

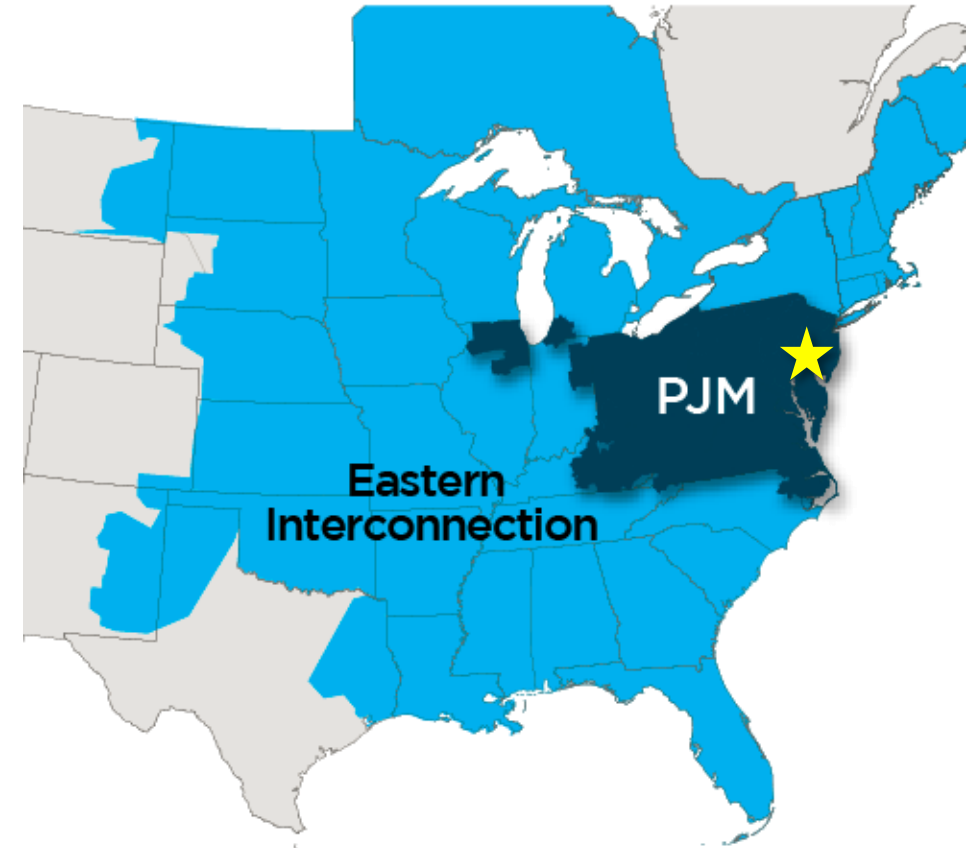
# What is PJM?

Andrew Levitt, Applied Innovation

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New Jersey Retreat on Advancing  
Vehicle-to-Grid Technologies

- ~700 employees
- ~\$290 m annual operating budget
- ~\$40b in transactions
- 65 million people served
- 21% of US GDP
- 165 GW peak load
- Founded 1927



## OPERATIONS



Matches supply with demand like...



## MARKETS



By Zone

AE	\$20.51
APP	\$14.55
APS	\$25.18
ATL	\$25.48
NY	\$17.91
COMED	\$25.68
DAYTON	\$26.21
DECK	\$14.38

Energy Market Pricing like...



## PLANNING



Planning for the future like...



# Paths to Market Access by Distributed Energy Resources

*Injects electric energy onto T or D grid. Comes through PJM queue. Standalone or behind a customer meter.*

## **Path 1: Generator rules**

*Reduces load. Must be behind a retail, muni, or coop load meter. Cannot inject past meter.*

## **Path 2: Demand Response rules**

PJM revenue

Energy market

Capacity market

Ancillary services markets

Lower bills

(Load reduction impact)