Dominion Energy Virginia
2025 Integrated Resource Plan (IRP) Update

Stakeholder Meeting 2 –
Reliability Topics & Modeling Inputs

August 27, 2025

This Meeting is Being Recorded

- Please note that this meeting is being recorded. The recording will be posted on the IRP Stakeholder Process website.

- The video and audio function have been disabled for participants and all questions submitted will be logged and anonymized.

- By continuing to participate in this meeting, you acknowledge that you have been informed of the recording and consent to being part of this recording. If you do not consent, you have the option to not attend this meeting.

Meeting Logistics

Q&A and Feedback Submittal

- Your audio is muted, but you can type messages into the Q&A screen.
- Select “all panelists” and type in your question (messages are not broadcast on screen share).
- If you are accessing the meeting by calling the 1–415 on number on your phone, you are not able to submit questions.

2025 IRP Stakeholder Website

- You can also submit questions/feedback via the “Submit Feedback” link on the IRP Stakeholder Website: DEVIRP.dominionenergy.com

2025 IRP Update Stakeholder Process

Meetings

- ✓ Friday, August 1 – Kickoff Meeting
- Wednesday, August 27 – Meeting on Modeling Inputs & Reliability
- Tuesday, September 30 – Stakeholder Input Review Meeting
- Friday, October 24 – Post Filing Meeting

Agenda

- Introduction / Safety Moment

- **Reliability Topics:**
  - Load Forecast
  - Energy Supply
  - Company Energy Storage Development

- **Modeling Inputs:** Stakeholder Survey

- Questions

Safety Moment: Stop for School Buses

- **Yellow flashing lights** mean **slow down** — the bus is preparing to stop. Children may be nearby waiting to board or being dropped off.

- **Red flashing lights** mean **stop** — stay at least 20 feet behind the bus while children are getting on or off. Remain stopped until the red lights stop flashing, the stop-arm retracts, and the bus moves again.

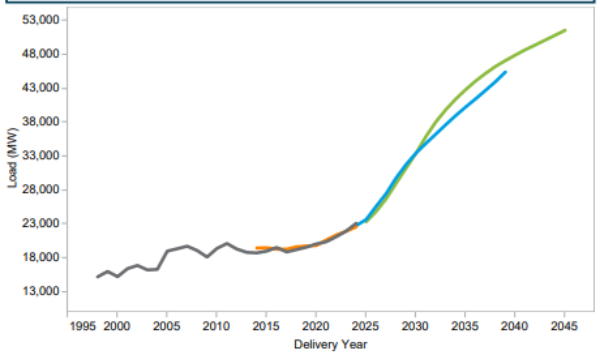
- **Even when no lights are flashing,** stay alert for children, especially during school arrival and dismissal times. Be cautious in neighborhoods, school zones, and near bus stops.

Load Forecast

2025 PJM Load Forecast: DOM Zone vs RTO

Dominion (DOM)

Summer Peak



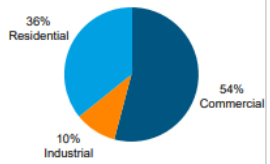
Weather - Annual Average 1993-2023

Avg Summer Daily Temp	77.0
Avg Summer Max Temp	97.0
Avg Winter Daily Temp	40.5
Avg Winter Min Temp	12.4

Zonal 10/15/20 Year Load Growth

SUMMER	6.3%	4.9%	4.0%
WINTER	6.0%	4.7%	3.9%

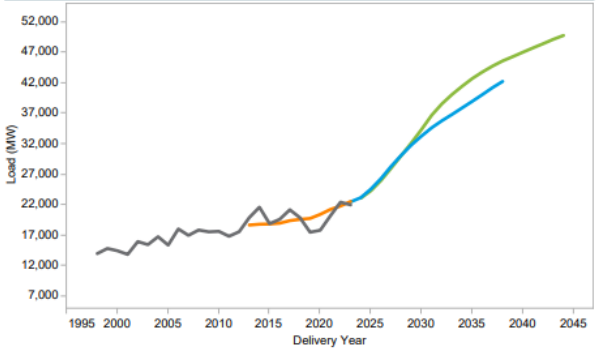
RCI Makeup



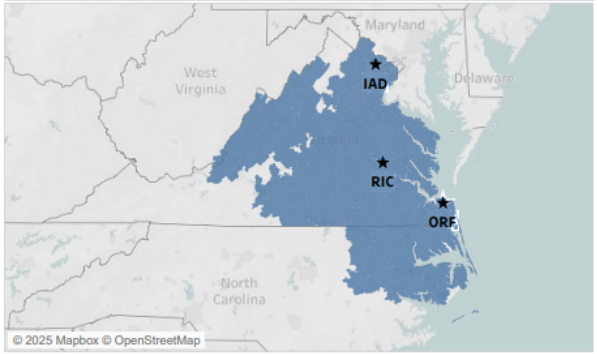
LDAs

PJM RTO

Winter Peak



Metropolitan Statistical Areas and Weather Stations



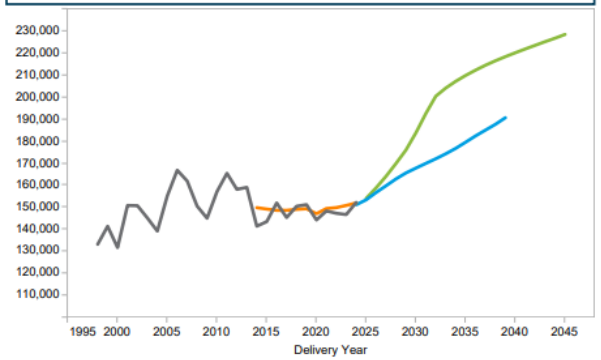
Peak WN peak Forecast 2024 Forecast 2025

MSA

Virginia Commonwealth Economics

PJM RTO

Summer Peak



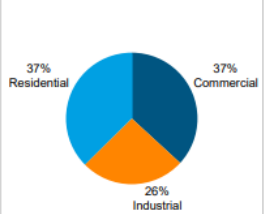
Weather - Annual Average 1993-2023

Avg Summer Daily Temp	74.3
Avg Summer Max Temp	95.2
Avg Winter Daily Temp	34.3
Avg Winter Min Temp	4.1

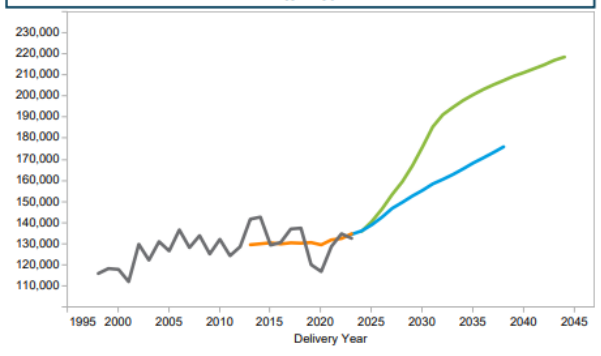
Zonal 10/15/20 Year Load Growth

SUMMER	3.1%	2.4%	2.0%
WINTER	3.8%	2.9%	2.4%

RCI Makeup



Winter Peak



Peak WN peak Forecast 2024 Forecast 2025

LDAs

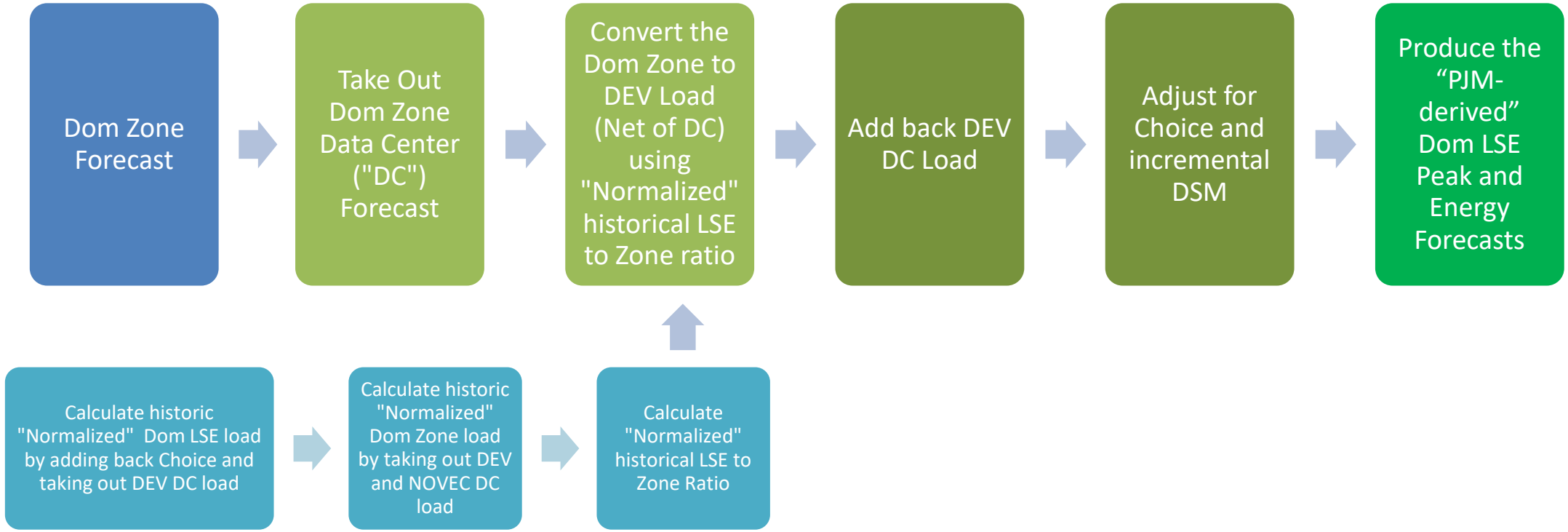
PJM Mid-Atlantic	Central MAAC
Eastern MAAC	Western MAAC
Southern MAAC	PJM West

Zones

AE	DAYTON	JCPL	PEPCO
AEP	DEOK	METED	PL
APS	DLCO	OVEC	PS
ATSI	DOM	PECO	RECO
BGE	DPL	PENLC	UGI
COMED	EKPC		

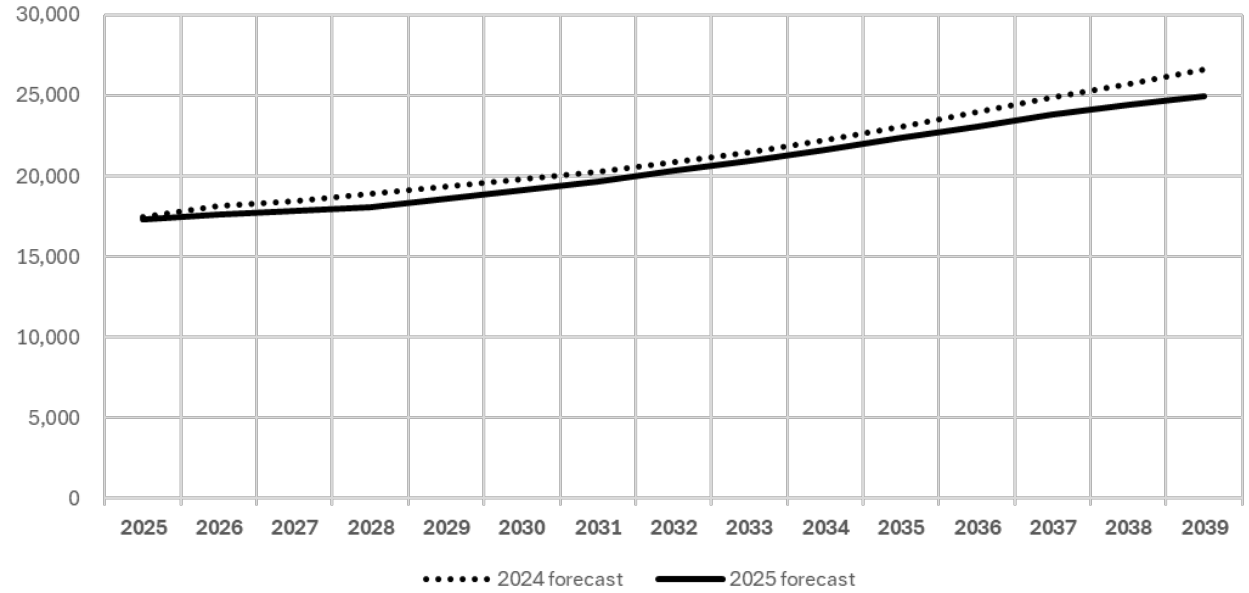
PJM RTO summer peak 10-year annual load growth increased to 3.1% from 1.6%

2025 PJM Derived Load Forecast Methodology

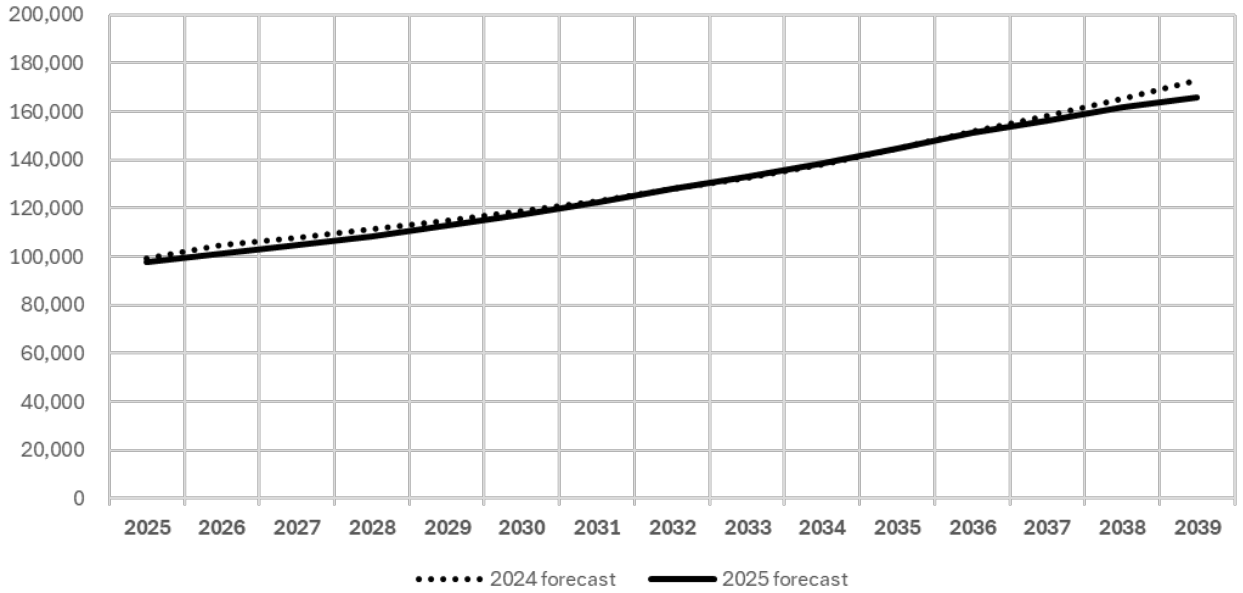


2025 PJM Derived Load Forecast Comparison

2025 vs 2024 DOM LSE – CP (MW)



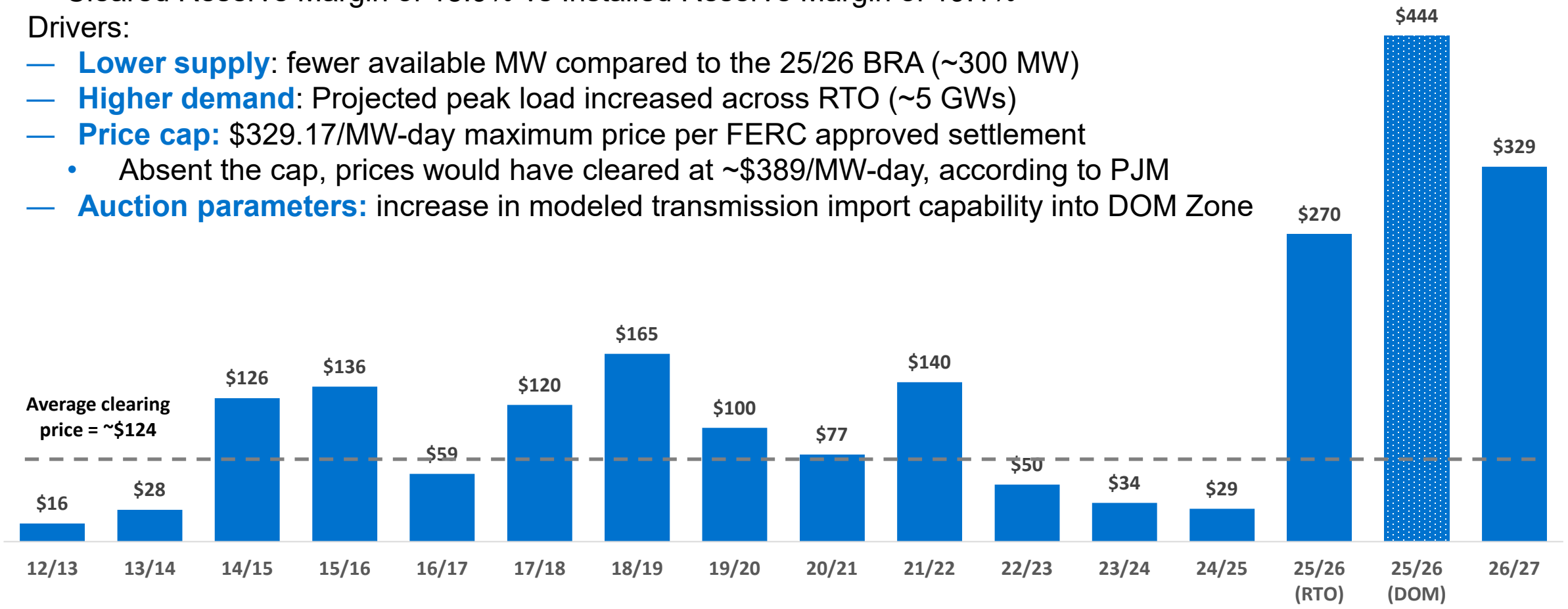
2025 vs 2024 DOM LSE – Energy (GWh)



Energy Supply

PJM 2026/2027 Base Residual Auction Summary

- PJM-RTO clearing price of $329.17/MW-day; DOM Zone did not separate
- Results indicate continued tightening of supply and demand conditions across the PJM region
  - Cleared Reserve Margin of 18.9% vs Installed Reserve Margin of 19.1%
- Drivers:
  - **Lower supply**: fewer available MW compared to the 25/26 BRA (~300 MW)
  - **Higher demand**: Projected peak load increased across RTO (~5 GWs)
  - **Price cap:** $329.17/MW-day maximum price per FERC approved settlement
    - Absent the cap, prices would have cleared at ~$389/MW-day, according to PJM
  - **Auction parameters:** increase in modeled transmission import capability into DOM Zone



Explanatory note: Capacity years run from June 1 to May 31

Effective Load Carrying Capability (ELCC)

Overview

- **What is ELCC?**
  - Measures how much additional load a resource can support without increasing system risk, using loss-of-load expectation (LOLE) as a benchmark.
  - Values derived from probabilistic modeling which simulates resource capacity contributions during simulated load, weather, and resource performance scenarios.
- **What are the primary drivers that influence ELCC values?**
  - Load scenarios: load peak and shape from prevailing PJM load forecast
  - Weather data: June 1, 1993 to present
  - Resource performance data: June 1, 2012 to present
  - Other: expected resource mix, Demand Response participation, etc.

Current Values

	2026/2027 BRA ELCC Class Ratings
Onshore Wind	41%
Offshore Wind	69%
Fixed-Tilt Solar	8%
Tracking Solar	11%
Landfill Intermittent	50%
Hydro Intermittent	38%
4-hr Storage	50%
6-hr Storage	58%
8-hr Storage	62%
10-hr Storage	72%
Demand Resource	69%
Nuclear	95%
Coal	83%
Gas Combined Cycle	74%
Gas Combustion Turbine	60%
Gas Combustion Turbine Dual Fuel	78%
Diesel Utility	91%
Steam	73%

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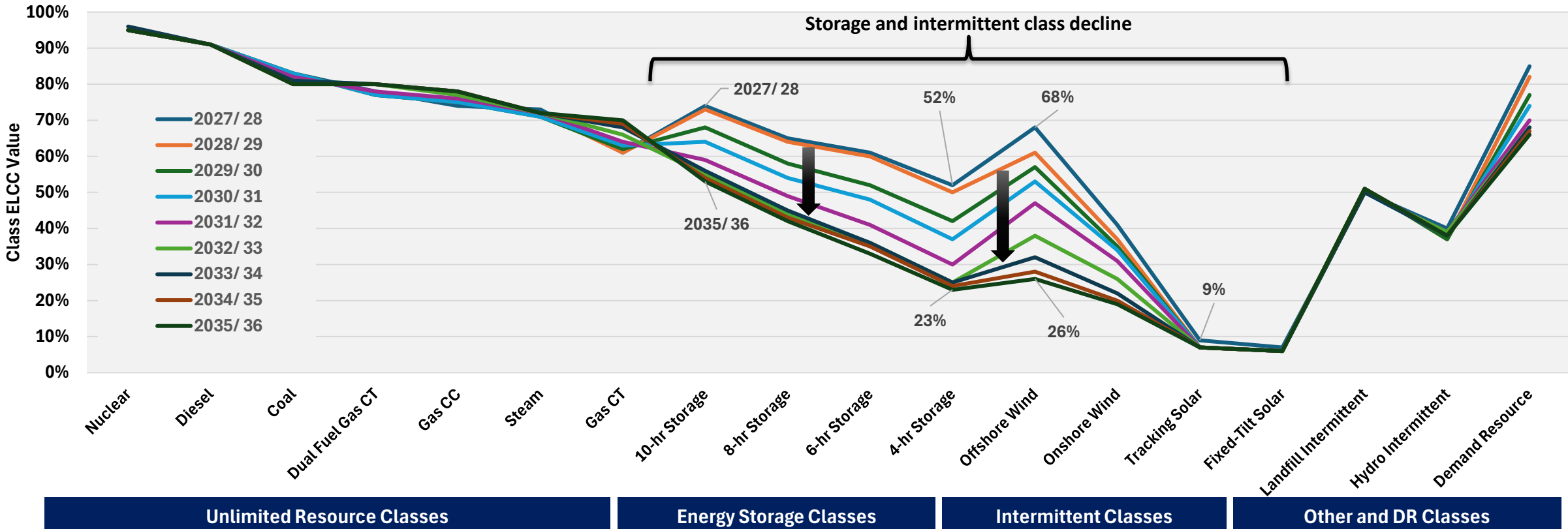
Sources: (1) https://www.pjm.com/-/media/DotCom/planning/res-adeq/elcc/elcc-parameters-schedule.xlsx; (2) https://www.pjm.com/-/media/DotCom/planning/res-adeq/elcc/2026-27-bra-elcc-class-ratings.pdf; (3) https://www.pjm.com/-/media/DotCom/planning/res-adeq/elcc/discussion-of-preliminary-elcc-class-ratings-for-period-2027-2035.pdf

PJM Preliminary ELCC Class Ratings – 2027/28 to 2035/2036



- According to PJM, study results are primarily impacted by:
  1. Acceleration in extreme winter peak values within PJM 2025 Load Forecast
  2. Change in resource mix from unlimited to intermittent resources
- Intermittent and storage class ELCC values most heavily impacted by shift towards winter risk

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Sources: (1) https://www.pjm.com/-/media/DotCom/planning/res-adeq/elcc/preliminary-elcc-class-ratings.pdf; (2) https://www.pjm.com/-/media/DotCom/planning/res-adeq/elcc/discussion-of-preliminary-elcc-class-ratings-for-period-2027-2035.pdf

Company Energy Storage Development

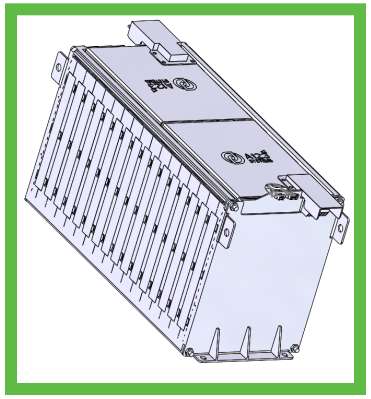
Energy Storage Systems

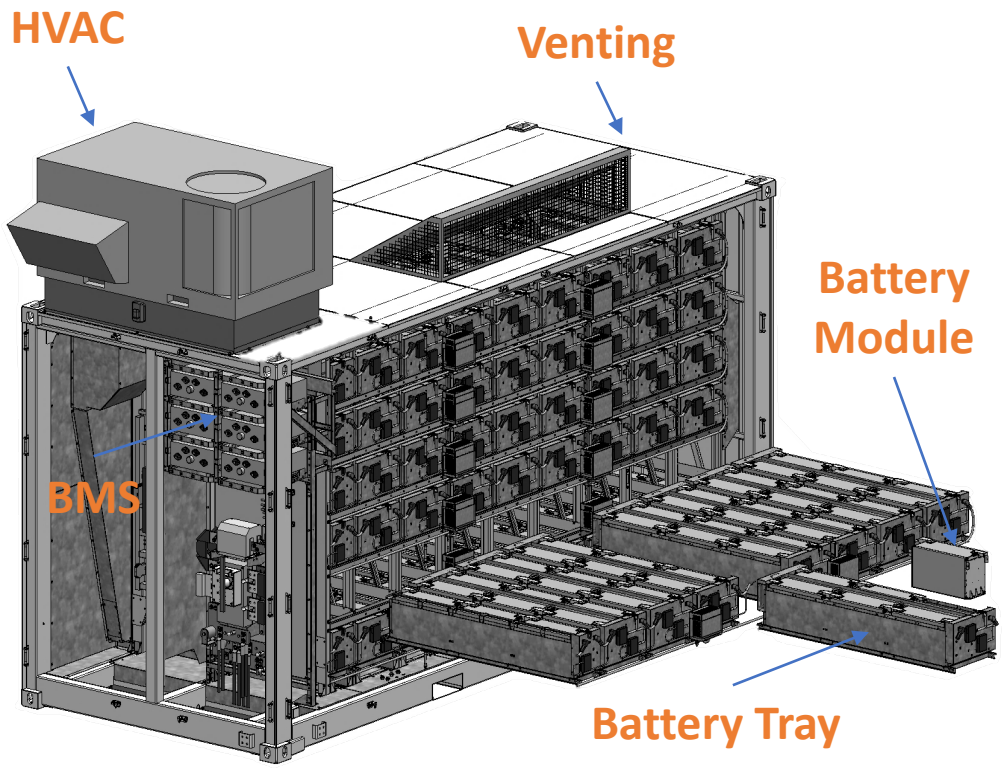
Lithium-Ion Battery System Components

Dominion Energy®

Cell

Module



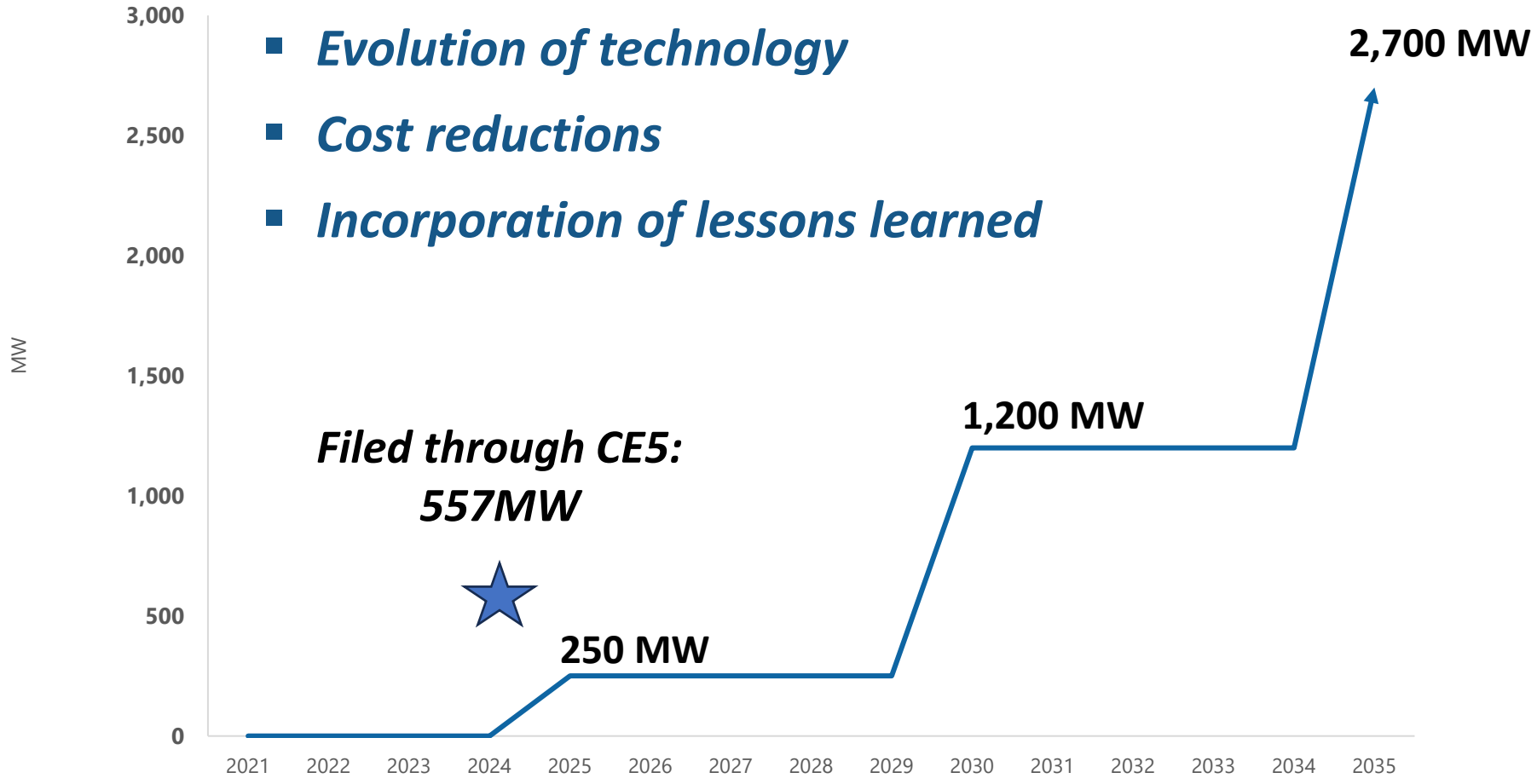


Enclosure

VCEA Energy Storage Targets

Deployment strategy enables:

- ***Evolution of technology***
- ***Cost reductions***
- ***Incorporation of lessons learned***



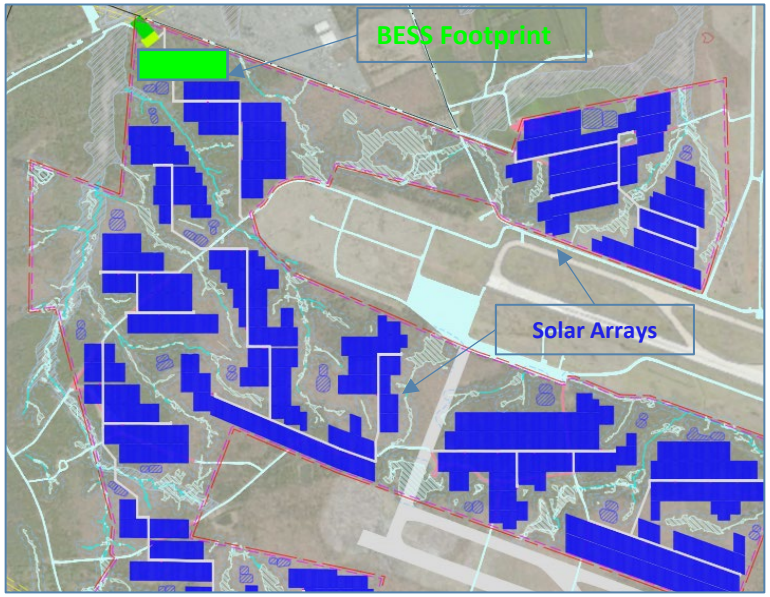
VCEA Energy Storage Projects

Dry Bridge Storage

20MW / 80MWh | Chesterfield | COD: 2023

Dulles Solar + Storage

50MW / 200MWh | Loudoun | COD 2026



Shands Storage

15.7MW / 62.8MWh | Sussex | COD 2025

**Does not include 3rd Party Power Purchase Agreement Projects*

Battery Storage Pilots

GTSA Phase I and II Overview

Phase I - Pilot Project CODs - Q4 2021/2022 (BESS 1, 2 & 3)

	Distribution		Generation
Location	1 New Kent County, VA	2 Hanover County, VA	3 Powhatan County, VA
Size	2 MW / 4 MWh	2 MW / 4 MWh	10 MWac / 40 MWh + 2 MWdc / 8 MWh
Use Case	Prevent Solar Backfeed	Non-Wires Alternative	Renewable Integration
Technology	Lithium-Ion	Lithium-Ion	Lithium-Ion

Phase II - Pilot Project COD – Q3 2026 (BESS 4, 5 & 6)

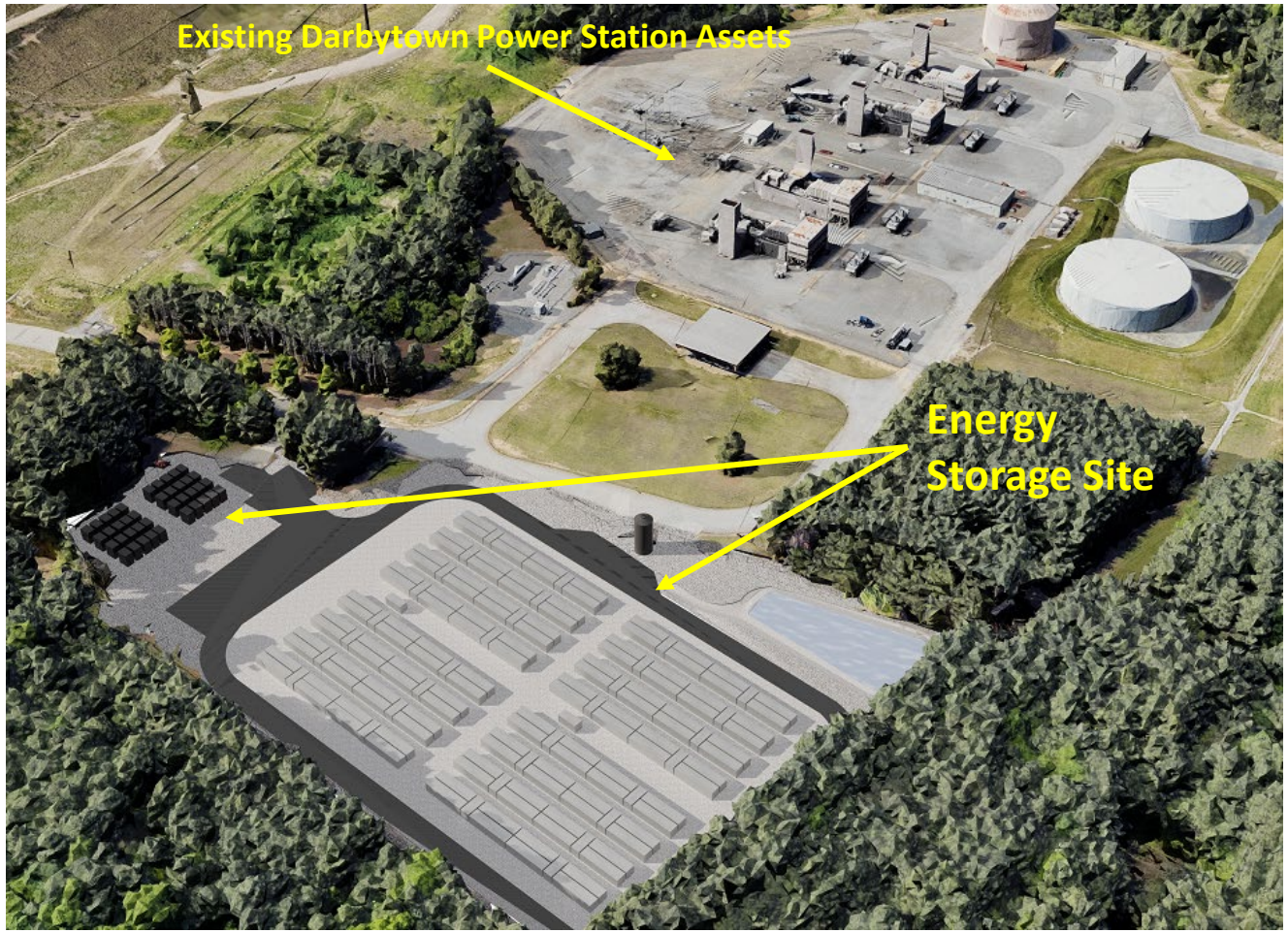
	Generation		Distribution	
Location	Darbytown, VA		Chesterfield Training Center	Virginia State University
Vendor	4 Form Energy	EOS	5	6 Enervenue
Size	5 MW / 500 MWh	4 MW / 16 MWh	1.9 MW / 3.8 MWh	1.5 MW / 15 MWh
Use Case	Seasonal Reliability	Daily Load Shifting	Micro Grid Outage Mitigation	Long Duration BTM
Technology	Iron - Air	Zinc - Halide	Lithium-Ion	Nickel-Hydrogen
COD	2026+		2026	2027

Darbytown Energy Storage
Technology Pilot

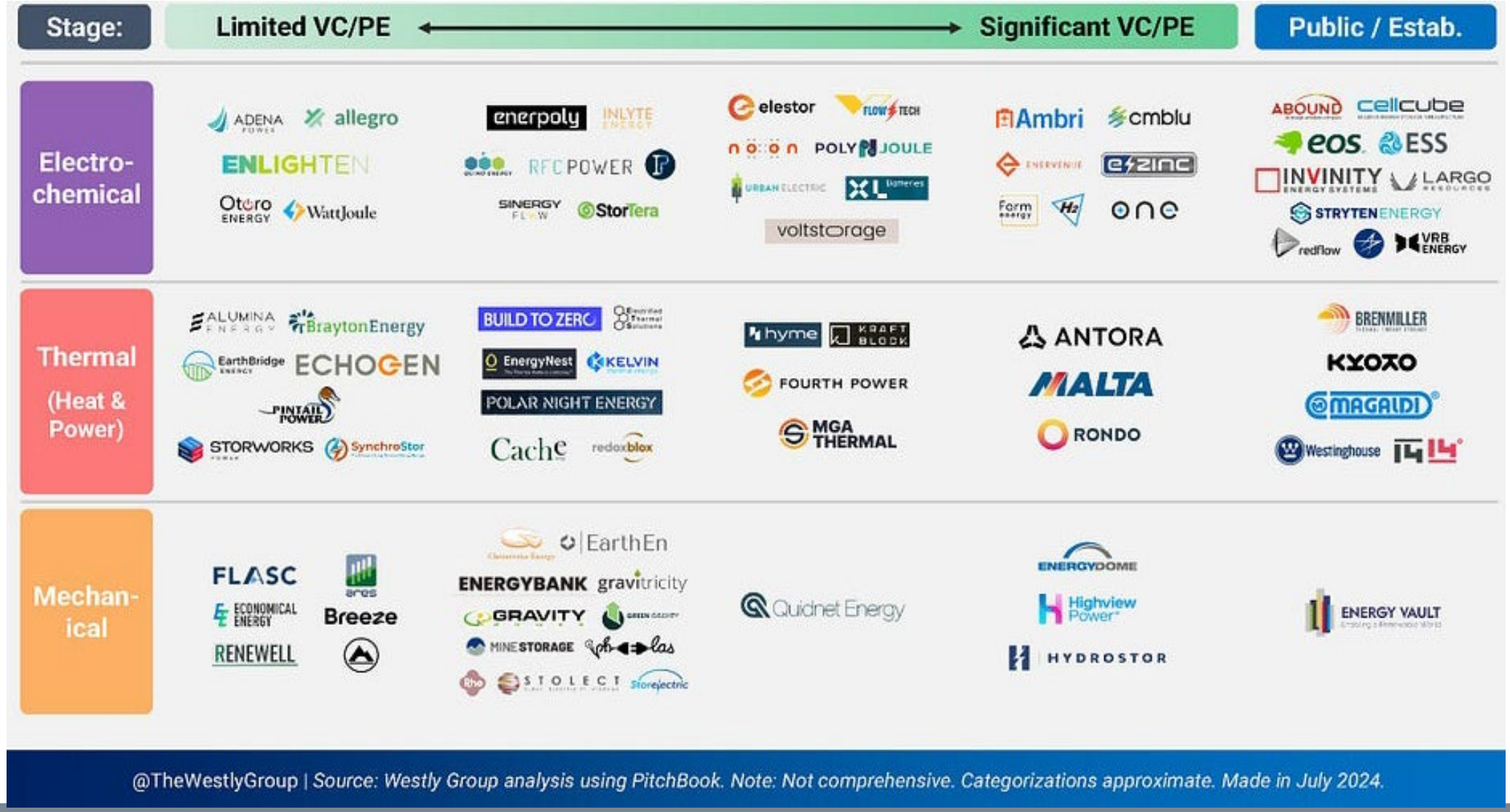
Battery Technologies

	Form energy	eos
Project Size	5 MW/500 MWh	4 MW / 16 MWh
Chemistry	**Iron-Air**	**Zinc Halide**
Duration	100 hour	4 hour
Use Case	Seasonal reliability	Daily load shifting

Project Location: Henrico County, VA



Long-Duration Energy Storage Technologies



@TheWestlyGroup | *Source: Westly Group analysis using PitchBook. Note: Not comprehensive. Categorizations approximate. Made in July 2024.*

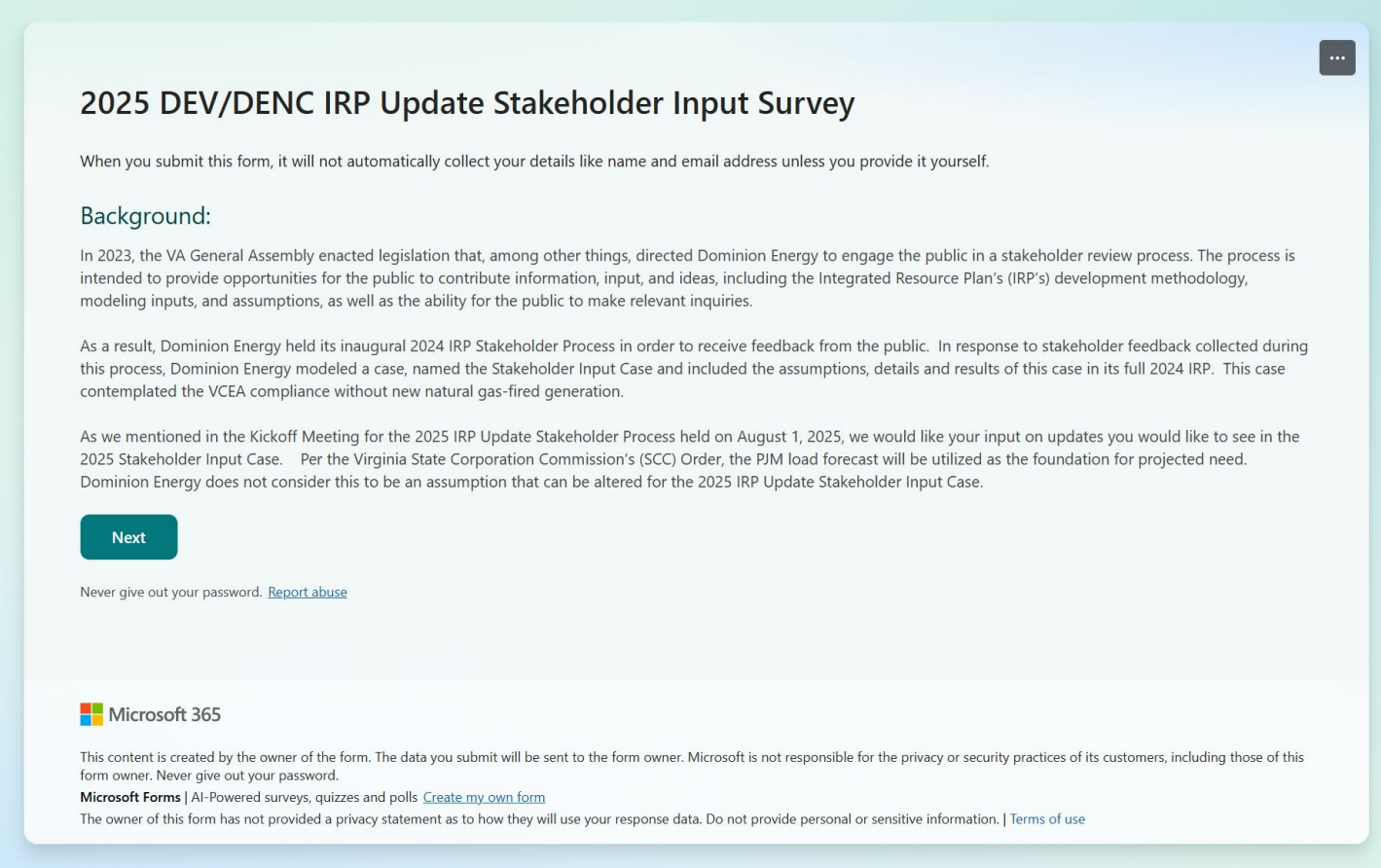
Modeling Input Stakeholder Survey

Survey Response Summary

- On August 14, 2025, the Company distributed a Stakeholder Input Survey ("survey") to the 2025 DEV/DENC IRP stakeholder group to collect feedback on modeling inputs for the 2025 IRP Update.

- The survey was available for submission via Microsoft Forms through August 21, 2025.

- The Company received 15 survey responses (6% response rate) from 13 unique organizations.
  - Two organizations submitted two unique responses; these have been combined.



2025 DEV/DENC IRP Update Stakeholder Input Survey

When you submit this form, it will not automatically collect your details like name and email address unless you provide it yourself.

Background:

In 2023, the VA General Assembly enacted legislation that, among other things, directed Dominion Energy to engage the public in a stakeholder review process. The process is intended to provide opportunities for the public to contribute information, input, and ideas, including the Integrated Resource Plan's (IRP's) development methodology, modeling inputs, and assumptions, as well as the ability for the public to make relevant inquiries.

As a result, Dominion Energy held its inaugural 2024 IRP Stakeholder Process in order to receive feedback from the public. In response to stakeholder feedback collected during this process, Dominion Energy modeled a case, named the Stakeholder Input Case and included the assumptions, details and results of this case in its full 2024 IRP. This case contemplated the VCEA compliance without new natural gas-fired generation.

As we mentioned in the Kickoff Meeting for the 2025 IRP Update Stakeholder Process held on August 1, 2025, we would like your input on updates you would like to see in the 2025 Stakeholder Input Case. Per the Virginia State Corporation Commission's (SCC) Order, the PJM load forecast will be utilized as the foundation for projected need. Dominion Energy does not consider this to be an assumption that can be altered for the 2025 IRP Update Stakeholder Input Case.

Next

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Survey Responses (Part 1)

Should the 2025 IRP Update Stakeholder Input Case …	2025 Stakeholder Majority	% Stakeholder Alignment**
…model Virginia in RGGI?	**Yes**	66%
…include a Hybrid Solar Plus Storage Resource as a selectable resource?	**Yes**	82%
…include long-duration energy storage (LDES) as a selectable resource?	**Yes**	91%
…include large-scale nuclear as a selectable resource?	**Yes**	91%
…include SMRs as a selectable resource?	**Yes**	100%
…include new natural gas facilities as a selectable resource?	**No**	55%

**not including blank responses

Survey Responses (Part 2)

	2024 Stakeholder Case	2025 Stakeholder Majority	% Stakeholder Alignment**
Meets RPS Program (i.e., REC retirements) Requirement?	Yes	**Yes**	70%
Forced VCEA Development Targets?	Yes	**Yes**	55%
Renewable Utility/PPA	65/35	**65/35**	55%
EPA Environmental Regulations	Yes	**Yes**	64%
REC Purchases	30%	**30% ***	56%
Solar Build Limits (MW)	2,040	**2,040**	40%
Storage Build Limits (MW)	700	**700**	50%
Onshore/Offshore Wind (MW)	60/6,000	**Onshore: 60 ***	56%
		Offshore: 6000	50%
Capacity Imports (Purchases) (MW)	5,000	**5,000**	60%
Energy Imports	20% of Annual	**20% of Annual ***	60%
Retirements	Least Cost Optimized	**Split**	45% least-cost, 45% forced

*or align with Primary Portfolios
**not including blank responses

Summary: Stakeholder Input Case Model Inputs

	2024 Stakeholder Case	2025 Stakeholder Case
Meets RPS Program (i.e., REC retirements) Requirement?	Yes	Yes
Forced VCEA Development Targets?	Yes	Yes
Renewable Utility/PPA	65/35	65/35
REC Purchases	30%	30% *
EPA Environmental Regulations	Yes	Yes
Solar Build Limits (MW)	2,040	2,040
Storage Build Limits (MW)	700	700
Onshore/Offshore Wind (MW)	60 / 6,000	60* / 6,000
Nuclear Build Limits (starting in 2034) (MW)	536	Large-scale and SMR resources selectable
Natural Gas Resources	None	None
Capacity Imports (Purchases) (MW)	5,000	5,000
Energy Imports	20% of Annual	20% of Annual *
Retirements	Least Cost Optimized	Split **
Load Forecast	PJM	
EE	Aligned with goals est. in SCC's pending target setting proceeding; Beyond 2028 based on proposed targets w/reasonable increase based on savings potential.	

In addition, 2025 stakeholders requested long-duration energy storage (LDES) and hybrid solar plus storage resources be selectable resources. Stakeholders also support modeling Virginia in RGGI.

*or align with Primary Portfolios
**even split between least-cost and VCEA-forced retirements

Questions

Questions?

- Load Forecast
- Energy Supply
- Energy Storage Development
- Modeling Inputs

2025 IRP Stakeholder Website

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Thank you!