

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.,	}	
Revisions to Incorporate Cost Responsibility	}	Docket No. ER24-843-000
Assignments for Regional Transmission	}	
Expansion Plan Baseline Upgrades	}	

COMMENTS OF BARRON SHAW

The PJM Board of Managers approved 215 baseline upgrades on December 11, 2023 as part of their Regional Transmission Expansion Plan (RTEP) process. The cost responsibility of these upgrades is subject to the PJM Tariff, and allow a 30 day comment period. While I see no indication that the tariff has been violated, I believe that the cost allocation has become unjust and urge the commission to consider a Section 206 proceeding to reconsider the structure of cost allocations.

Causes of new transmission

The causes of the \$5.4B in new transmission are well established by PJM: new data center load primarily in Virginia, and the retirement of fossil fuel generators in Maryland and Virginia.

The load caused by new data centers is huge. A full 21% of Dominion Power's load in 2022 was consumed by data centers¹ , and demand has only grown since then. This

¹ https://s2.q4cdn.com/510812146/files/doc_financials/2022/q4/2023-02-08-DE-IR-4Q-2022-earnings-call-slides-vTC-Final.pdf page 26

demand should not be considered organic growth nor normal, “business as usual.” The primary operating expense of these businesses is raw electricity, and they consume so much of it that the assumptions that underlie the FERC-approved tariffs demand review.

From an environmental standpoint, the power that these data centers require is the worst kind - always on. Any attempt to run them with local solar or wind power would be futile in the climate of Northern Virginia because those power sources are weather-dependent and therefore intermittent.

The communities that house these data centers reap huge rewards. Northern Virginia now earns over \$1B in local taxes from data centers.² This is nearly 5 times the amount of revenue collected in taxes in my entire county (York, PA). These local municipalities clearly have much to gain by continued growth in the industry.

While demand for power is up in these markets, local supply is down. Both Maryland and Virginia have passed legislation targeting clean power by 2035 and 2045 respectively. This has directly led to a planned thermal generation loss of 11,000 MW in the region, including the well-publicized closing of the Brandon Shores peaker plant near Baltimore.

Impacts on upstream source states

² <https://www.governing.com/infrastructure/the-data-center-capital-of-the-world-is-in-virginia>

PJM has been transparent about the issues in Maryland and Virginia, but has been less forthcoming about the impact of the new transmission on Pennsylvania and West Virginia.

A recently proposed market efficiency project provides perspective. PJM proposed project 9A in 2018 and as part of proceedings showed that approximately \$750M in benefit would cost ratepayers in Pennsylvania approximately \$740M in increased rates of electricity. This nearly 1:1 increase for decrease was bad enough for a pair of 230kv lines. How much worse will the impact on ratepayers in Pennsylvania be for a project that is five times the cost and runs at 500kv? The current process provides no insight. Instead, power will be drained, rates will rise, and no one in Pennsylvania will understand why.

There also appears to be no consideration on the impact to energy policy in the source states. If West Virginia and Pennsylvania suddenly become responsible for supporting half of the load in Maryland and Virginia, is it not harder for those source states to move their own generation mix? West Virginia and Pennsylvania do not have the solar capacity Virginia has, nor the offshore wind capabilities of Maryland; it is irrational to expect them to develop green generation if Maryland and Virginia cannot.

Cost Allocation

Because most of the upgrade costs are associated with higher voltage (Regional) facilities, the costs for the project will fall to both recipients (50%) and to the grid as a

whole (50%). The logic behind this cost allocation was that Regional facilities provide benefit to everyone on the grid. This logic is now failing as there is no evidence that West Virginia or Pennsylvania will ever gain anything from the new construction. Instead, the primary beneficiaries are the largest, most profitable companies in the world.

Quite simply, it is nearly inconceivable that the new lines (together with the old lines) will ever be needed to carry current back into West Virginia or Pennsylvania. So why should those citizens be paying for even a portion of it?

The market efficiency backstop

Even if there were no reliability issues, current PJM rules for market efficiency ensure that if the marginal cost of power (destination LMP cost vs source LMP cost) in these high-load areas ever exceeds 25% of the cost of a new transmission line from a source state, PJM has the authority to initiate a TEAC process that culminates in the right of federal eminent domain over any entity that happens to be in the path of the proposed lines.^{3 4} It is not hard to identify the victims in this scenario.

PJM's Independent Market Monitor (Monitoring Analytics) has long held that PJM and FERC should look at generation siting as a potential solution for market efficiency.

³ PJM Operating Agreement Schedule 6 1.5.7 where the threshold for new construction is set at a 1.25 B:C ratio

⁴ Transource Pa. v. DeFrank US District Court for the Middle District of Pennsylvania 12/6/23.

Proximity to generation should be of paramount importance especially in high-load siting decisions.

Implications for new load

To summarize, the current state public policy and FERC-approved PJM tariff provides for the following scenario:

New generation in Northern Virginia (and potentially Maryland) is welcomed by local governments. Their taxes are used for the betterment of citizens in one of the richest parts of the United States. The new generation that is required for them is not built locally because it would be in violation of state rules. Instead, it is built in rural communities in other states, using exclusively fossil fuels. The new transmission that is required is paid not by the data centers, but by all the citizens including those in the states that are sending their power. Moreover, if the marginal cost of this electricity ever exceeds the cost of a new line by 25%, the data center is entitled to a new transmission line.

Perhaps the data centers understand this current state of affairs and are rushing to build as much as they can before a prudent regulator suggests that they should shoulder more of these costs.

Given current policy, is there any limit to the amount of power that regulators are willing to export for the benefit of the richest companies in the world?

Conclusion

These public policy decisions made by Maryland and Virginia are having profound effects on generation mix, generation costs, and transmission rates in West Virginia and Pennsylvania. These decisions are little different than the off-shore wind decisions in New Jersey that trigger a separate cost-allocation process. FERC should realize this and convene a section 206 proceeding to realign the cost structure to align with today's reality.

Respectfully Submitted:

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