PJM – RISING COSTS & MITIGATION STRATEGIES

MEPAV ANNUAL CONFERENCE

May 21, 2026

AGENDA

01 Overview of PJM Power Costs

02 Increasing Cost Trends

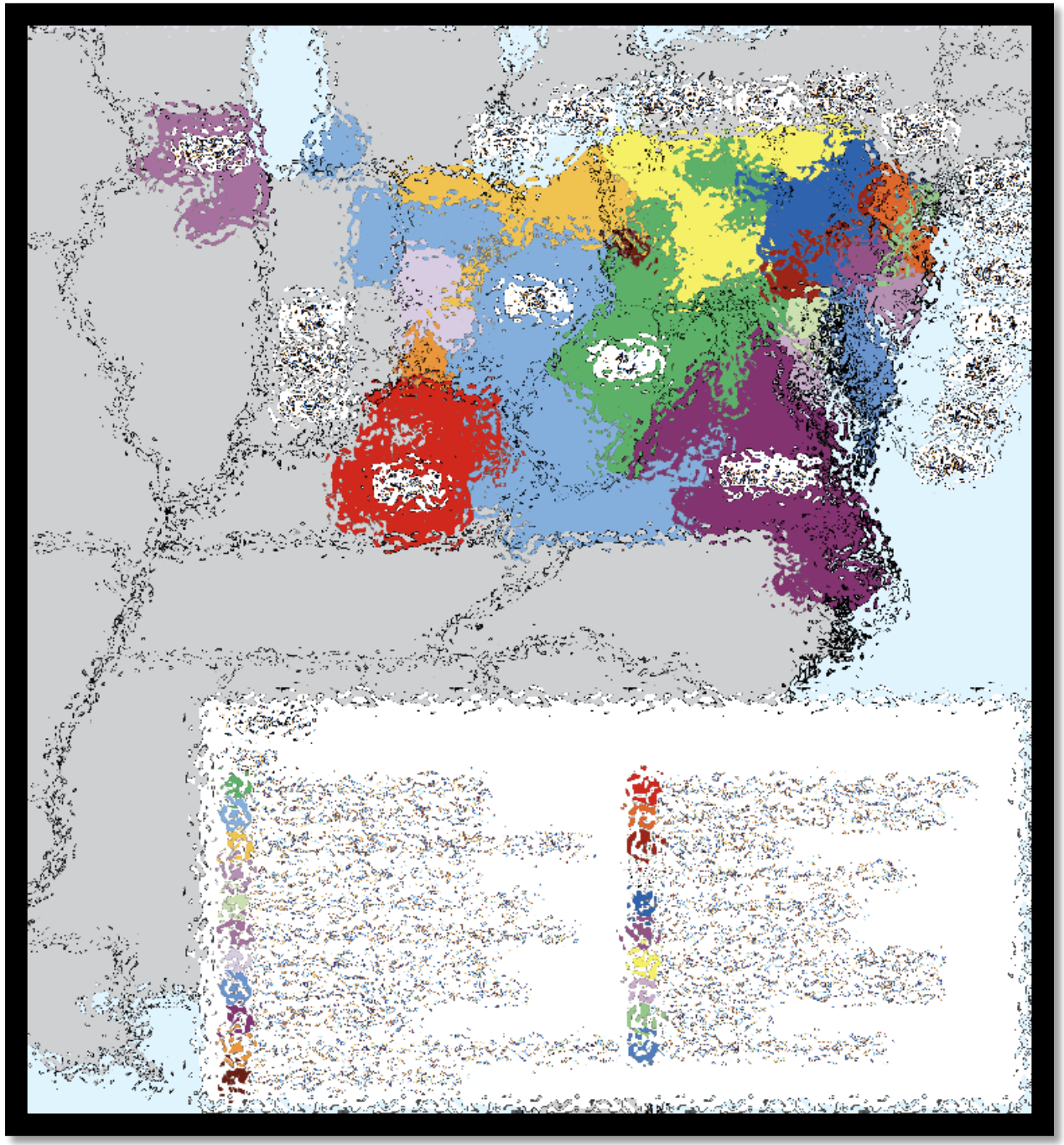
03 Cost Mitigation Strategies

04 Wrap-up

OVERVIEW OF PJM COSTS

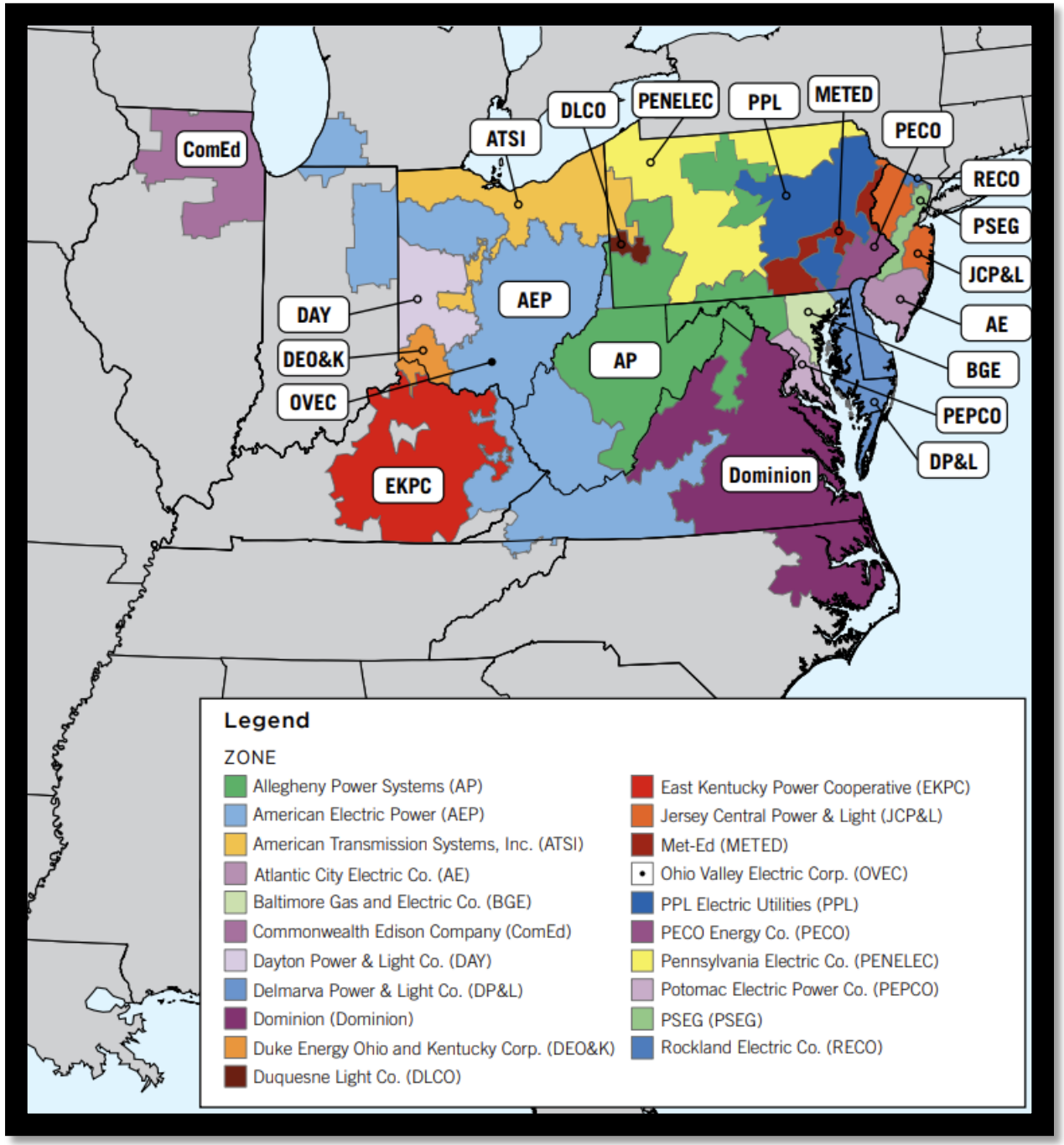
QUIZ ON PJM

- How many states does PJM cover?
- How many transmission zones are in PJM?
- How many transmission zones are in VA?



QUIZ ON PJM

- How many states does PJM cover?
  - 13 + DC
- How many transmission zones are in PJM?
  - 21
- How many transmission zones are in VA?
  - 3



PJM OVERVIEW

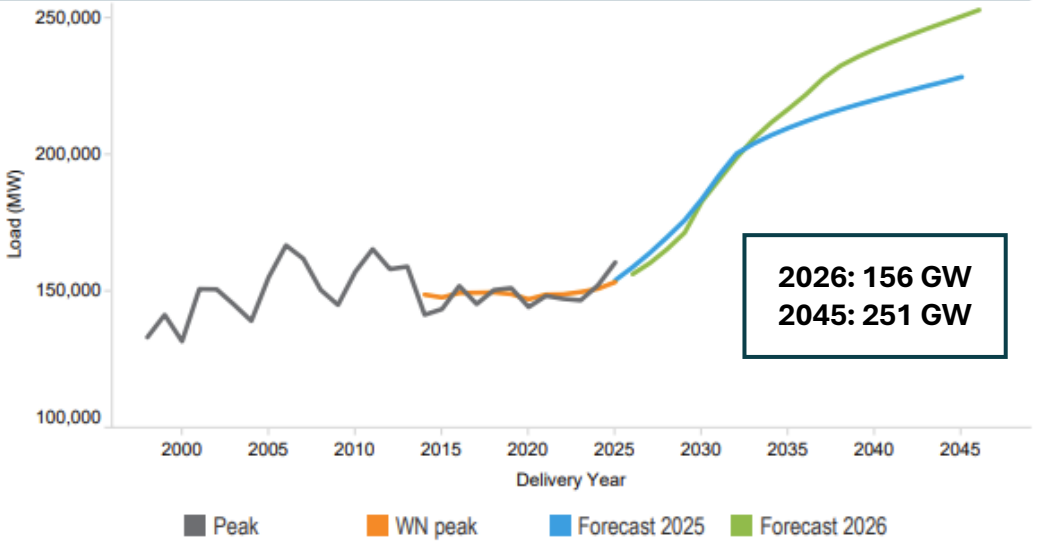
67 Million+ people served

88,417 miles of transmission lines

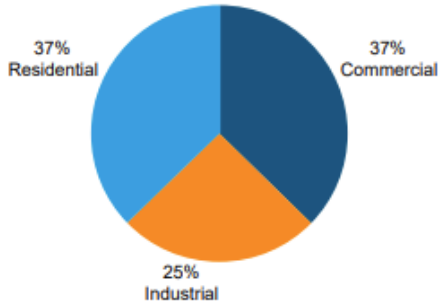
369,000+ square miles of territory

PJM RTO

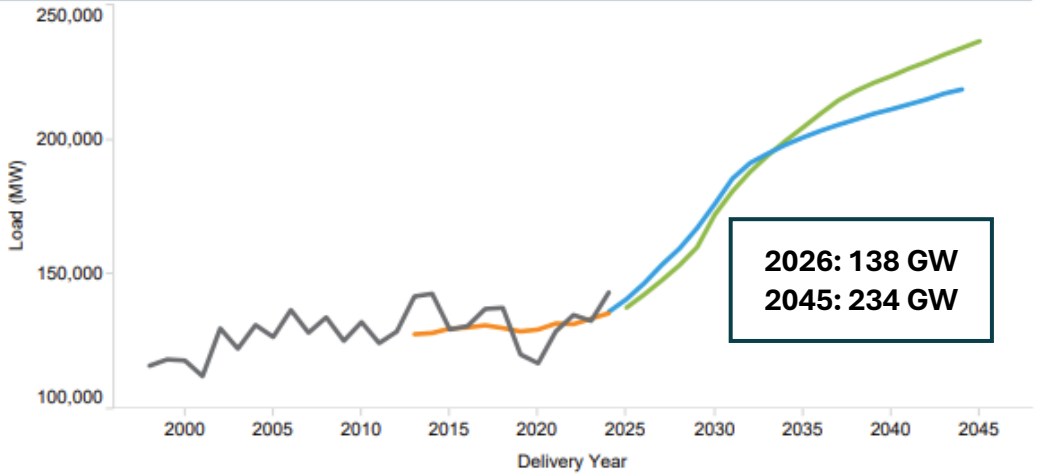
Summer Peak



RCI Makeup



Winter Peak



Weather - Annual Average 1994-2024

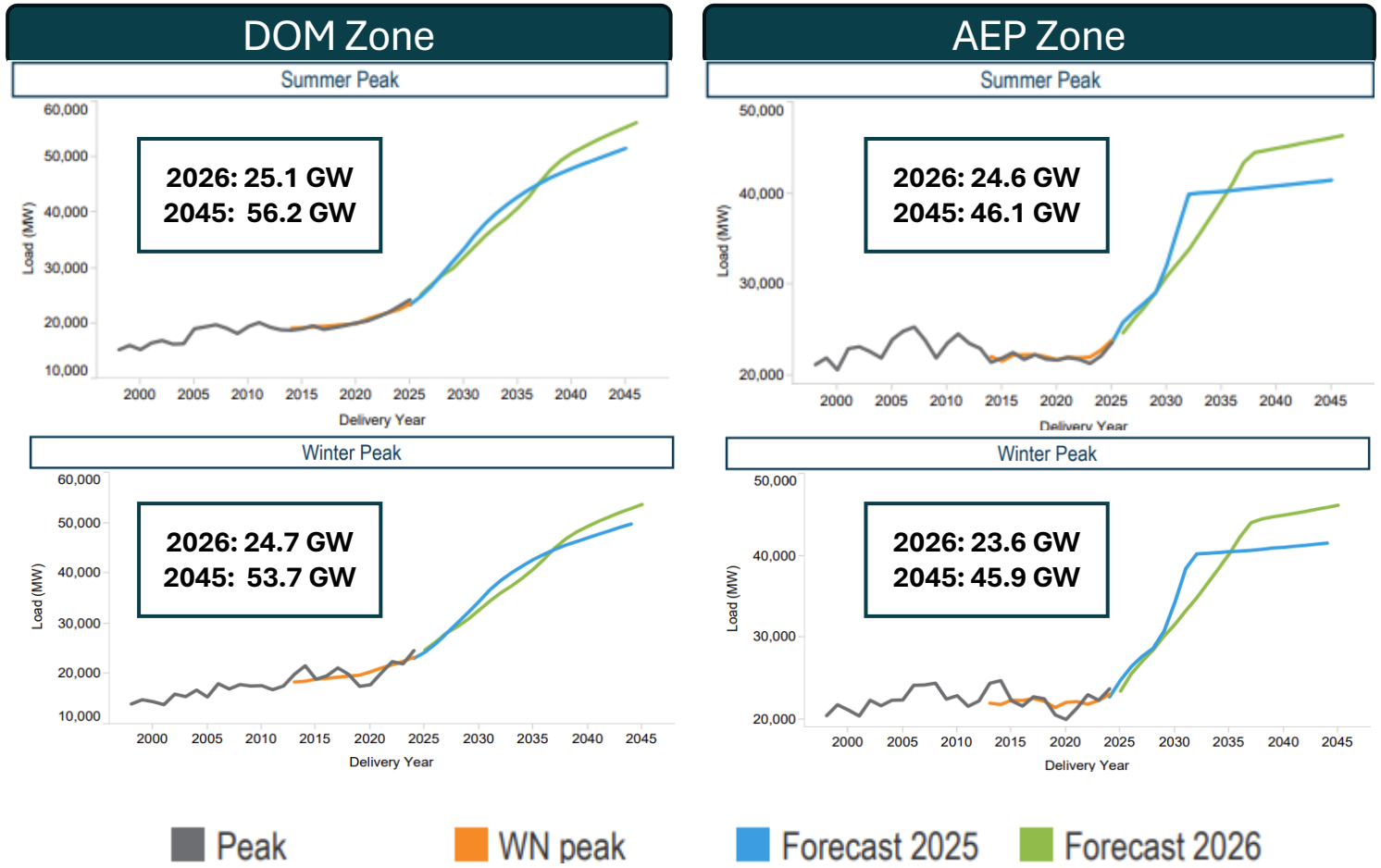
Avg Summer Daily Temp	*74.3*
Avg Summer Max Temp	*95.2*
Avg Winter Daily Temp	*34.4*
Avg Winter Min Temp	*4.2*

Zonal 10/15/20 Year Load Growth

SUMMER	3.6%	2.9%	2.4%
WINTER	4.0%	3.3%	2.7%

https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2026-load-report.pdf

LOAD GROWTH AND PEAK TRENDS



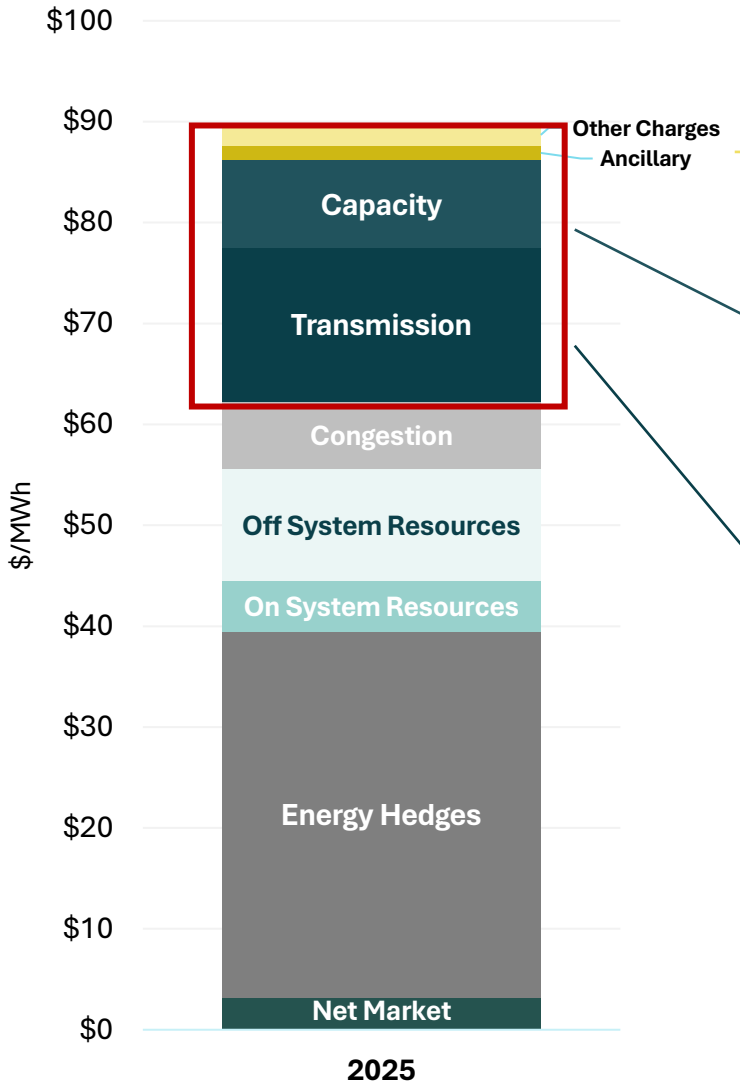
WN = Weather Normal

AEP loads expected to increase by 5.3% in summer and 5.6% in winter over the next 10 years on average.

DOM loads expected to increase by 5.4% in summer and 5.1% in winter over the next 10 years on average.

https://www.pjm.com/-/media/DotCom/library/reports-notices/load-forecast/2026-load-report.pdf

PJM POWER COST COMPONENTS



PJM Charges

Admin., Ancillary, Misc., True-up Load Reconciliation Costs

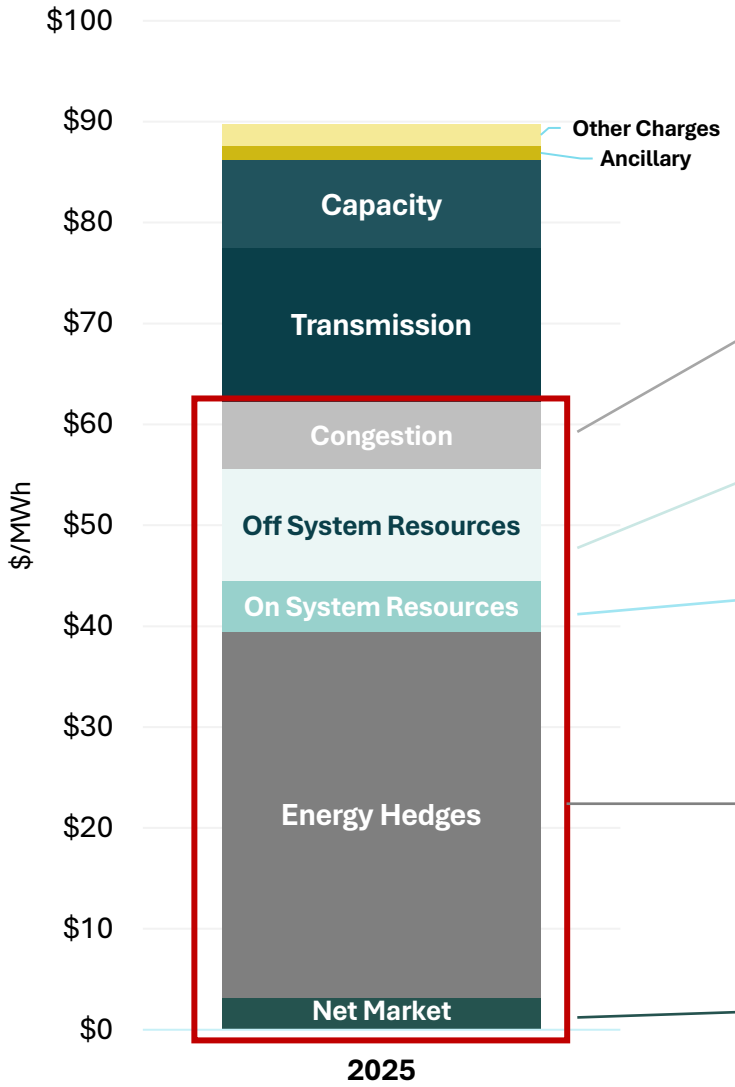
Capacity: Capacity Purchase, Market Capacity, Resource Credits

Maintain compliance with PJM resource adequacy requirements

Transmission: Network Integration Transmission Service (NITS), Transmission Enhancement Charge (TEC), Other Transmission Charges

Pay for flow of energy across transmission lines

PJM POWER COST COMPONENTS (CONT'D)



Energy Components

Congestion: Cost to deliver energy to load.

Off System Resources: Generation located in a different transmission zone used to serve load.

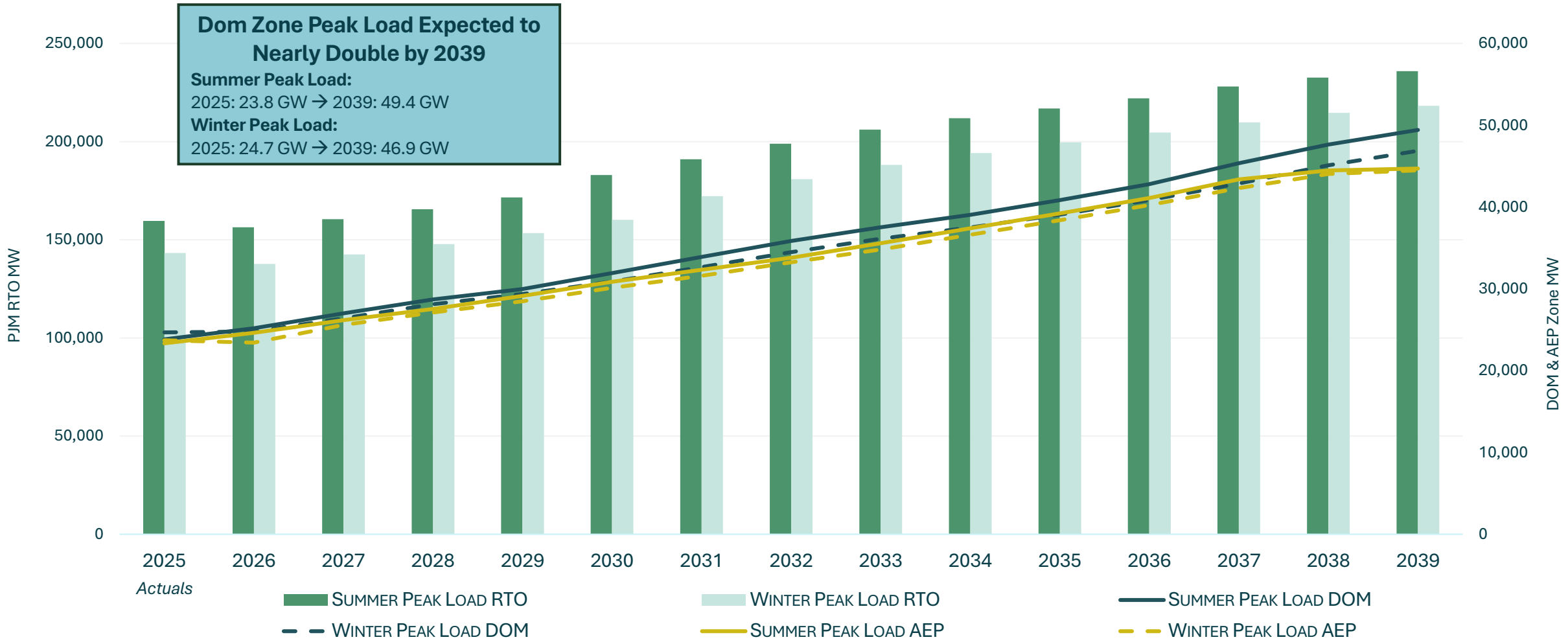
On System Resources: Local sited generation used to serve load.

Energy Hedges: Commoditized Block Hedges, Shaped Load products

Market Interaction: PJM Market Purchases and Sales used to balance remaining energy needs

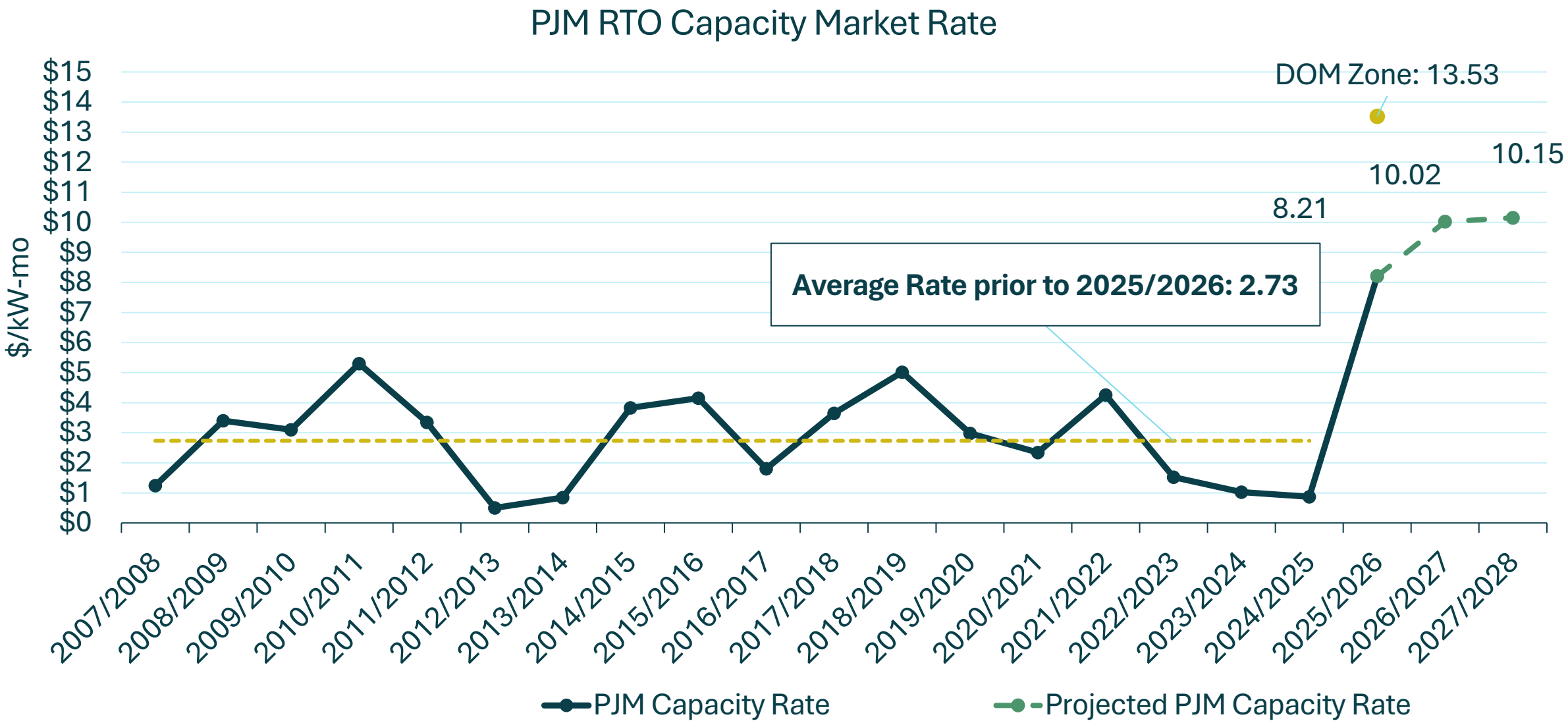
INCREASING COST TRENDS

PJM FORECASTS GREATER PEAK LOAD AND ENERGY CONSUMPTION OVER NEXT 15 YEARS

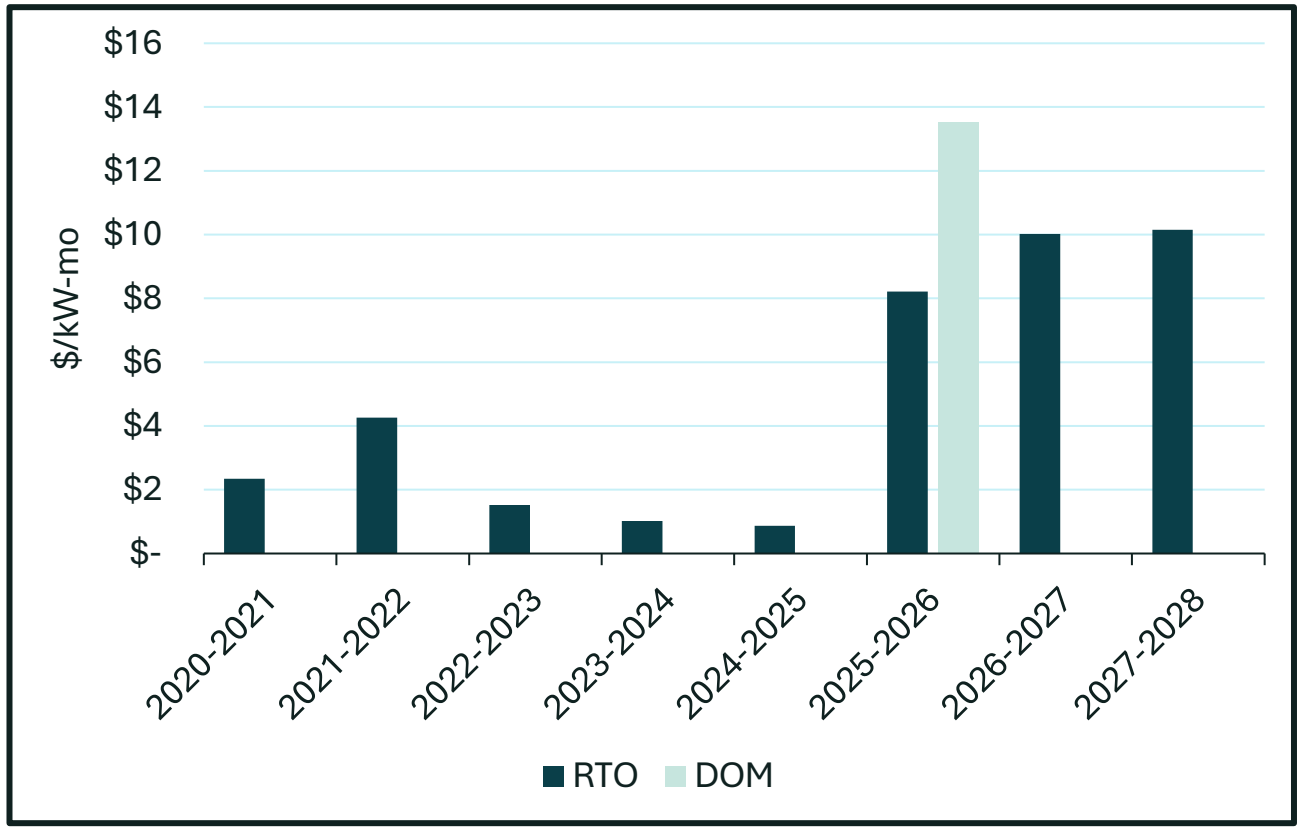


2026 PJM Long-Term Load Forecast

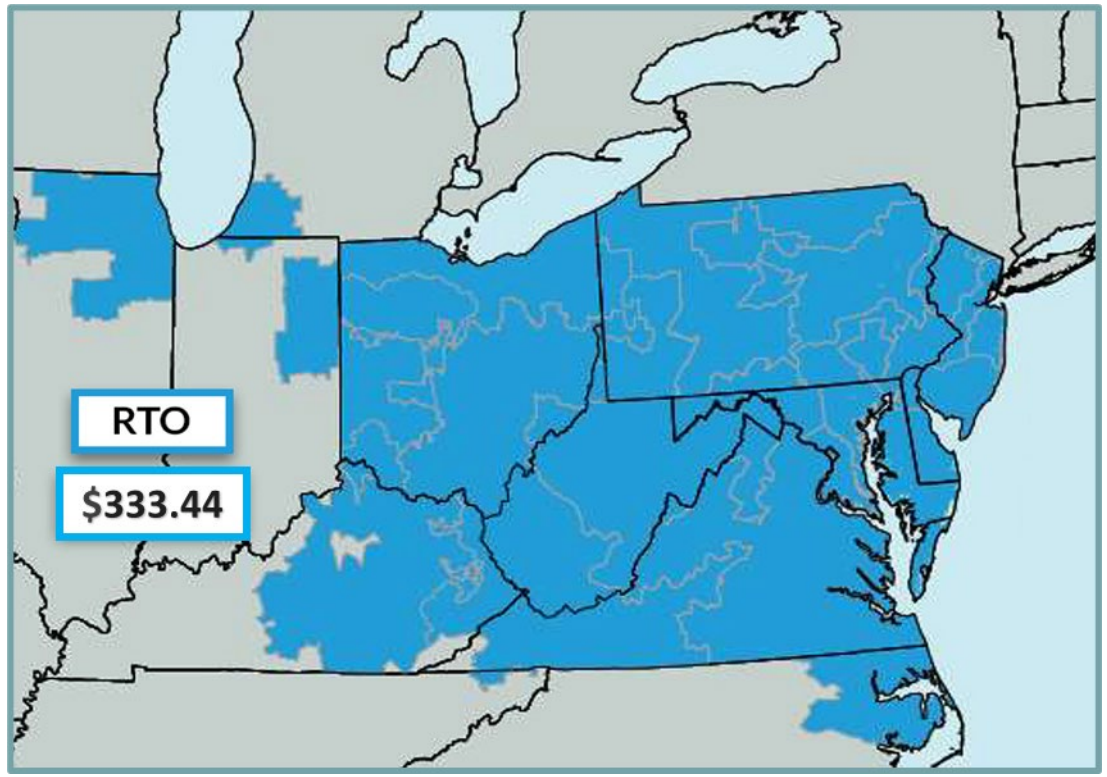
CAPACITY PRICES OVER TIME



2027-2028 AUCTION RESULTS



2027-28 BRA Price($/MW-day)



BRA Capacity prices released by PJM hit the price ceiling in all locations.

2027-2028 AUCTION PRICE SCENARIOS

BRA With Cap and Floor ($/MW-day)

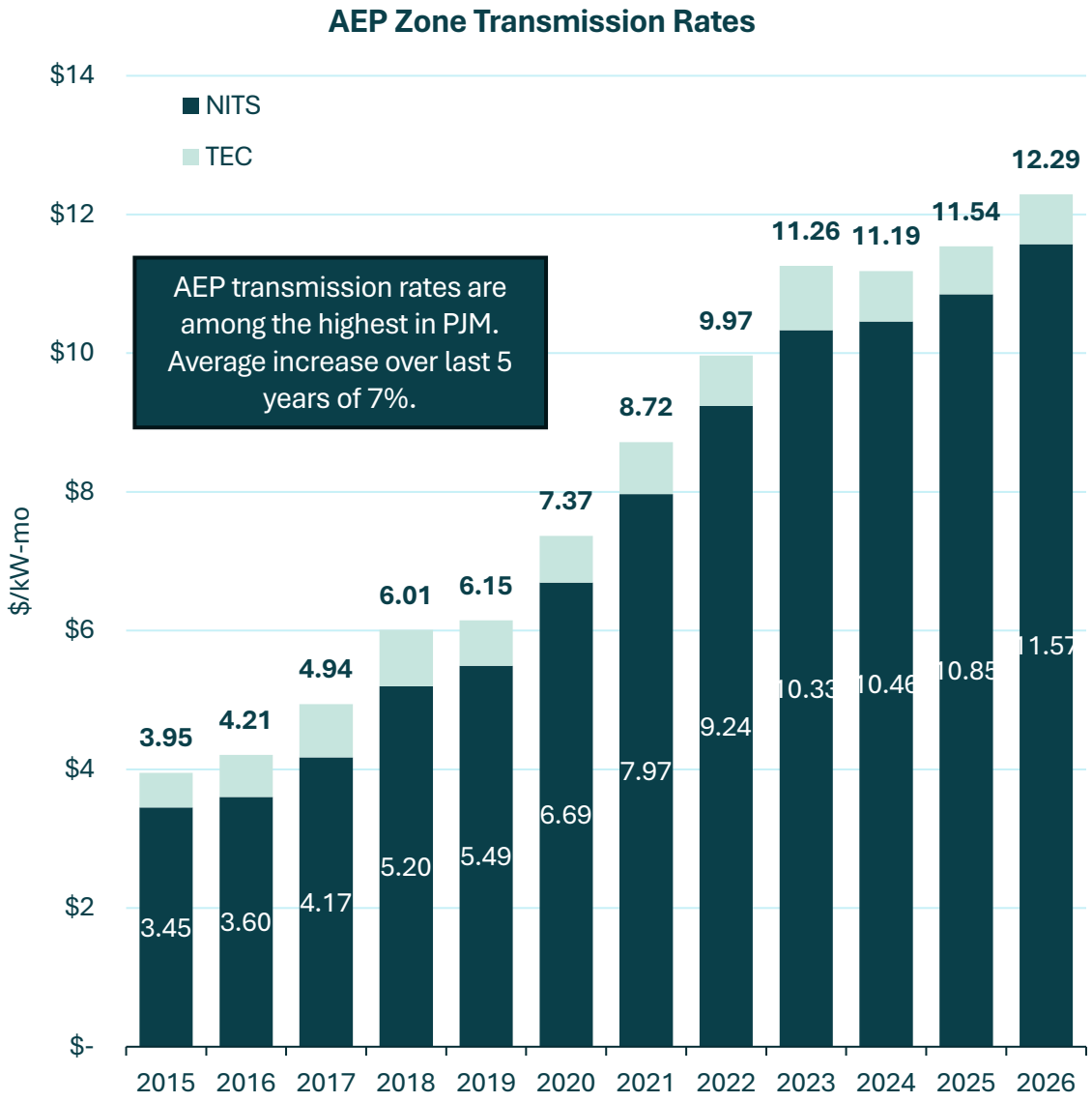
Delivery Year	Resource Clearing Price (RCP)	Cleared UCAP (MW)	Reserve Margin
2026-27	$329.17	134,205.3	18.9%
2027-28	**$333.44**	**134,478.1**	**14.9%**

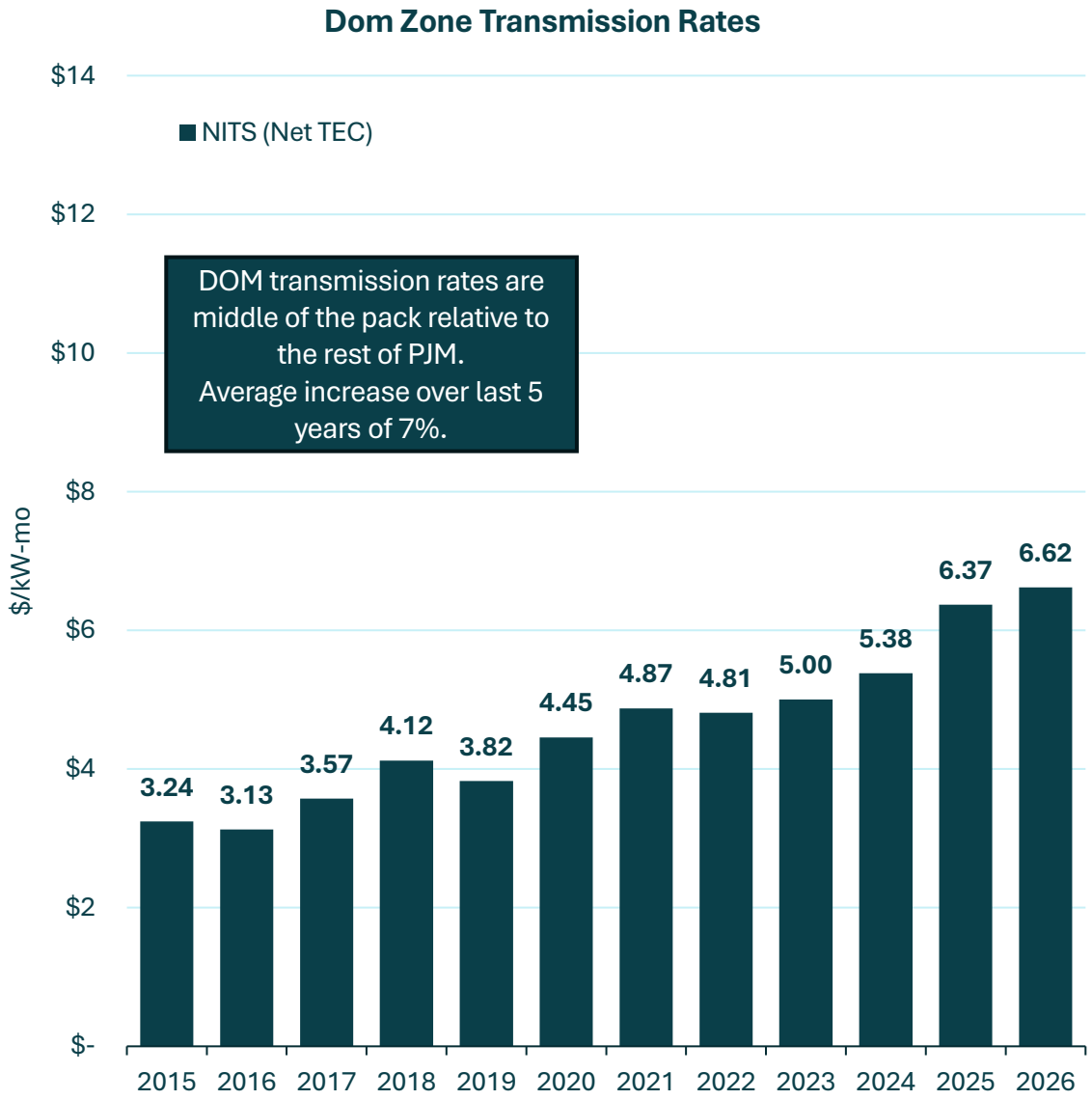
BRA Without Cap and Floor ($/MW-day)

Delivery Year	Resource Clearing Price (RCP)	Cleared UCAP (MW)	Reserve Margin
2026-27	$388.57	134,205.3	18.9%
2027-28	$529.80	135,270.7	15.4%

- **Auction Price is significantly higher without a Cap & Floor in place for PY 2027/28**
  - $529.80 for Rest of RTO
  - $542.83 for DOM
- **Auction Clearing Price would have increased by:**
  - **2026–27 BRA:** $59.40 (18%) ↑
  - **2027–28 BRA:** $196.36 (58%) ↑
- **FERC approved price collar extension for next two auctions (2028/29 & 2029/30).**
  - Cap of $325/MW-day ($9.89/kW-mo). Expectations are that the 2028/29 BRA will clear at the cap.

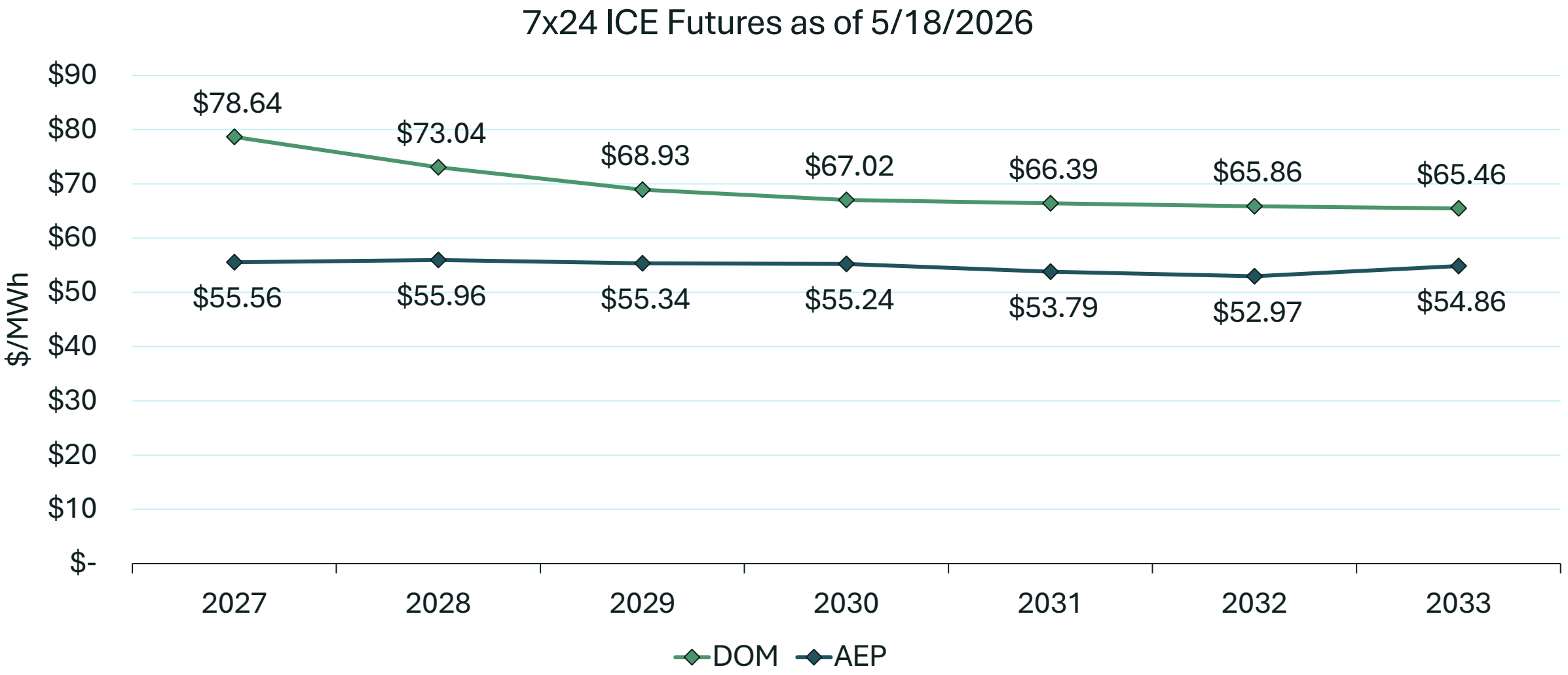
TRANSMISSION PRICES OVER TIME



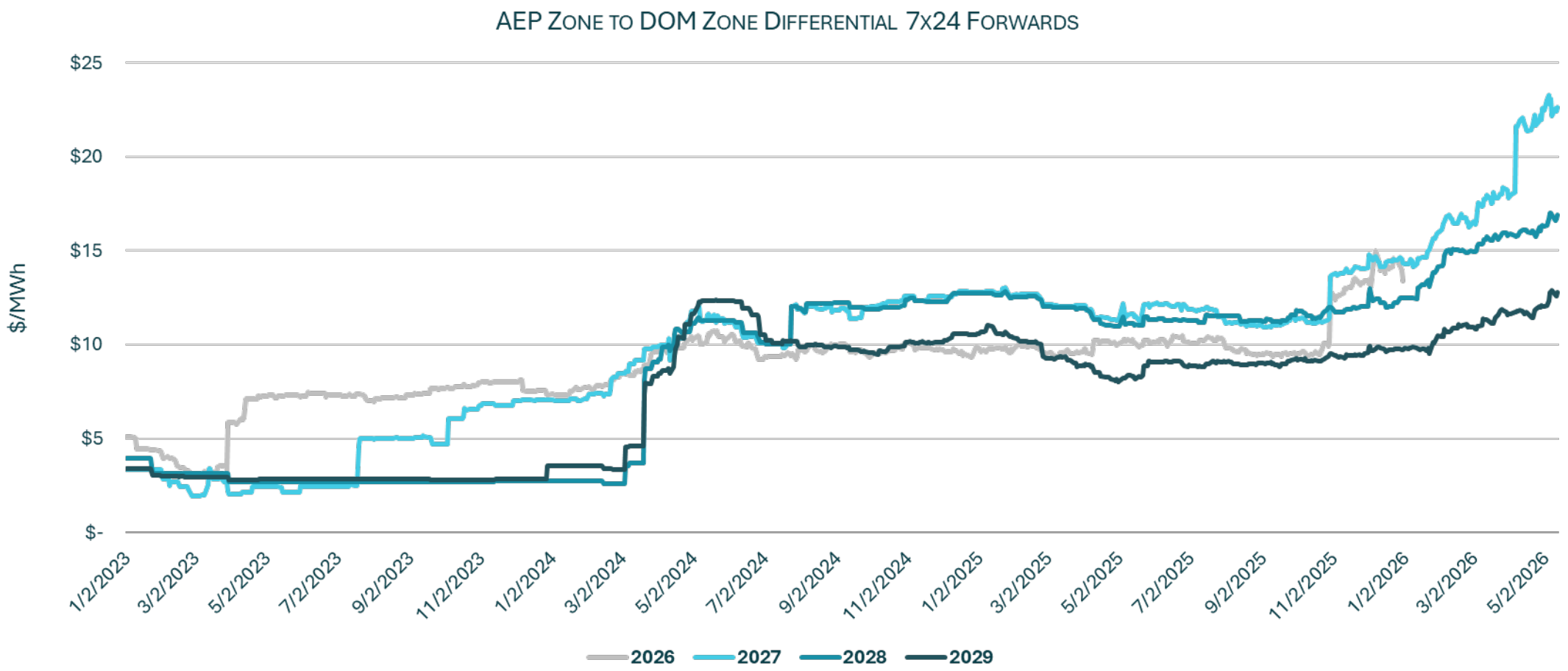


ENERGY PRICE FUTURES

CY 2025 Average 7x24
DOM: $60.03/MWh
AEP: $45.81/MWh



FORWARD CONGESTION DIFFERENTIAL



Increasing trend in forward congestion differential between AEP and Dominion Zones. Concerns for long-term energy prices in Dominion if the pace of load growth continues.

COST MITIGATION STRATEGIES

PRIMARY CONTROLLABLE COSTS

Capacity Costs

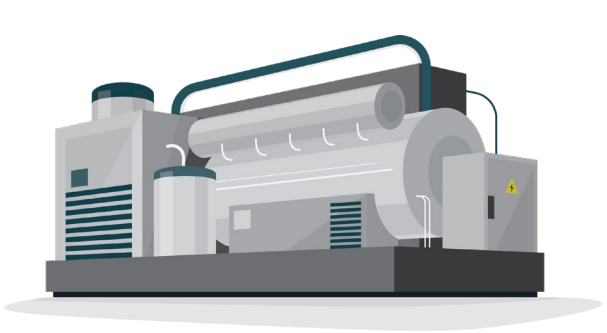
Transmission Costs

Energy Costs

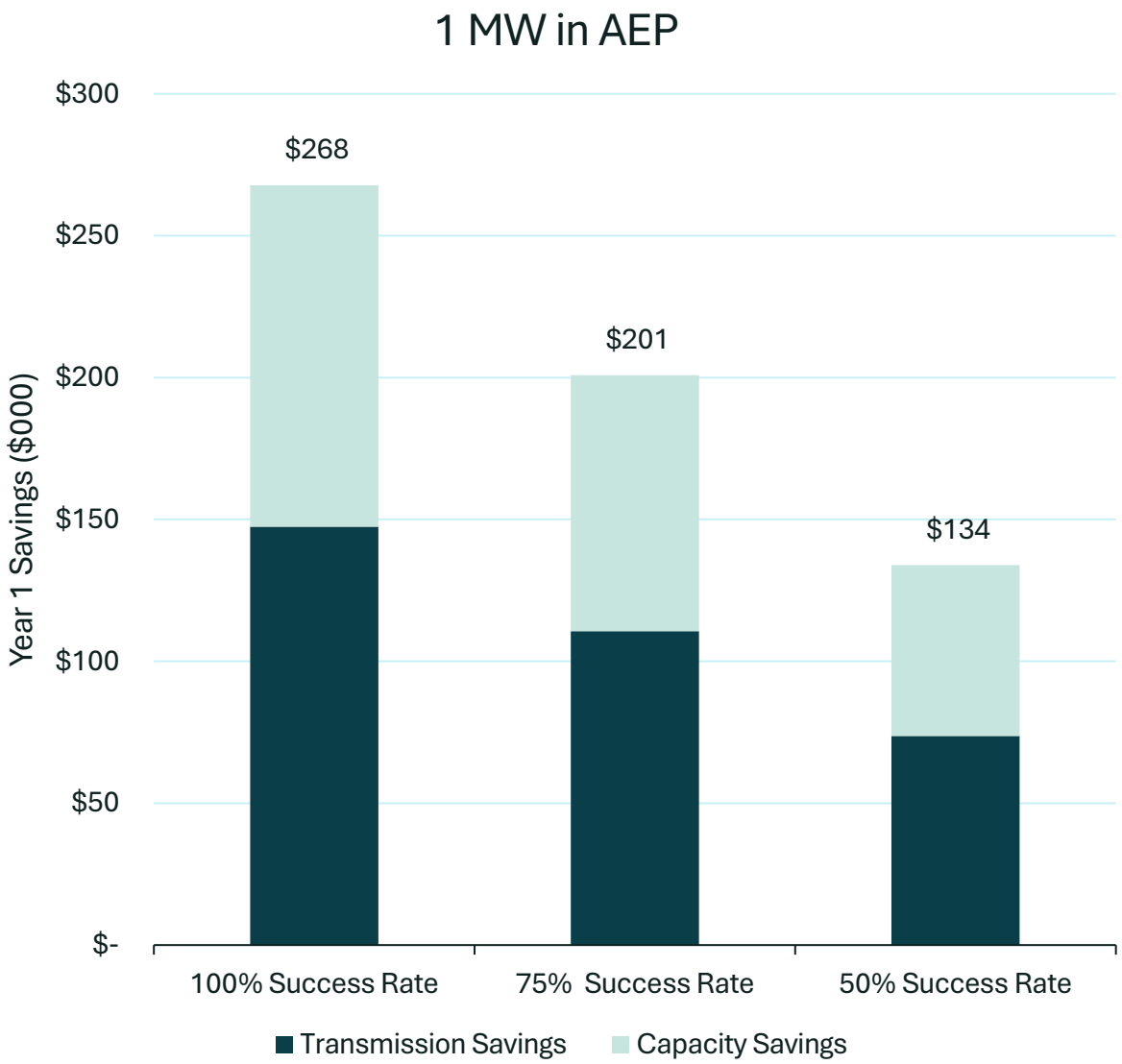
Congestion Costs

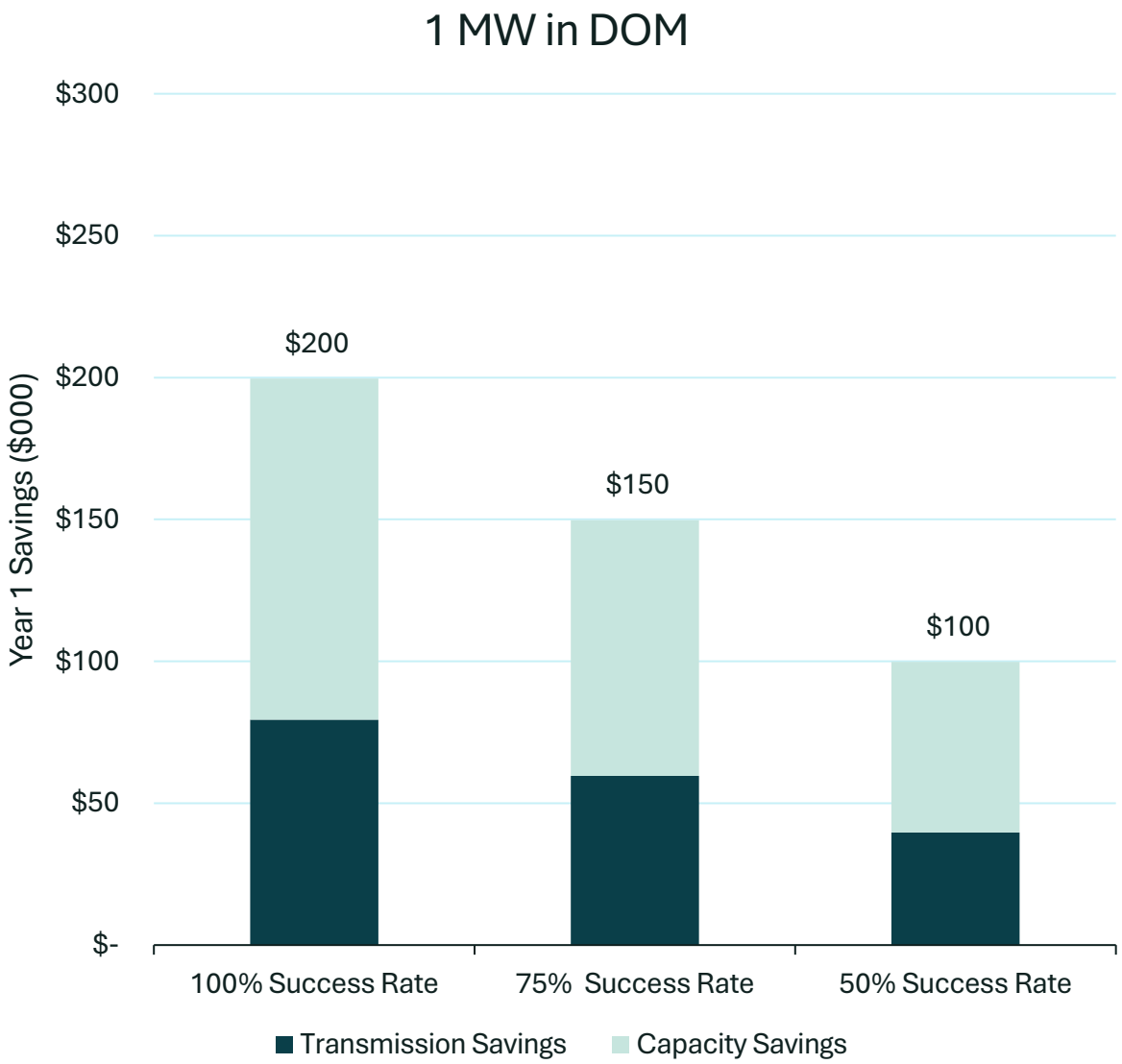
RESOURCE PARTICIPATION

Resource Location	Capacity	Transmission	Energy	Congestion
Behind-the-Meter	Peak Shaving	Peak Shaving	Local, Fixed Price Supply	None
Interconnected	Capacity Credit	None	Fixed Price Supply	Depends on location



BTM BESS EXAMPLE



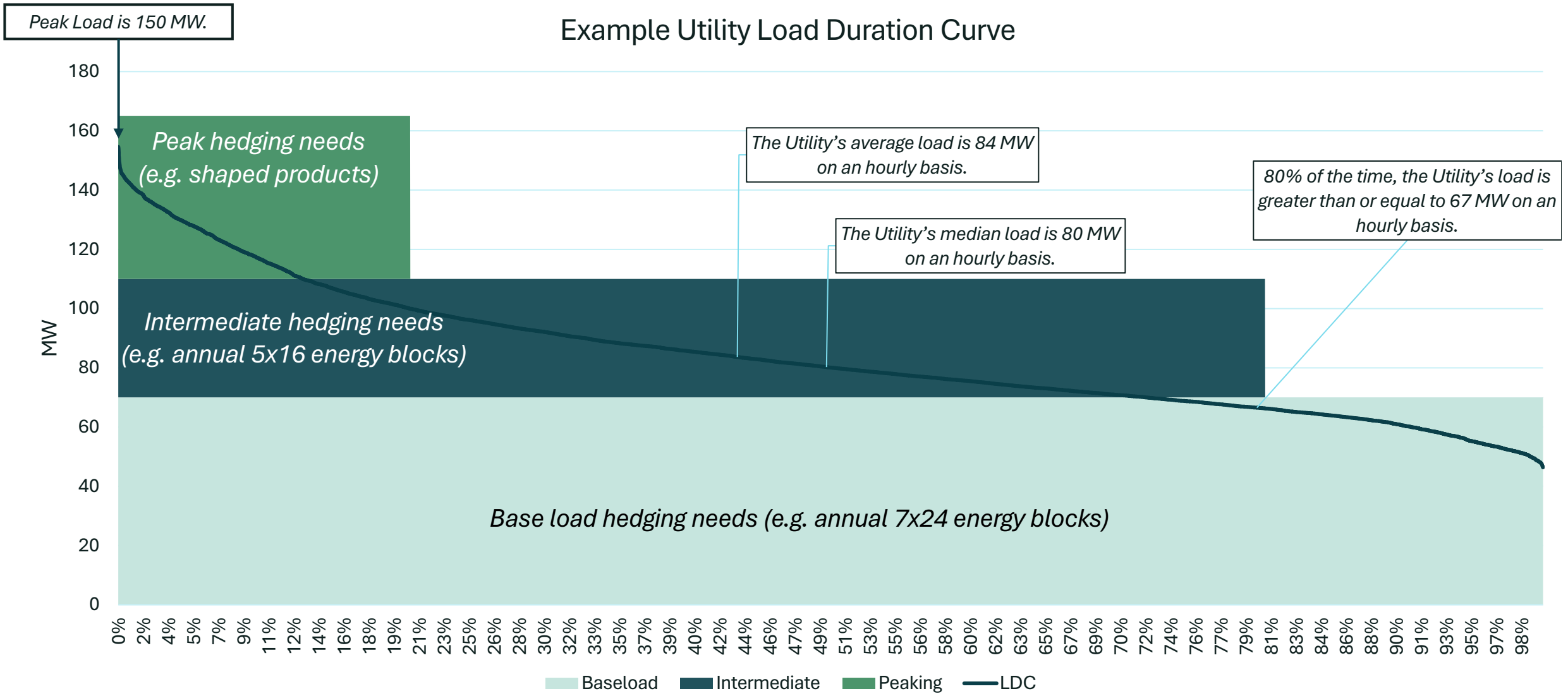


Assumes 2026 transmission rates and PY 2026/2027 capacity rate.

BILATERAL PURCHASES

Capacity	Transmission	Energy	Congestion
Capacity Hedges	None	Annual, Seasonal, Shaped Hedges	FTRs, Congestion Swaps

ENERGY HEDGING EXAMPLE



Assumes 2026 transmission rates and PY 2026/2027 capacity rate.

WRAP-UP

BEST PRACTICES

Implement Energy Risk Management Plans

- Outline a framework for hedging strategy (e.g. portfolio of resources)
- Establish timelines for hedging costs
- Define desired risk profile
- Define generation technologies of interest

Request for Proposals

- Define specific needs over time and frequently test the market on costs to provide supply
  - Resource procurements
  - Capacity hedge requests
  - Structured energy supply (e.g. 7x24, 5x16, etc.)

QUESTIONS

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