



RAPPAHANNOCK  
ELECTRIC COOPERATIVE

# POWERING OUR REGION TOGETHER: **ENERGY FORUM**

## **KEYNOTE SPEAKER**

John Hewa  
President & CEO





# Investing in Our Communities



- **The Power of Change:**
  - In 2025 **\$237,000+** grant awards to **71 non-profits**
  - Since 2005 **\$1,757,783** awarded to **472 non-profits**
- **Scholarships:** **\$22,500** awarded in 2025
- **Corporate Giving:**
  - **\$280,000+** in 2025



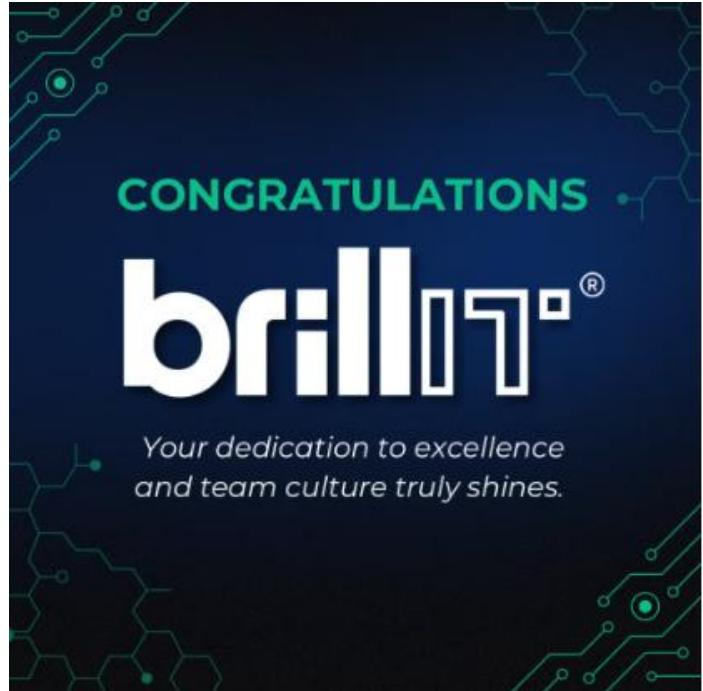
# Volunteerism & Community Service

- **56 Employees, 15 volunteer projects**
- **~175 employees, over 3,000 hours annually** supporting community initiatives
- **\$19,000 donated to food banks in 2025** including Blue Ridge Area Food Bank, Feeding Greene & Rappahannock County Food Bank
- **Project Big Heart Culpeper Chapter**



# Workforce Development

- VA Top Employer for Interns– 2024 & 2025
- Ambassador for Girl Power Camp
- Partner in launch of Laurel Ridge Community College Power Line Worker program
- BrilliT VA Best Places to Work in 2023 and 2025
  - POWER Best Places to Work in 2025

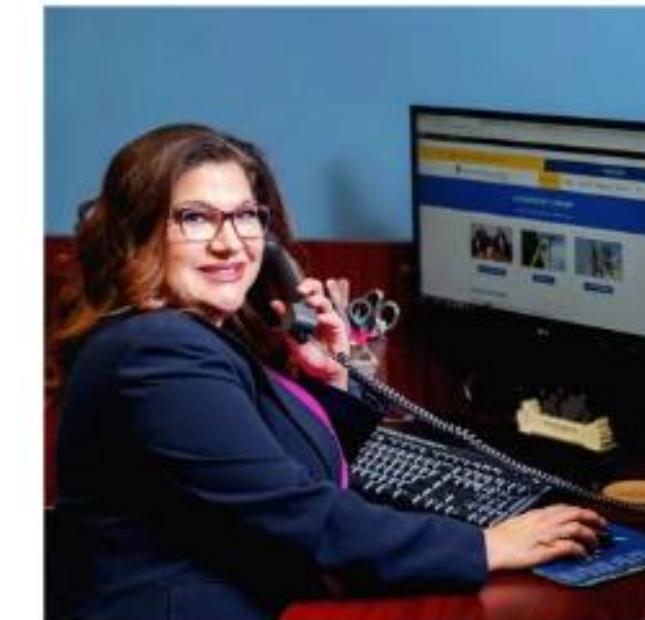
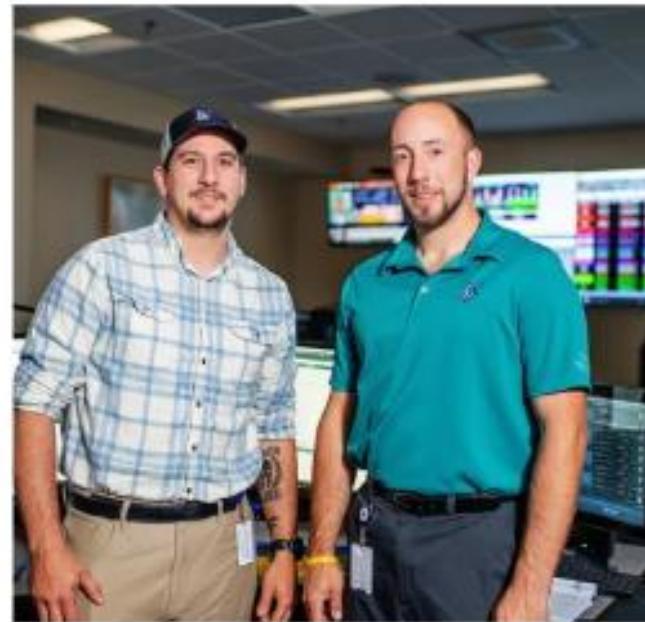




# Virginia Economic Investment ....and ENERGY

**John Hewa, P.E., Dr. Eng.**  
President & CEO





## MISSION

CONNECTING OUR MEMBERS AND COMMUNITIES WITH SAFE, RELIABLE,  
AFFORDABLE, AND SUSTAINABLE ENERGY SOLUTIONS.

# Drivers Shaping REC's Energy ACTION



## Demand Surge

Demand growth is drastically influencing capital plans



## Member Expectations

Growing interest in distributed energy resources



## Generation

Industry approach to serve growing demand



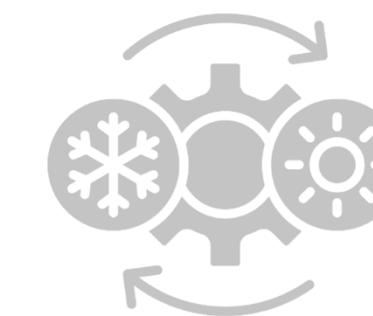
## Affordability

Rising cost pressures and member impact



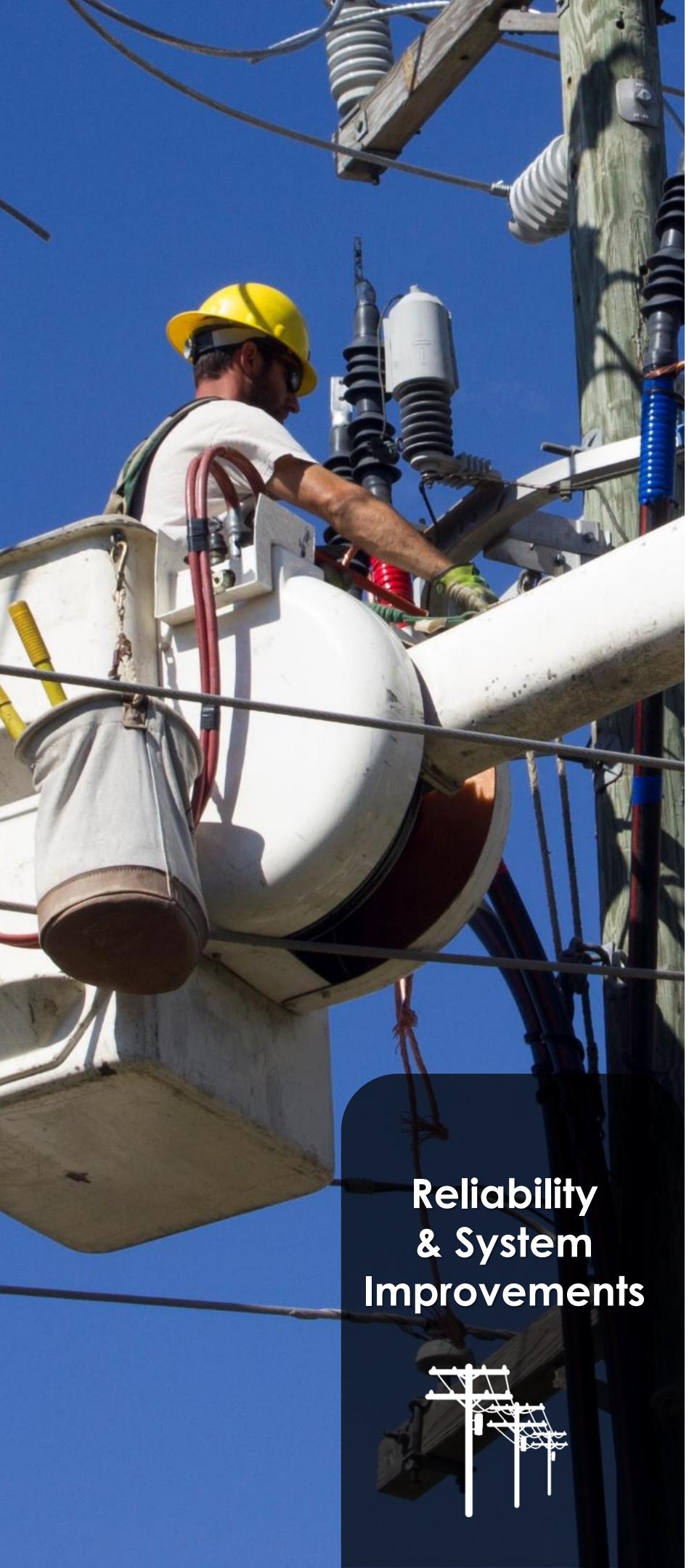
## Policy

Energy legislation and regulations



## Resiliency Threats

Threats from extreme weather and cyber security

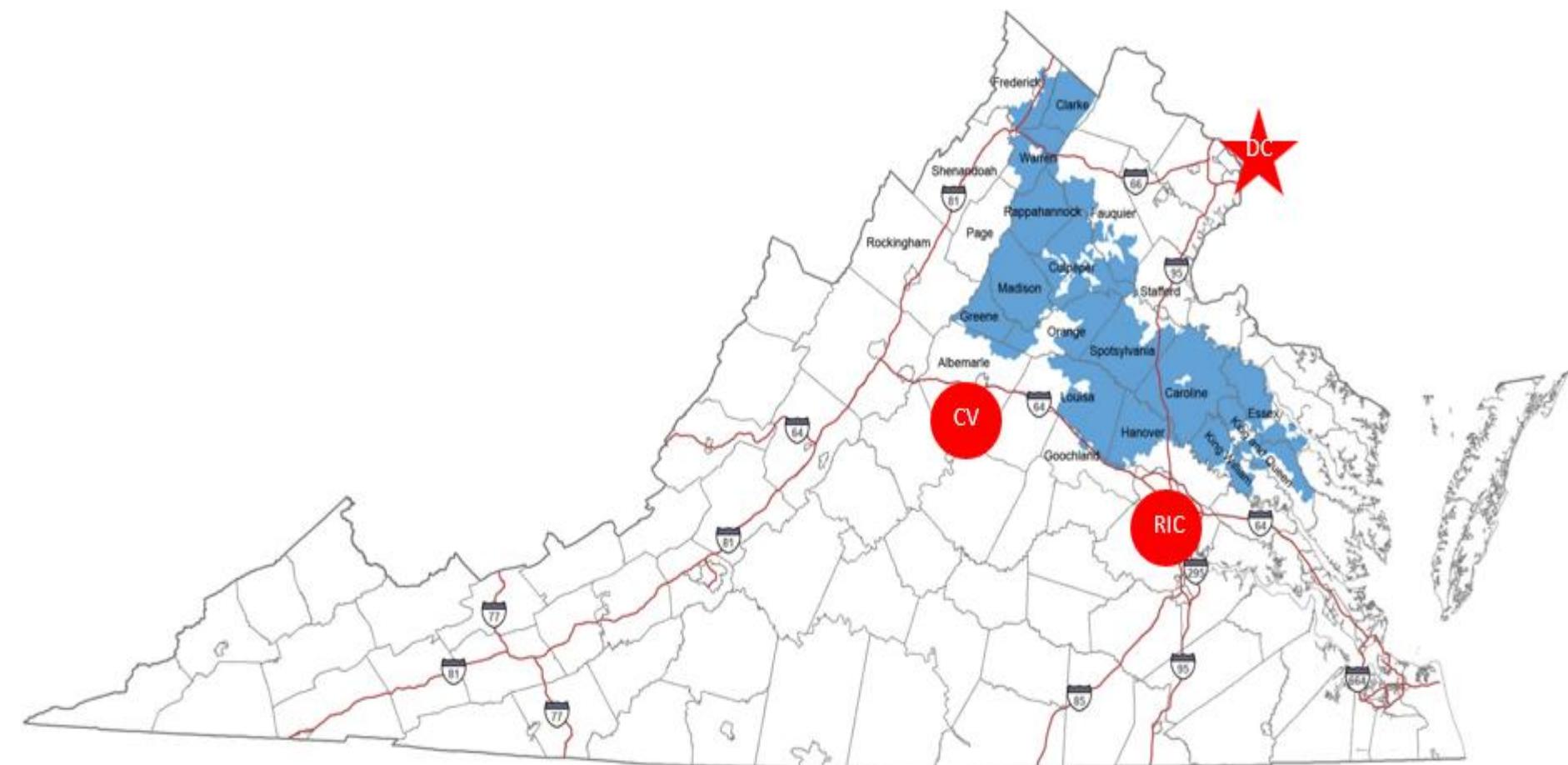


# RAPPAHANNOCK INNOVATION ZONE

Our booming 4,000 square mile, 22-county service region stretches from the Blue Ridge mountains to the tidal waters of the Chesapeake

- 184,000 Active Accounts
- \$1.4B Assets
- 18,000 Miles of Line
- 4,500 Miles of Fiber
- >500 Employees

- 2nd Co-Op Nationally Miles of Line
- 12th Co-Op Nationally Consumers
- 2024 & 2025 Best Utility Analytics
- Top Quartile ACSI



**REC is Positioned in an Emerging Global Epicenter of Hyperscale Computing**

**20X Load Request**



# RAPPAHANNOCK ELECTRIC COOPERATIVE



Better Security. Better Decisions. Better Operations.

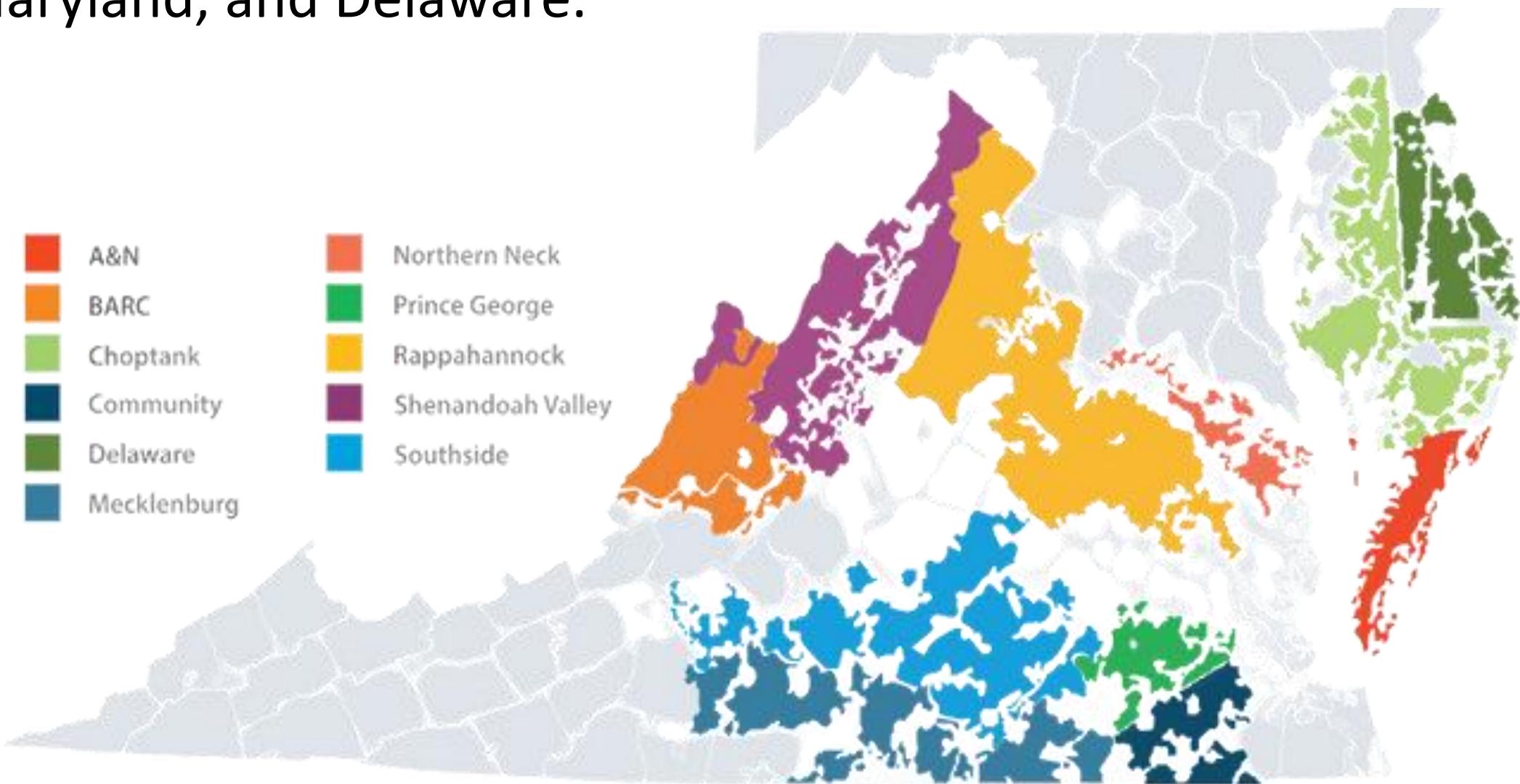




Old Dominion  
Electric Cooperative®

ODEC is committed to maintaining a diverse generation portfolio that meets today's energy demand, while remaining cognizant of a fluctuating energy landscape

Old Dominion Electric Cooperative generates power for local electric cooperatives across Virginia, Maryland, and Delaware.



The areas served by our 11 member distribution cooperatives covers rural, suburban and exurban areas. Our service area includes several attractive growth areas with high residential concentration, which provides stability in our markets.

[PAST YEARS](#) | [2025 RANKING](#) | [METHODOLOGY](#)

## America's Top States for Business

[Start Over](#) | 1 - 5 of 50

CNBC's annual study once again puts all 50 states to the test, measuring them on 135 different metrics, the most-ever, in 10 key categories of competitiveness.



1. North Carolina



2. Texas



3. Florida



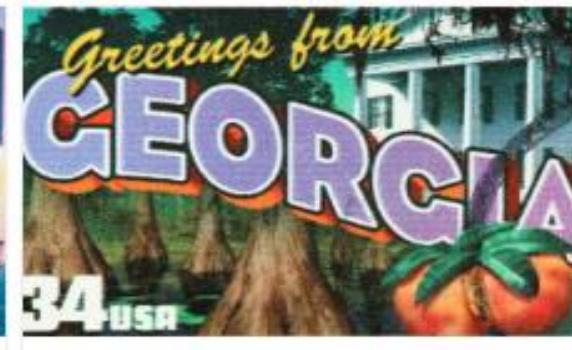
4. Virginia



5. Ohio



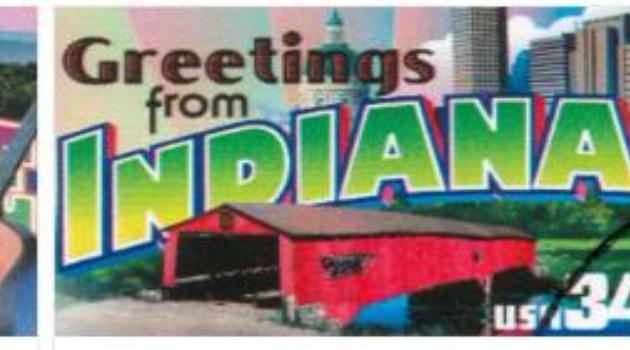
6. Michigan



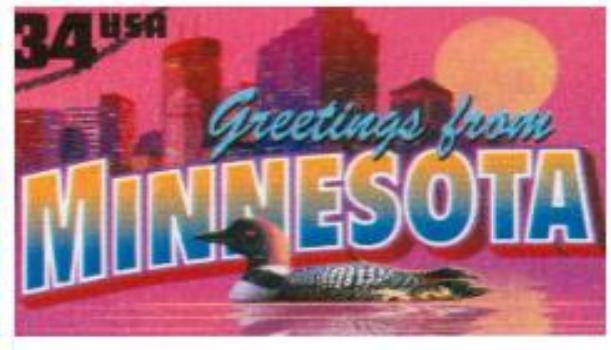
7. Georgia



8. Tennessee



9. Indiana



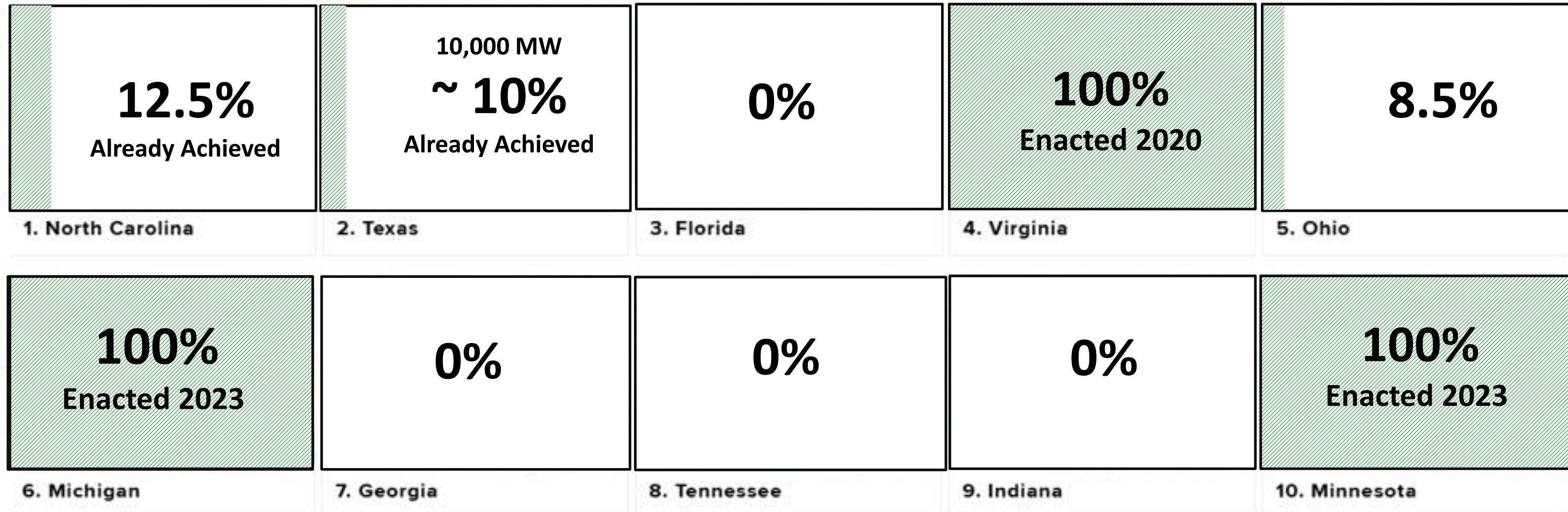
10. Minnesota

# Top States for Business – Renewable Portfolio/Decarbonization Mandates

## America's Top States for Business

Start Over | 1 - 5 of 50

CNBC's annual study once again puts all 50 states to the test, measuring them on 135 different metrics, the most-ever, in 10 key categories of competitiveness.



**Six Years After The Passage Of Virginia's Clean Economy Act And An Energy CRISIS Has Developed**

# Crisis of Affordability

Environmental Defense Fund

**Analysis: Costly gas and infrastructure are driving Virginia's soaring power bills**

Virginians are facing rising costs on multiple fronts, and electric bills are no exception. Virginia's electric bills are increasing at a...



Canary Media

**Virginia legislators have a new road map for reigning in electric bills**

Containing rising power rates is easier said than done for candidates campaigning on the issue. A recent study details how to do it once...



Cardinal News

**Virginia's energy future: Balancing growth and costs amid rising demand**

Over the next 15 years, Virginians' energy bills are expected to rise as much as 50%, primarily driven by the growing demand from energy...



B Bay Journal

**Report finds low-income Virginians pay the most for energy, points to need for affordable solar projects**

Keep everything unplugged. Turn off the AC. Seal air leaks. Virginians are doing what they can to keep their energy bills low but, for some,...

Cardinal News

**About 25% of Virginia households are experiencing an energy affordability crisis**

Households at or below 60% of the state area median income — roughly \$80,000 for a family of four — can receive no-cost weatherization and...



The Virginian-Pilot

**Energy bills in Virginia could increase \$1,100 annually by 2040, new report says**

Virginians could pay upwards of \$1000 more on energy bills each year by 2040, according to a new report from the Center for...



Utility Dive

**To keep energy affordable, Virginia must embrace power line innovation**

To keep energy affordable, Virginia must embrace power line innovation. Regulators should ensure electric utilities pursue transmission...



ABC News

**Electricity bills are expected to go up this winter: Find out how much**

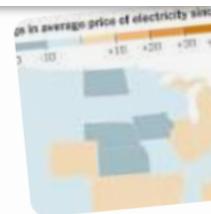
Consumer electricity bills are expected to rise this winter due to a variety of factors.



The New York Times

**Why the Price of Electricity Is Spiking Around the Country**

Millions of Americans have watched with dismay as their electricity bills have spiraled upward over the past few years. The rising price of...



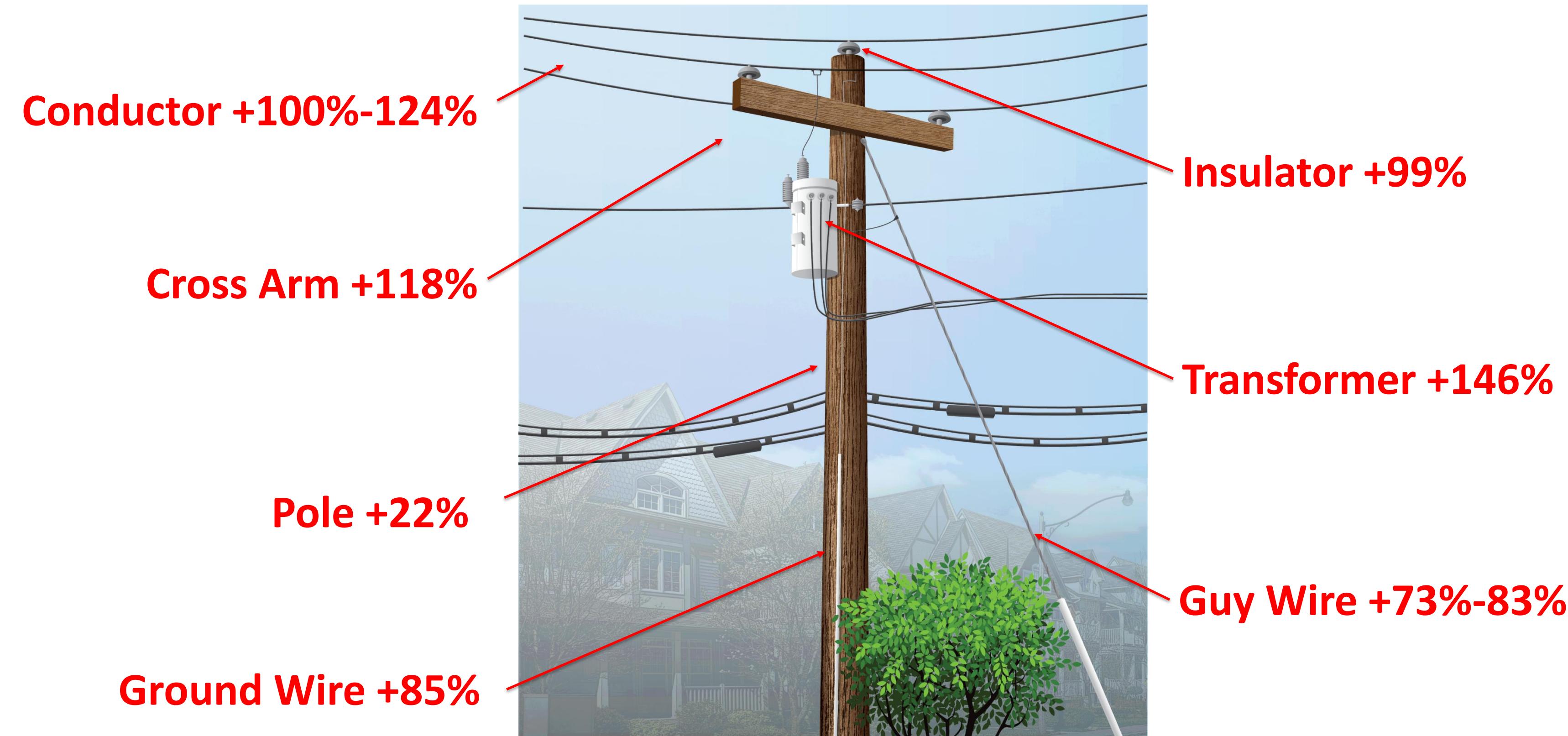
Virginia Mercury

**Va. lawmakers weigh energy options for utilities to meet VCEA mandate, energy demand**

As Virginia grapples with rapidly increasing energy demands and skyrocketing utility bills, a group of state lawmakers are looking deeper...



# Breaking Down Rising Energy Costs



2020 – 2025 Price increases for standard equipment necessary for the REC distribution system

# Four Signs Virginia's Energy Business Has Changed

- 1 PJM Capacity Auction
- 2 Transmission Rate Increases
- 3 Energy Imports Have Climbed
- 4 Energy Prices Are Rising

# Generation Capacity

11.5X

June 2024

\$28.92 MW- Day

June 2026

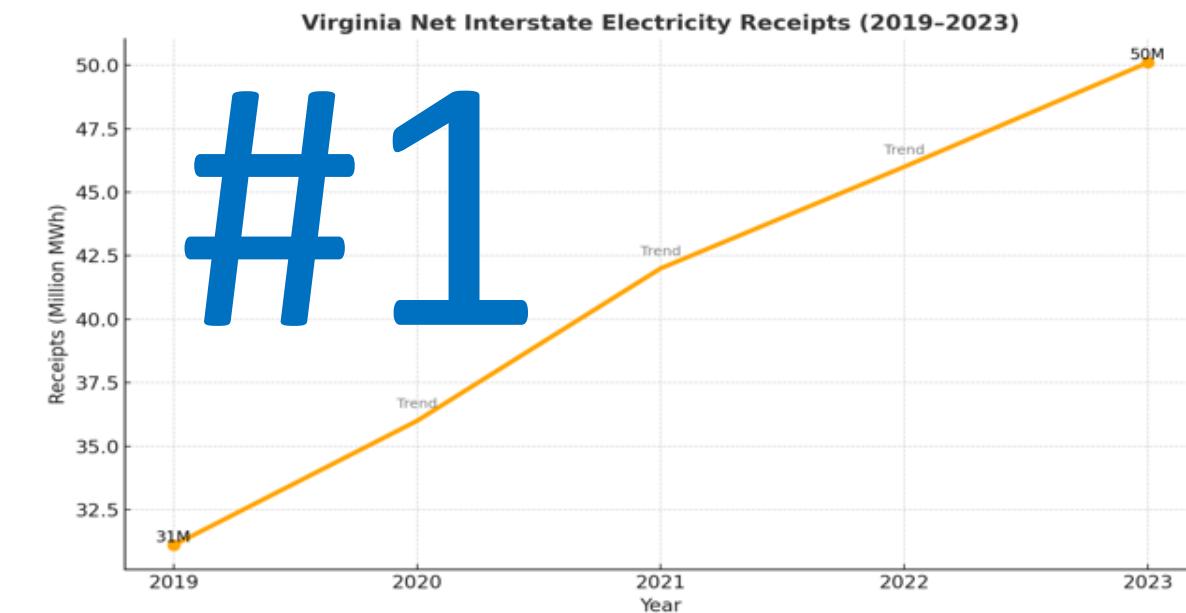
\$329.17 MW- Day

June 2027

\$333.44 MW- Day

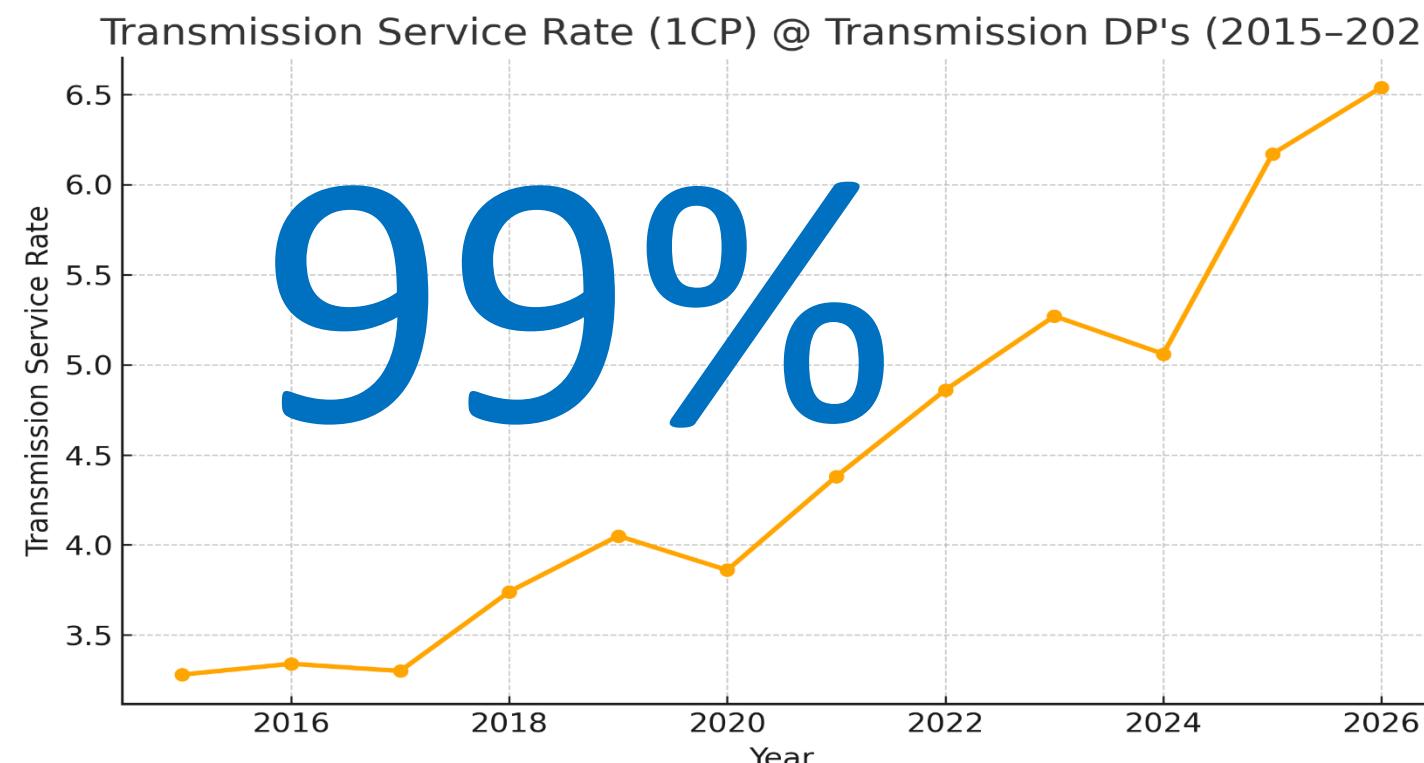
# Imports

Virginia Net Interstate Electricity Receipts  
(2019–2023)



Source: U.S. Energy Information Administration (EIA), Today in Energy, October 2024.

# Transmission



# Delivered Energy

41%

Jan – June 2024  
\$53.86

Jan – June 2025  
\$76.15

# DOE: Resource Adequacy Report July 2025

Report on Evaluating U.S. Grid Reliability and Security

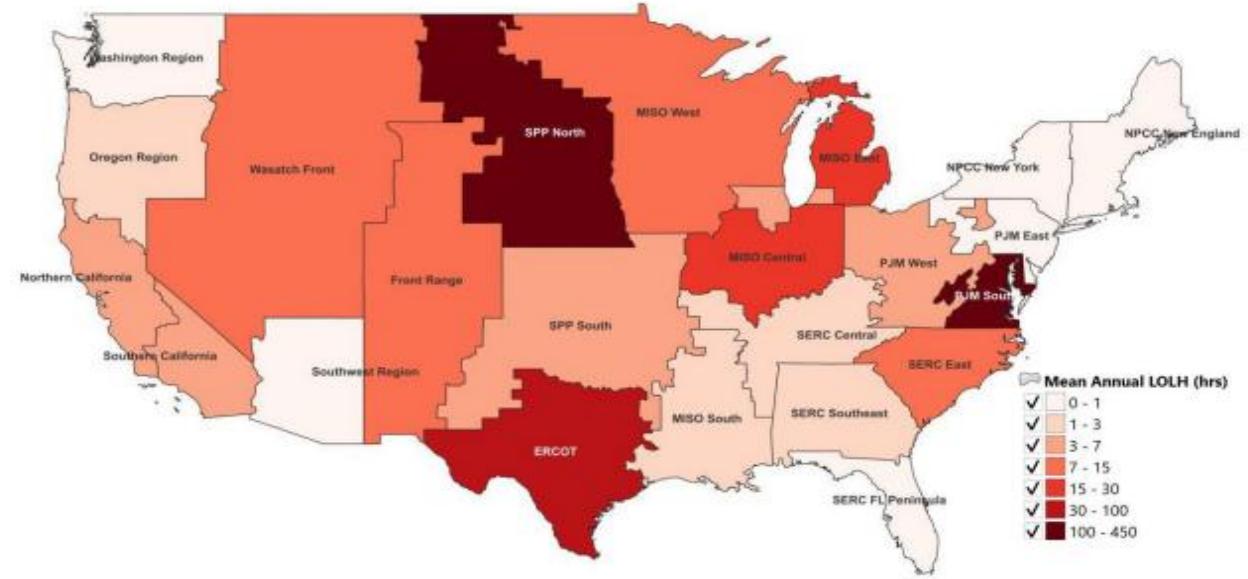


Figure 1. Mean Annual LOLH by Region (2030) – Plant Closures

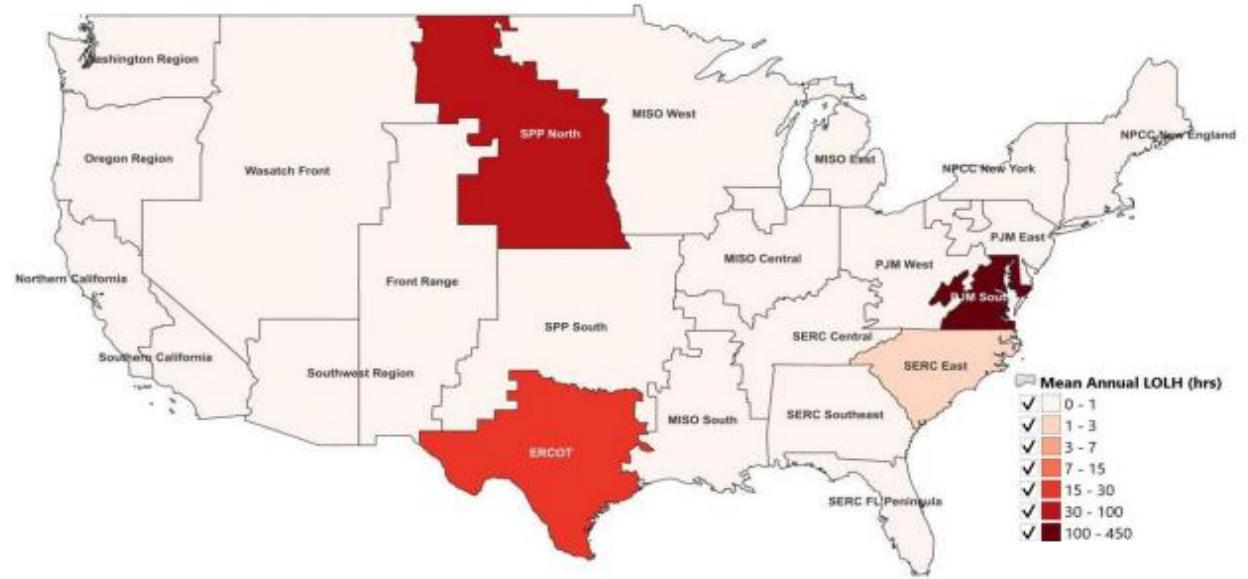
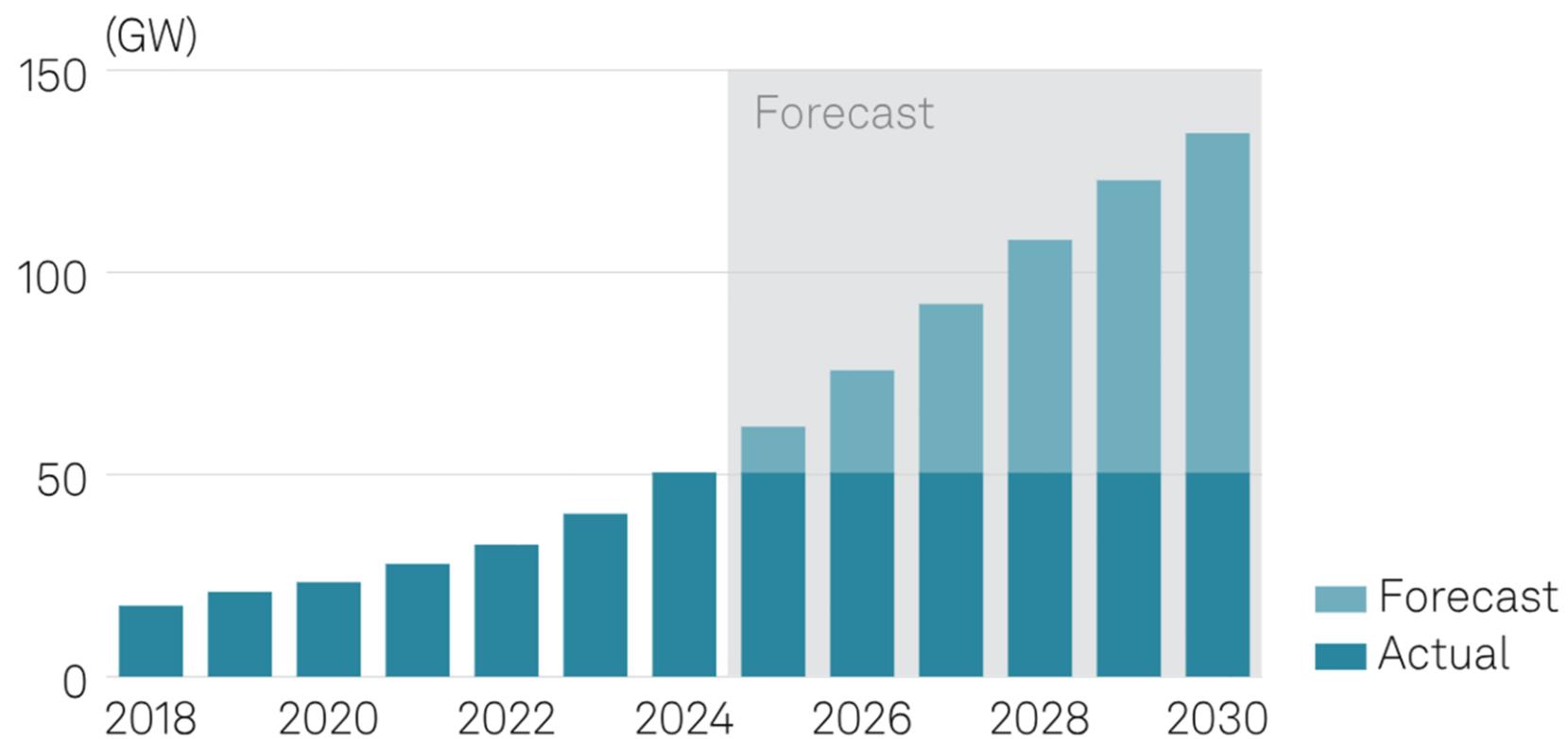


Figure 2. Mean Annual LOLH by Region (2030) – No Plant Closures

- Status quo is unsustainable
- Grid growth must match pace of AI innovation
- Retirements plus load growth increase outages by 100x in 2030
- Plan supply falls short, reliability is at risk
- Old tools won't solve new problems

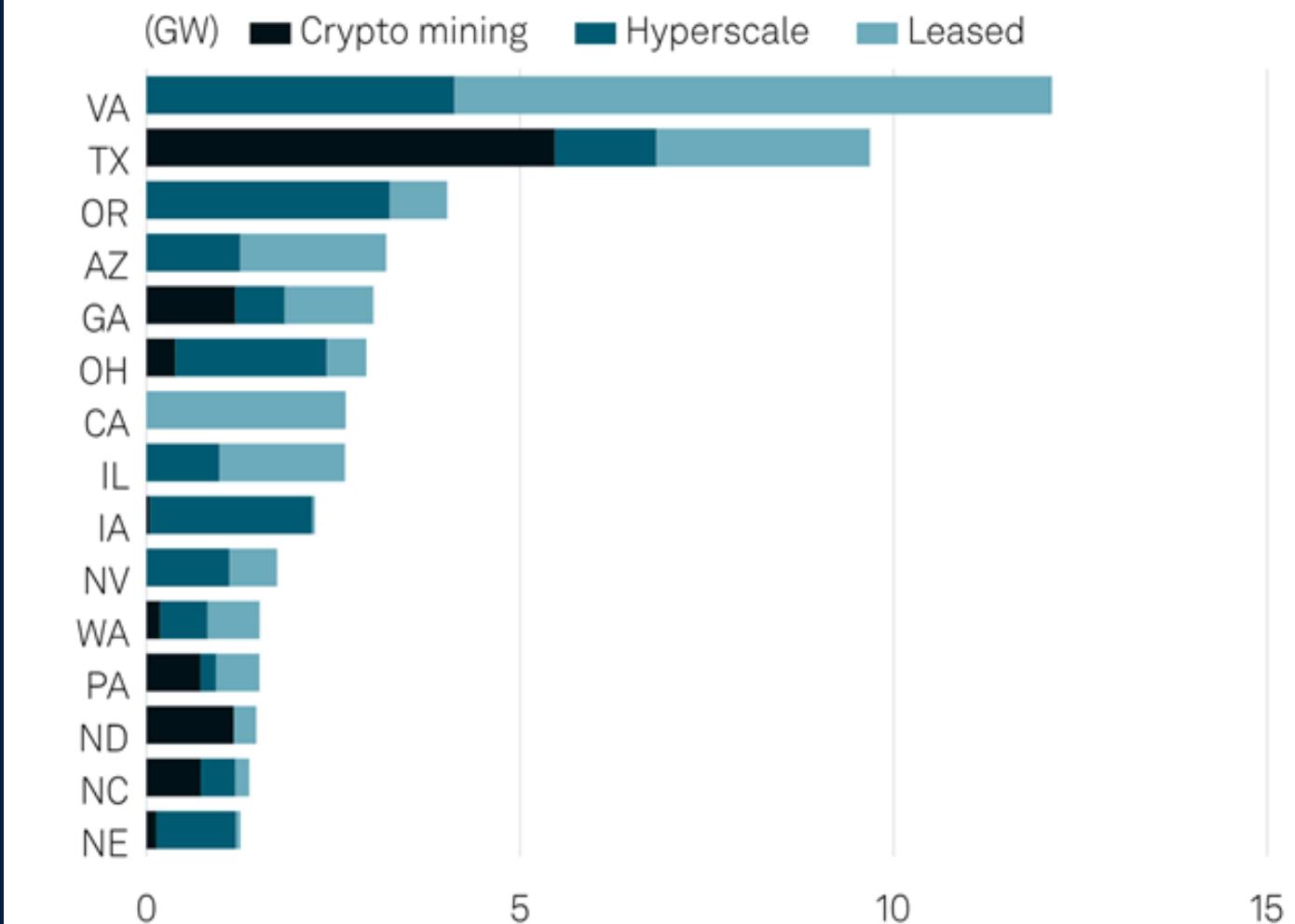
# National Data Center Growth

**US power demand from data centers expected to more than double from current levels**



Utility power represents actual and forecasted total electricity supplied to data centers from the power grid, including IT equipment, cooling, lighting, offices and security systems as of the market monitor release date.  
Source: S&P Global Market Intelligence; 451 Research Data center Services & Infrastructure Market Monitor & Forecast: US focused released Sept. 24, 2025.

**Largest data center demand regions, 2025 forecast**



Utility power represents actual and forecasted total electricity supplied to data centers from the power grid, including IT equipment, cooling, lighting, offices and security systems as of the market monitor release date.  
Source: S&P Global Market Intelligence; 451 Research Data center Services & Infrastructure Market Monitor & Forecast: US focused released Sept. 24, 2025.

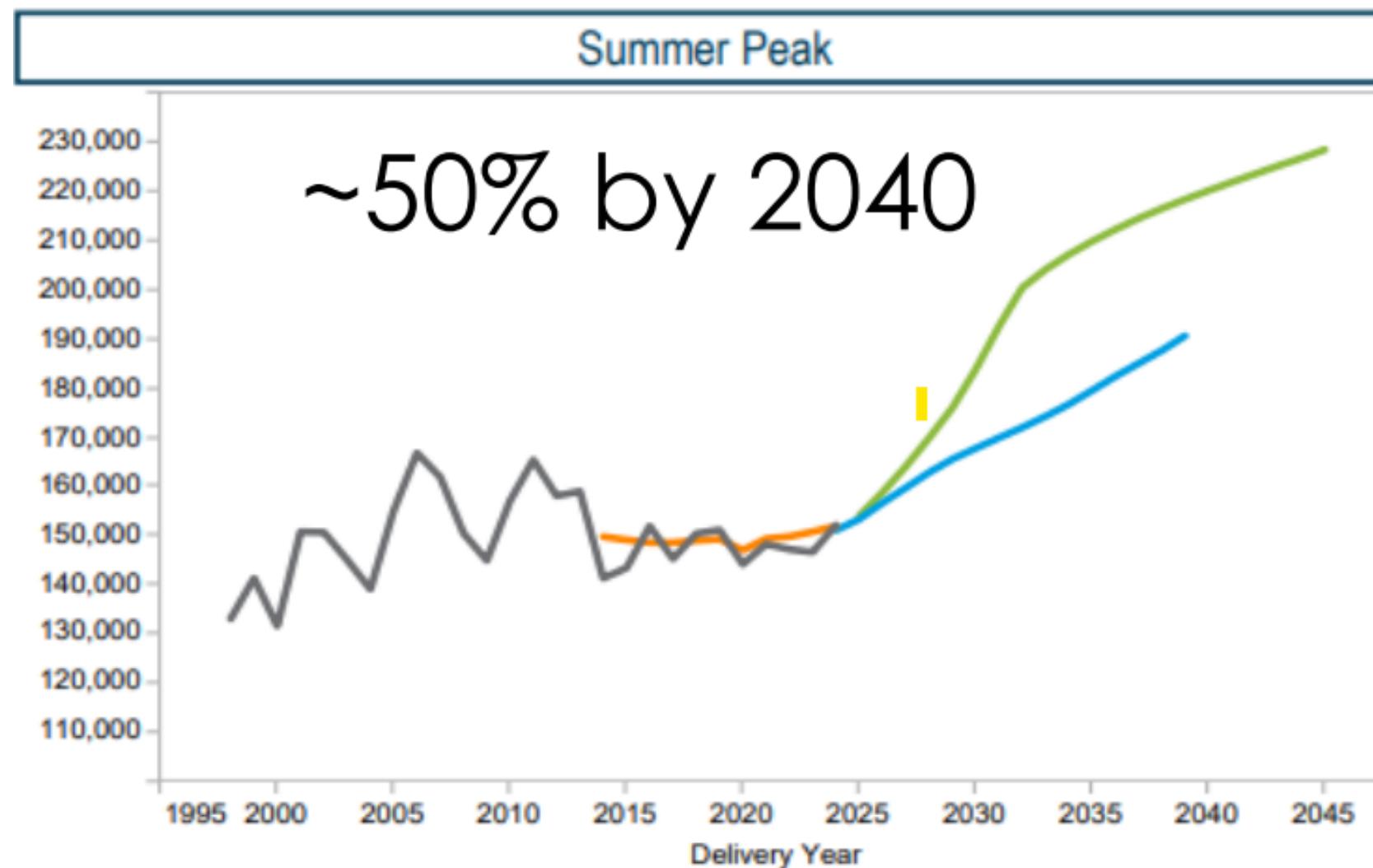
# Strategic Questions

- 1 How critical is energy reliability and security?
- 2 How important are affordability and competitiveness?
- 3 How will each sector be adequately powered?
- 4 Can economic and environmental goals be harmonized?

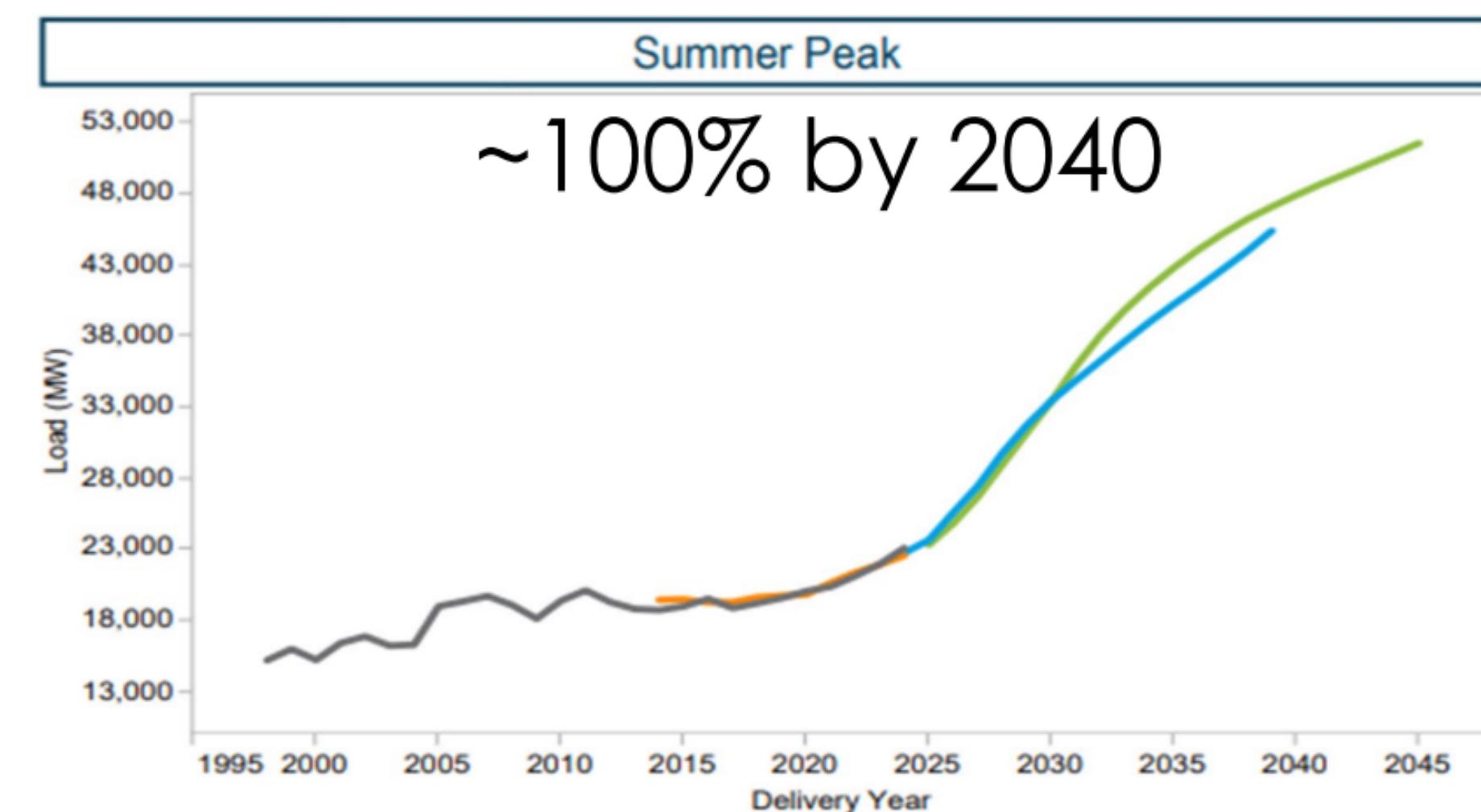
- A How much generation, what type, and where?
- B How robust will the transmission network be?
- C Can traditional infrastructure be deployed...can developing technologies deploy quickly?

# PJM Energy Outlook

PJM RTO



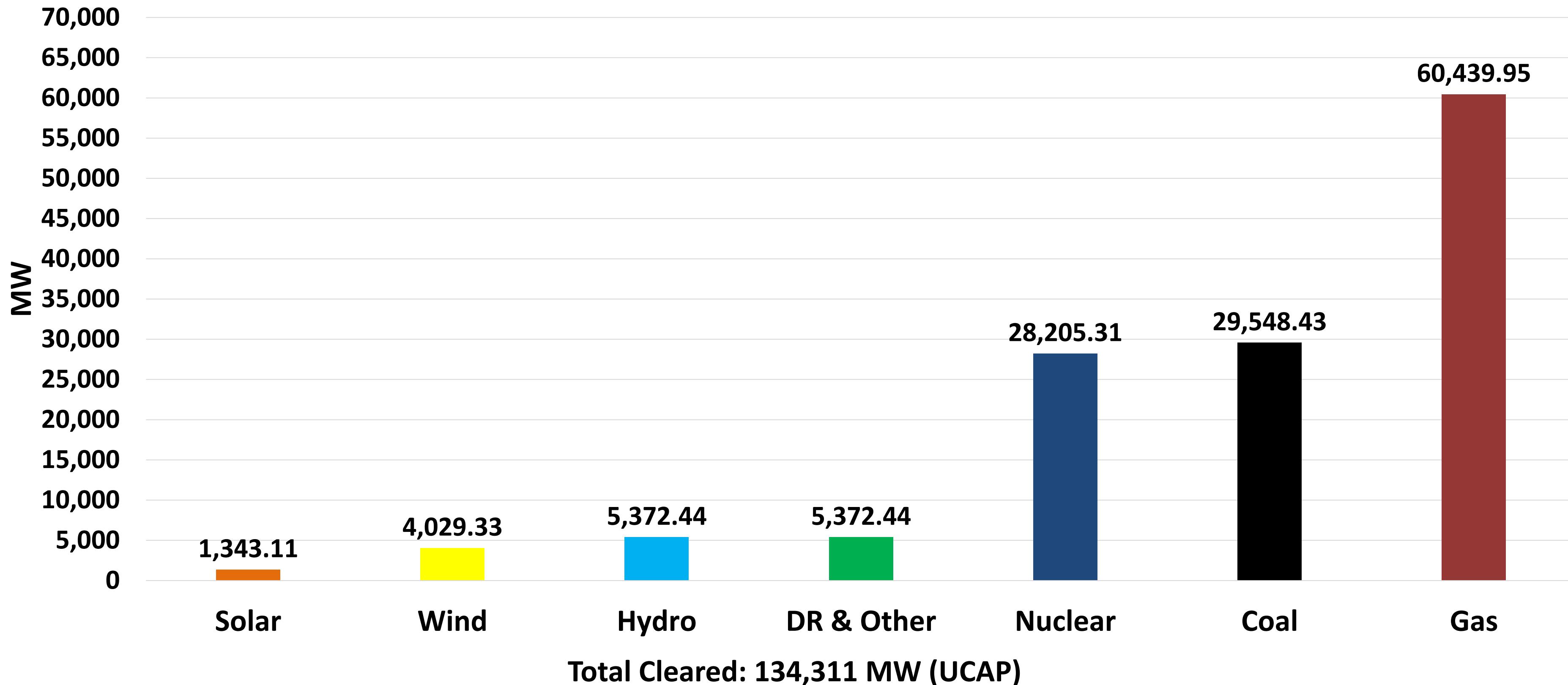
Dominion (DOM)



“A capacity shortage may affect the PJM system as early as the 2026/2027 Delivery Year, when the 2025 Long-Term Load Forecast is taken into account, PJM Board Chair Mark Takahashi noted in a Dec. 9 letter to stakeholders.” (PJM Inside Lines, 2025)

# How Existing Demand Is Being Met

PJM 2026/2027 BRA – Cleared Capacity by Source (UCAP) – July 2025



# Fundamentals of Siting Generation in Virginia

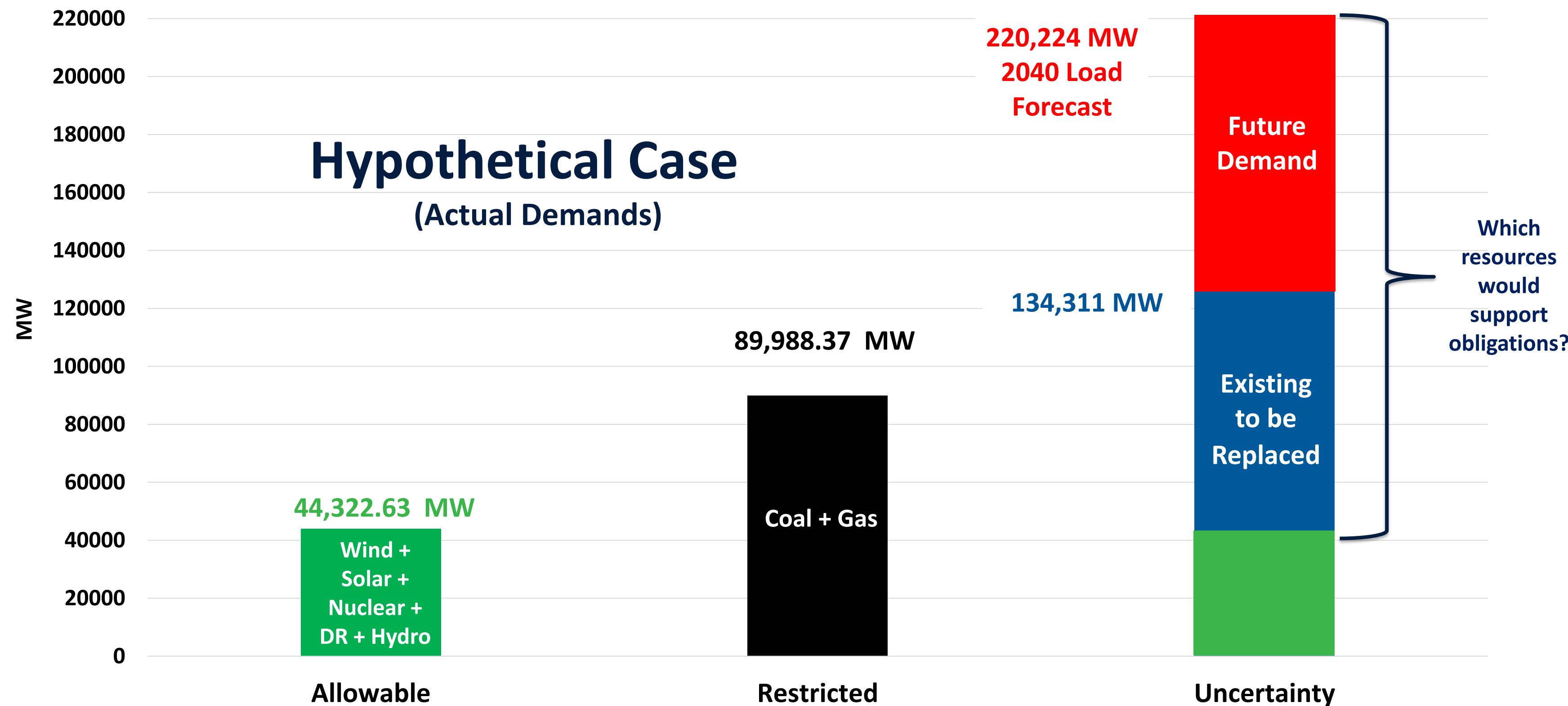
Increases Energy  
Security and Reduces Risk

- ✓ More Competitive
- ✓ More Affordable
- ✓ More Stable Pricing

Reduces Dependency  
on Transmission Grid

Brings Economic  
Investment, Jobs, Tax  
Benefits for Communities

# What If Every PJM State Matched Virginia's Policy?



# Virginia needs to build more generation capacity at an unprecedented pace

**10,000 MW NEED  
50,000,000 MWh NEED**

For scale – that is equivalent to:

**\*More needed by 2040**

**To Meet Capacity**

**To Meet Energy**

## Solar + Storage

~200 Solar Farms (50MW each) with Batteries

Investment: ~\$13B – \$19B

Land Use: ~90,000 AC

## Natural Gas Combined Cycle

10-15 Power Plants

Investment: ~\$12B – \$16B

Land Use: ~3,000 AC

## Conventional Nuclear

5 Large-Scale Dual Reactor Sites

Investment: ~\$90B – \$148B

Land Use: ~10,000 AC



~500 Solar Farms (50 MW each)

Investment: ~\$28.7B – 40B

Land Use: ~200,000 AC

~50,000,000 MWh

~52,500,000 MWh

~80,000,000 MWh

# Solutions For Virginia's Energy Business

- 1 Accelerate Regulatory and Planning Process
- 2 Accelerate Permitting
- 3 Invoke Energy Storage and Standby Generation
- 4 Authorize Emergency Base Load Generation
- 5 Establish Virginia as THE Energy Technology Epicenter

# Energy Prices Straight Talk

**EFFECTIVE** January 1, 2026

- Power Cost Decrease Announced
- Less than \$1 per 1,187 kWh

*Annual direct pass-through of cost to purchase power on the wholesale power market through wholesale power provider Old Dominion Electric Cooperative. Can fluctuate annually to reflect a decrease or increase depending on the volatility of the wholesale power market.*





RAPPAHANNOCK  
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RELIABLE • AFFORDABLE • FOCUSED ON YOU

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President & CEO

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