



Amped Up: PJM's Future Power Needs

WEST VIRGINIA ENERGY SUMMIT

Asim Z. Haque

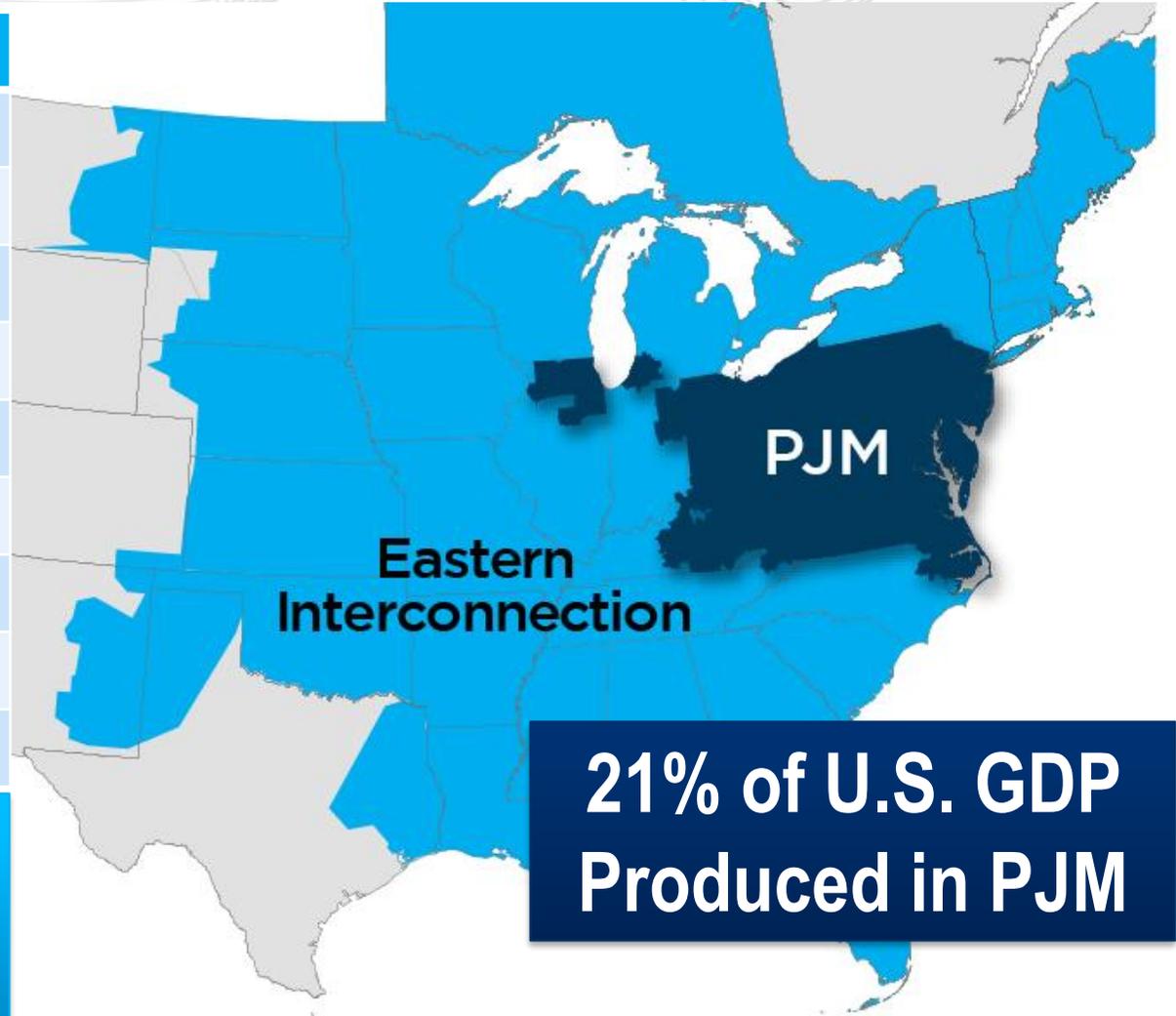
SVP, Governmental and Member Services
PJM Interconnection

November 13, 2025

Key Statistics

Member companies	1,090
Millions of people served	67+
Peak load in megawatts	165,563
Megawatts of generating capacity	180,785
Miles of transmission lines	88,185
Terawatt hours of annual energy	770
Generation sources	1,439
Square miles of territory	368,906
States served	13 + DC

- 26% of generation in Eastern Interconnection
- 25% of load in Eastern Interconnection
- 20% of transmission assets in Eastern Interconnection



As of 2/2024

Operates As A <u>Non-Profit</u>
No Shareholders or Share Price
Federally Regulated (FERC)
Independent Board
Market Monitor
Mission-Driven

GRID RELIABILITY

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Markets

- Energy
- Capacity
- Ancillary services

A large orange gear-shaped icon with a white rounded rectangle in the center containing the text for the Operations section.

Operations

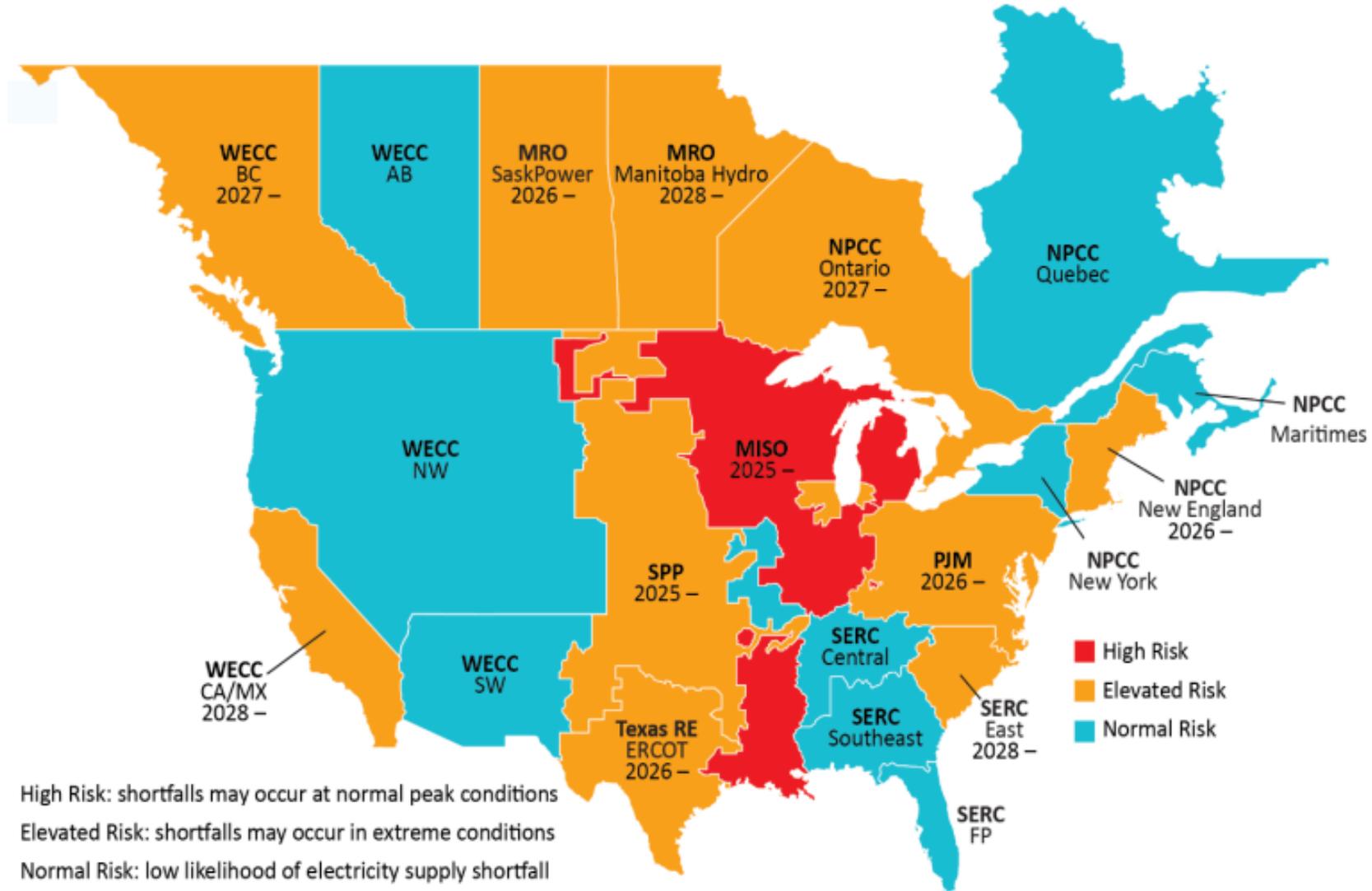
- Grid operations
- Supply/demand balance
- Transmission monitoring

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Regional Planning

- 15-year outlook





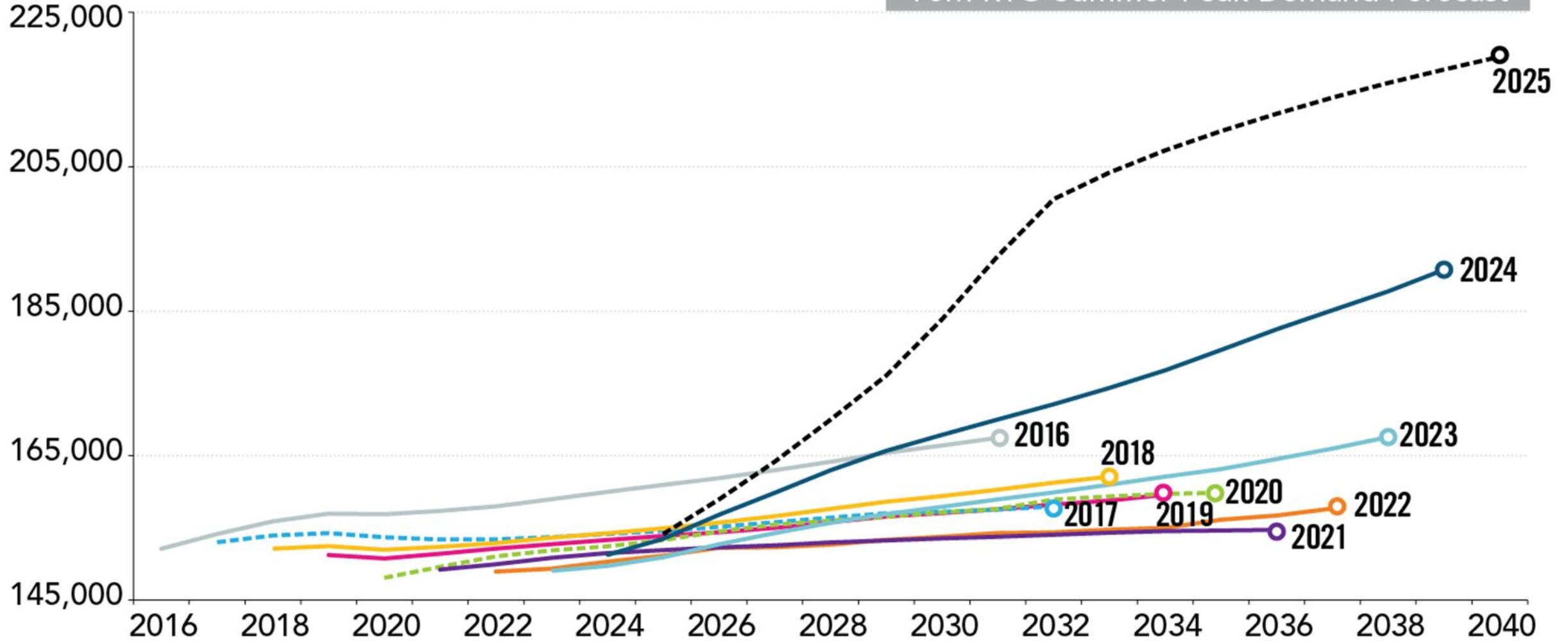
Graphic: NERC



Electricity Demand Growth

Load (MW)

PJM RTO Summer Peak Demand Forecast



DIVE BRIEF

PJM expects summer peak load to grow 2% a year on average, driven by data centers

Chevron to build gas plants to power data centers amid AI boom

By Reuters

Blackstone to Acquire 774-MW Virginia Gas Plant in 'Data Center Alley' in Reported \$1B Deal

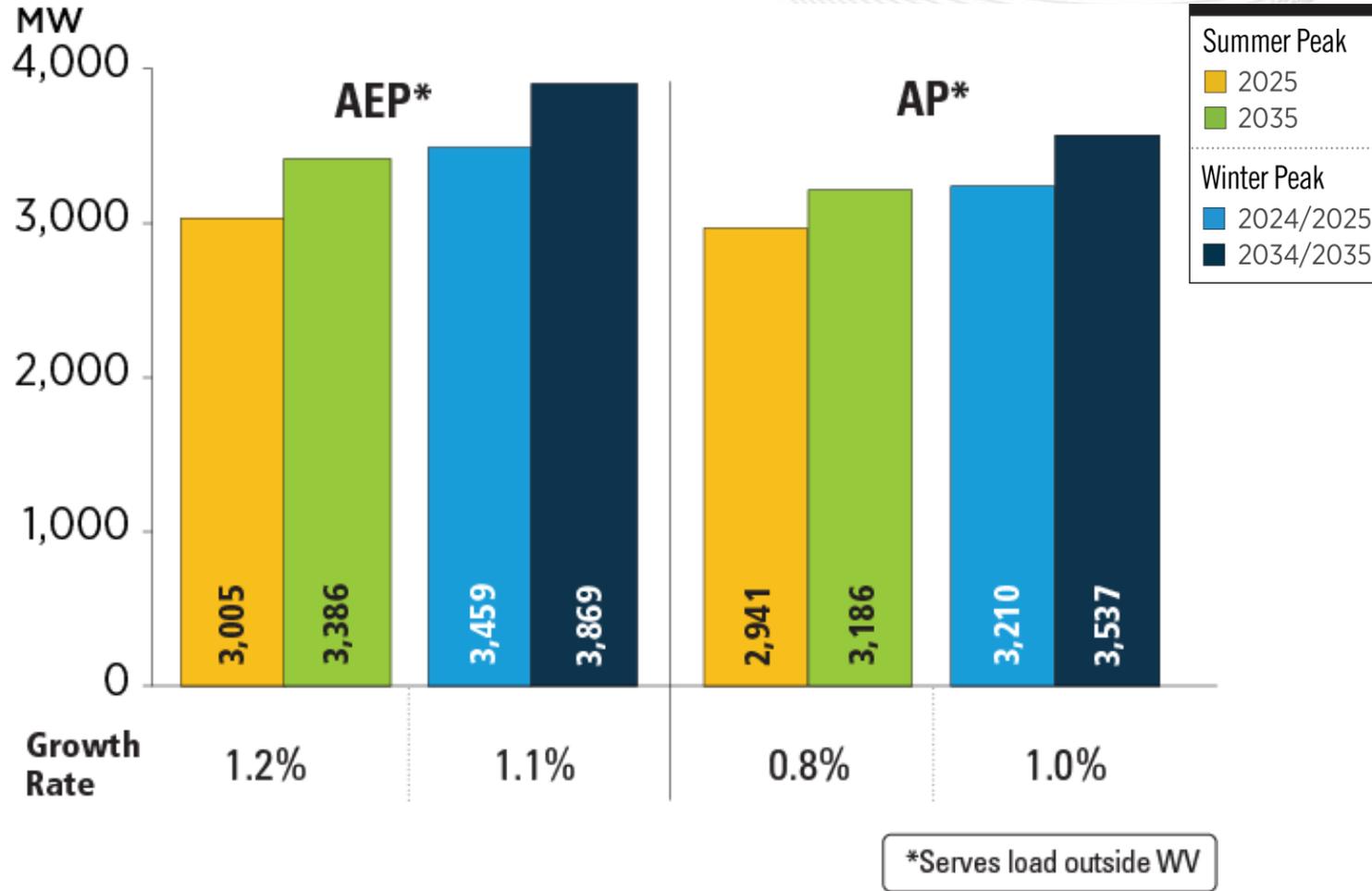
US electricity demand to surge to 128GW by 2029 due to data center growth - report

The report identifies the PJM and ERCOT as areas that will experience the largest growth in demand

POWER

Dominion Plans for Long-Term Virginia Data Center Power Demand, Connects with PJM on Transmission Lines

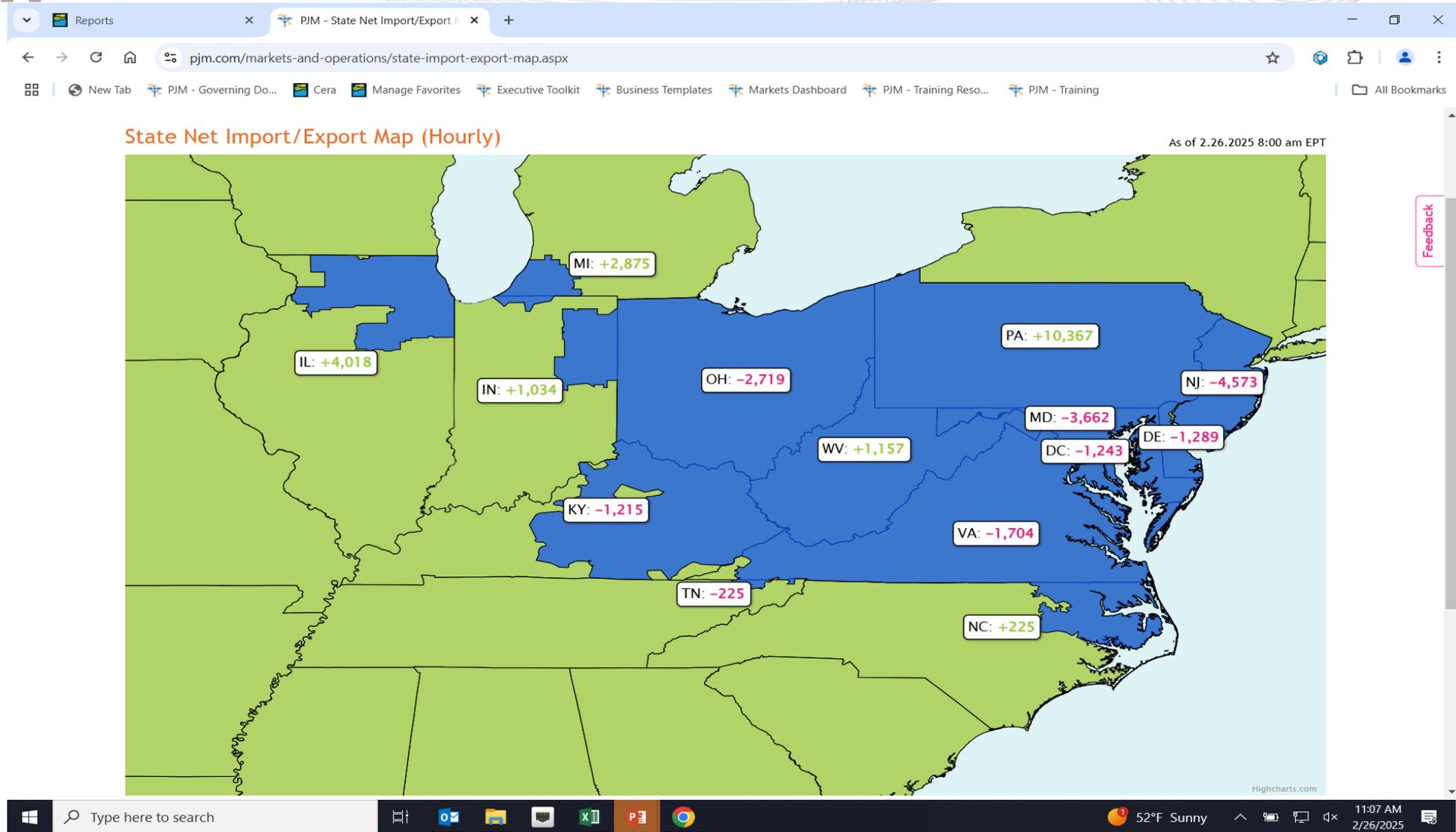
Dominion Energy Virginia this month has released a comprehensive, long-term regional plan to meet growing power demand, and jointly proposed several new large transmission projects with First Energy and American Electric Power (AEP) to strengthen electric reliability across the 13-state PJM region over the next decade.

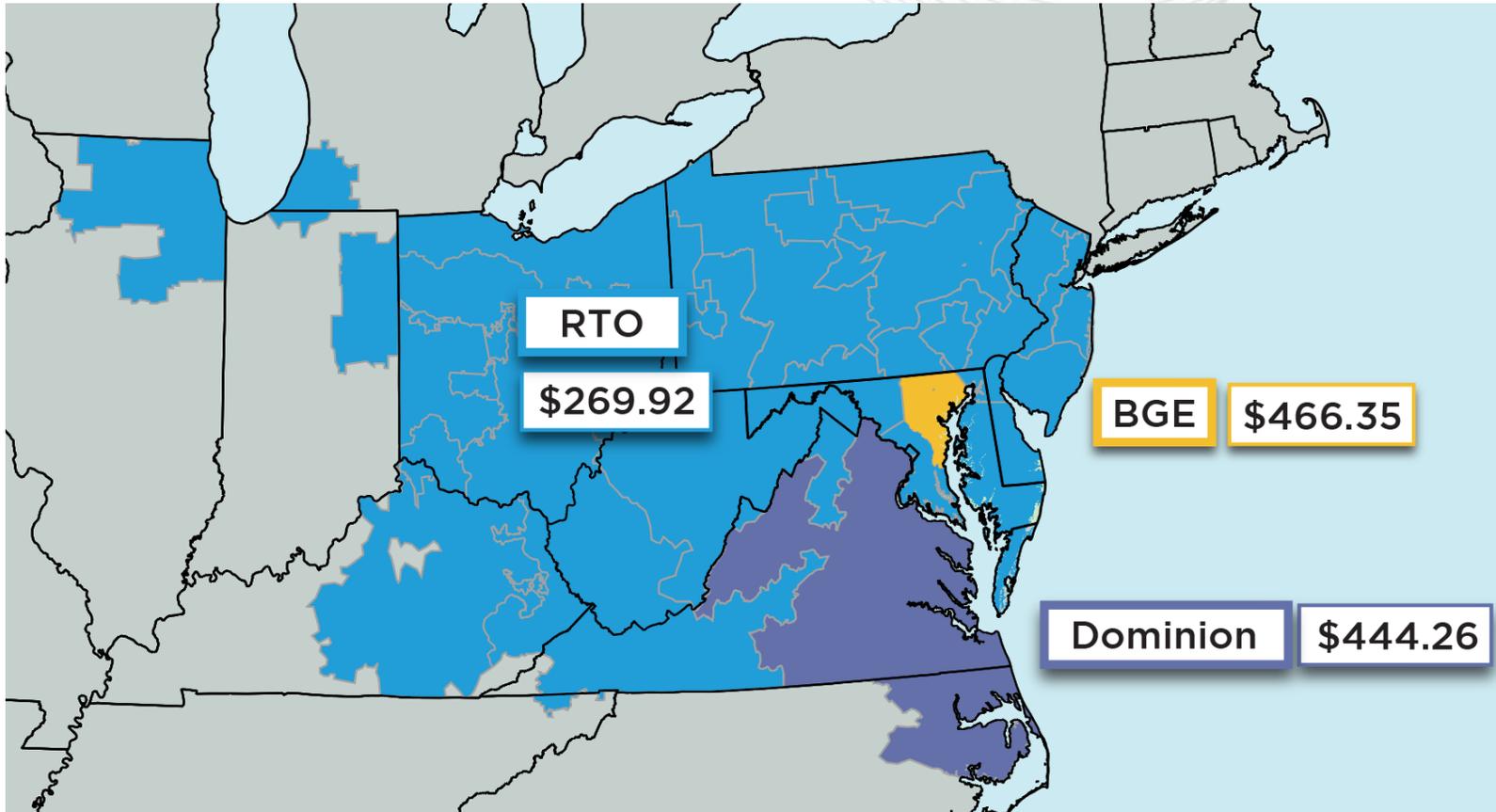


PJM RTO Summer Peak		PJM RTO Winter Peak	
2025	2035	2024/2025	2034/2035
154,144 MW	209,923 MW	136,127 MW	198,175 MW
Growth Rate 3.1%		Growth Rate 3.8%	

The summer and winter peak megawatt values reflect the estimated amount of forecast load to be served by each transmission owner in the noted state/district. Estimated amounts were calculated based on the average share of each transmission owner's real-time summer and winter peak load in those areas over the past five years.

	PJM Region (MW)
2025 Supply	181,533
2025 Demand (Peak Summer)	160,526
2040 Demand (Peak Summer)	212,000





RTO Price Comparison

	2025/2026	2024/2025
RTO Price:	\$269.92/ MW-day	\$29/ MW-day
Reserve Margin <i>with IRM of:</i>	18.5%	20.5%
	17.8%	14.7%

PJM's Generation Interconnection Queue



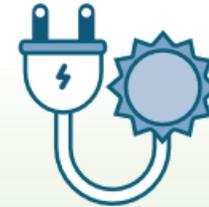
>70% of 200 GW
through the PJM
queue process



63 GW
have agreements
to begin operation



1–2 year
study process
turnaround for
new projects



6.7 GW
of solar already
connected

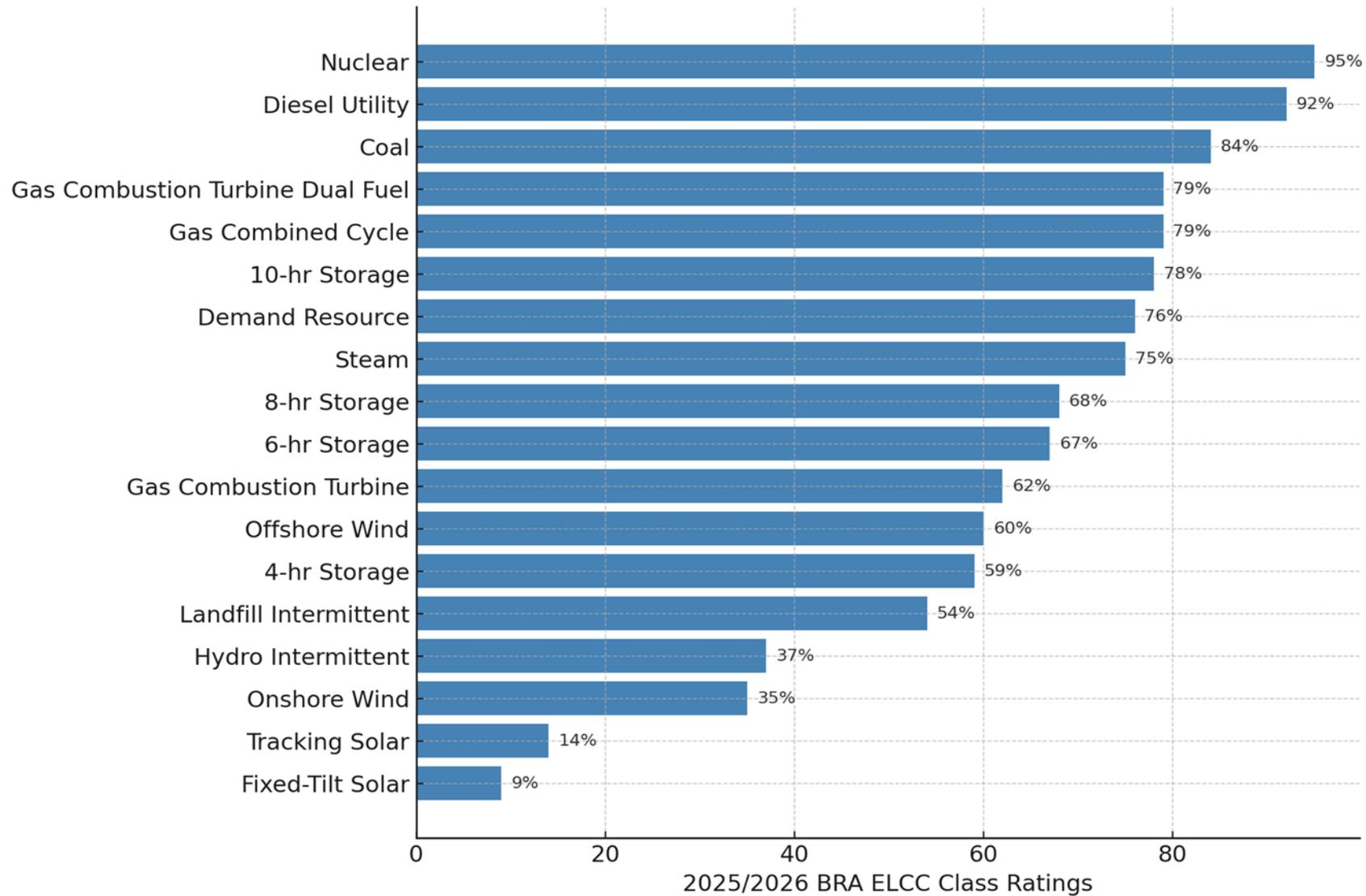


46 GW
remaining to be
processed in
2025–2026



As of June 2025

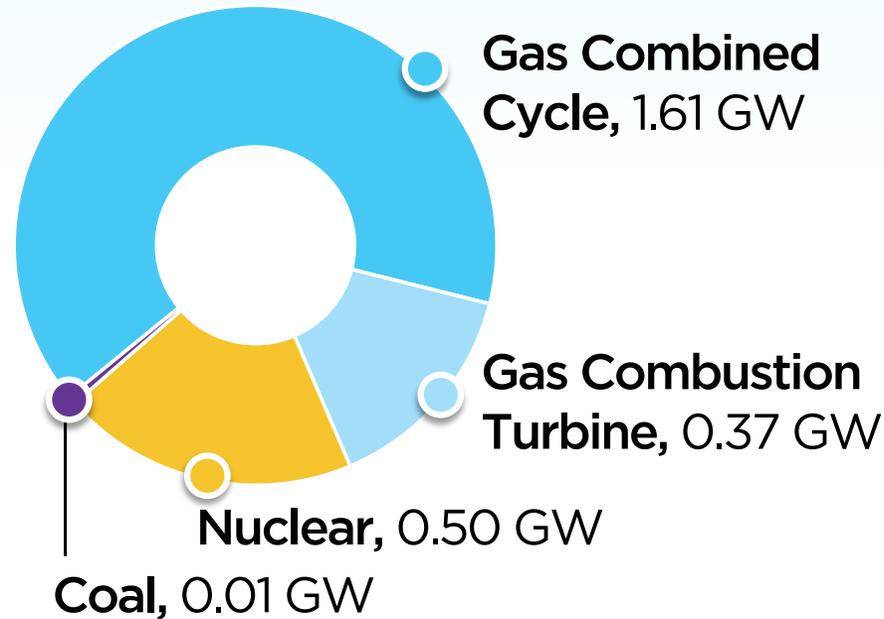
ELCC – Capability of Generator Classes



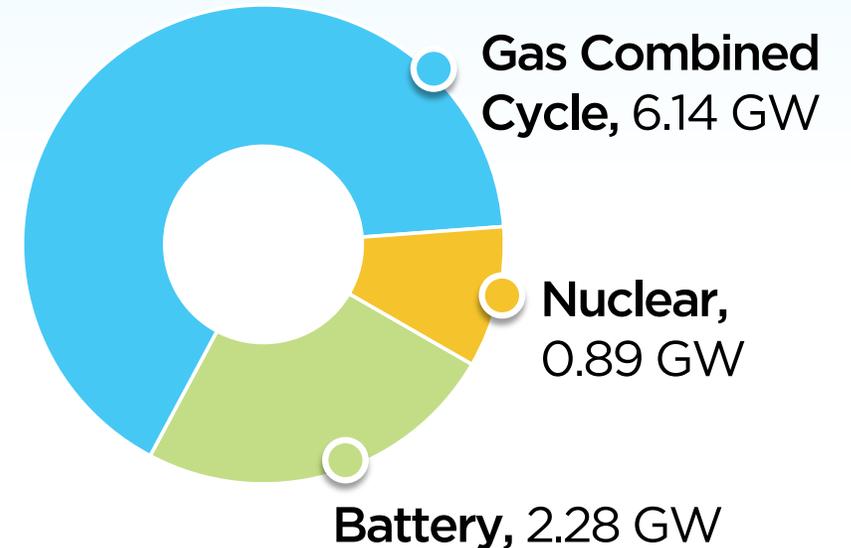
PJM created a one-time opportunity for projects with short turnaround times to join a transition cycle, where they will be studied as much as 18 months faster under the [Reliability Resource Initiative](#) (PDF).

These upgrades and new construction projects are expected to come online by 2030 and 2031.

Total Upgrades: 2.49 GW



New Construction Total: 9.31 GW



As of June 2025

Refine Demand Forecast

Expedited Interconnection Track

Evolving Demand Response Rules For Data Center Participation

Possible: Bring Your Own Generation or Long-Term Procurement Frameworks

Possible: Load Shed Priority

UTILITY DIVE Deep Dive Opinion Library Events Press Releases Topics

OPINION

State frameworks are critical to addressing PJM affordability

Affordability concerns have risen in the PJM sphere due to "tightening supply and demand," writes Senior Vice President Asim Haque.

Published Oct. 2, 2025

By Asim Haque



The PJM Interconnection control room. Permission granted by PJM Interconnection

Asim Z. Haque is senior vice president of governmental and member services for PJM Interconnection.

The U.S. energy landscape is undergoing major transformation as the power sector works to meet the increasing electricity demands of artificial intelligence and the digital economy.

PJM Recommendations

Retail Cost Allocation – States ultimately have control over how costs are allocated to the various customer classes in utility tariffs. Costs can be allocated away from residential consumers and small businesses and toward other customer classes more directly driving the tightening supply-demand balance, including data centers. State programmatic rebates can be allocated to specific customer classes as well.

Data Center Entry Commitments – A number of our states are placing financial requirements and stricter entry commitments on data centers trying to connect through regulated utilities as a way to make sure that the data center is actually coming to that utility’s service territory. This will, in turn, allow for utilities to submit more accurate data to PJM to better refine our load forecasts used on the wholesale side. Further, PJM is considering a period where states can review and provide feedback on requested large load additions in PJM’s load forecast.

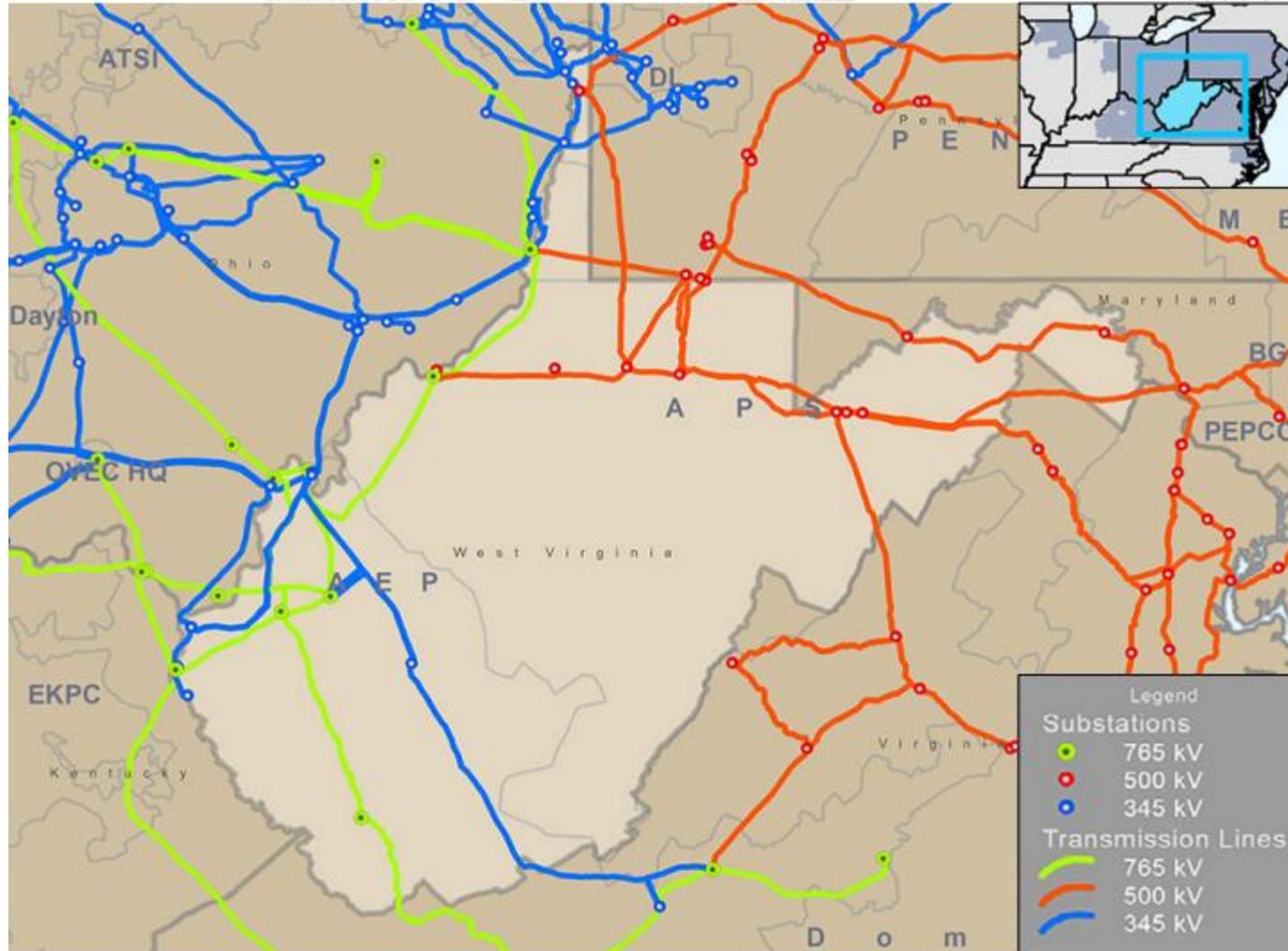
Default Service Procurement – Our restructured states are all utilizing default service procurement mechanisms to procure supply for consumers who are not shopping with a competitive retail supplier. It is worthwhile to analyze whether these procurement mechanisms are designed for a high-priced wholesale environment. In those states with especially low shopping statistics, consumers are deeply exposed to this high-capacity market price if default service procurement mechanisms are not designed to long-term hedge against that price.

Retail Shopping – Competitive suppliers may be able to offer better rates than what is being procured in default service auctions. This may be an opportunity for competitive suppliers, residential/small business consumers and state regulators to work collectively to enhance shopping while maintaining traditional consumer-protection oversight.

State Programs and the Total Bill – Knowing that the wholesale price for power will be higher in future years, the total bill can be analyzed to determine whether existing state programs that were initiated during times of lower wholesale pricing should continue, and again, if rebates should be allocated away from or to certain customer classes.

Demand Response and Energy Efficiency – Paying customers to reduce usage during system stress is a direct solution to reducing peak electricity demand. States can play a central role in developing and promoting robust demand response and energy efficiency programs.

Siting/Permitting – We need more energy infrastructure, both generation and transmission. States play a pivotal role in projects ultimately getting built through their siting/permitting processes. If energy infrastructure projects don’t receive state permitting approvals, it won’t matter how many projects PJM pushes through its generation interconnection queue.





Thank You