McGlynn, Chair
2750 Monroe Boulevard
Audubon, PA 19403

RE: PJM 2014/15 Long-Term Proposal Window (Market Efficiency)

Dear Paul:

We write to provide comments and express concern over the stated recommendation to approve 9A to relieve AP-South Interface congestion. PJM presented a comparison of four project combinations targeted to resolve the AP-South Interface congestion.¹ The projects range in estimated cost from $197.44 million to $340.63 million, with each project passing the B/C threshold of 1.25:1. The alternative projects have similar B/C metrics and provide comparable congestion relief relative to their investment. PJM should, in accordance with its Operating Agreement, conduct “sensitivity studies, modeling assumption variations, and scenario analyses” to choose among the alternatives.² Ultimately, PJM should choose the project that provides the suggested benefits with the least risk to customers under a range of potential future conditions.

Instead, PJM is recommending the most expensive solution ($340.63 million) on the apparent basis of providing the most absolute congestion relief,³ which is inconsistent with the Operating Agreement and, as discussed below, does not result in the most efficient or cost-effective solution. Project 19B is nearly half of the cost, includes a cost cap, and provides more savings to PJM load than Project 9A.

The Finalist Projects Perform Comparably Relative to Their Investment
The benefit/cost ratios for the projects are essentially the same with a range of 2.39:1 to 2.48:1 for 9A, 18H and 19B. A cost increase of less than 5% over the estimated cost for Project 9A would result in its benefit/cost ratio being lower than that of Projects 18H and 19B.

The congestion relief, based on investment, is essentially the same for project 9A and 19B. For every $1 million of investment, Project 9A provides ~$70k of annual congestion relief on AP-South and ~$120k of annual congestion relief in PJM. For the same $1 million of investment, Project 19B provides ~$65k

¹ PJM TEAC Market Efficiency Update, May 12, 2016, Slide 4.
² These sensitivities should include items such as project cost overruns and market changes (e.g. carbon regulation, fuel pricing, generation additions/retirements). While PJM has conducted limited sensitivity studies, it has not presented B/C metrics for any sensitivity study as a point of comparison among the alternative projects.
³ It is not reasonable to compare absolute congestion relief for projects with significant cost differences. The higher cost project will naturally be expected to provide more total congestion relief. A more appropriate comparison is congestion relief relative to investment.
of annual congestion relief on AP-South and ~ $110k of annual congestion relief in PJM. A cost increase of less than 10% for Project 9A would result in it providing less congestion relief relative to investment than Project 19B.

Project 9A and 19B both provide ~ $45k of annual production cost benefits for every $1 million of investment.

**PJM Should Consider Cost Containment**

The project is being approved based on market efficiency – the ability to provide benefits to load that more than offset the costs. Project 19B includes a cost cap to guarantee customer benefits in excess of its costs.

In contrast, load is exposed to all cost increases related to Project 9A. As stated above, slight increases in cost for Project 9A would render it inferior to Project 19B from benefit/cost, congestion relief, and production cost savings perspectives. As there is no cost cap for Project 9A, ratepayers have the risk of costs being higher than the estimates. Significant cost increases could even negate the benefits forecasted to be provided by Project 9A, and result in a B/C less than the threshold of 1.25:1.

**PJM Should Consider Appropriate Market Sensitivities**

The Operating Agreement states that PJM “shall use the sensitivity studies, modeling assumption variations and scenario analyses in evaluating and choosing among alternative solutions.”

The market efficiency analysis related to the AP-South projects has been prolonged, resulting in more than two years passing since the key input assumptions were determined. In this time, the Clean Power Plan was finalized, fuel prices have fallen dramatically (gas prices decreased nearly 50%), and significant changes have occurred to generation topology. In the face of uncertainty of assumptions, the lower cost option, Project 19B, presents less risk for ratepayers.

PJM updated the 2014 model for some market changes (load forecast, transmission topology), but did not address the Clean Power Plan or changes to fuel pricing and generation topology. Our analysis indicates that all of the market changes since 2014 result in less AP-South Interface congestion, which further supports selection of a lower cost solution. The additional ~ $150 million of investment associated with Project 9A is not warranted as congestion is reduced.

**Gross Load Payment Should be a Key Consideration**

PJM relies on absolute congestion relief and production cost savings in its recommendation and ignores the gross load payment benefits of the projects.

The gross load payment represents the cost to all load within PJM. This should, by its nature, be one of the most important factors to consider in selecting a market efficiency project. Project 19B provides higher overall, absolute load savings than Project 9A, even though its cost is approximately half as much.

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4 PJM Operating Agreement, Schedule 6, Section 1.5.3.
5 While the Clean Power Plan is undergoing a legal challenge, it is reasonable for PJM to conduct a sensitivity to ensure it is making the appropriate project selection in the event the Clean Power Plan is upheld.
Simply put, load across the entire PJM footprint will pay approximately half the cost and will realize more absolute load savings if Project 19B is approved. The benefit/cost ratio does not account for this as it only considers load zones that benefit from the project.

Northeast Transmission respectfully requests that the TEAC fully consider the implications of the issues raised above as it considers the PJM recommendation.

Sincerely,

NORTHEAST TRANSMISSION DEVELOPMENT, LLC

[Signature]

Robert Colozza
Senior Vice President