



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



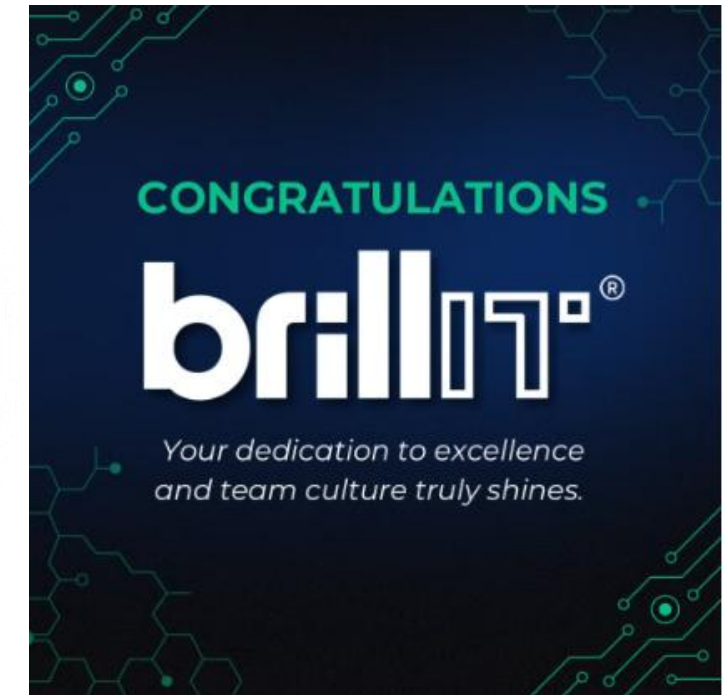
Volunteerism & Community Service

- **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
- BriliT 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



Generation

Industry approach to serve growing demand



Policy

Energy legislation and regulations



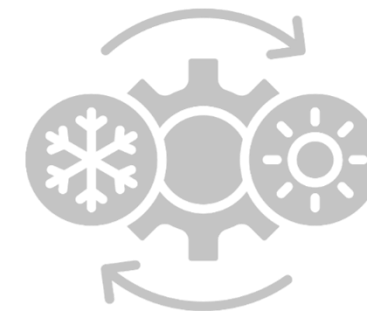
Member Expectations

Growing interest in distributed energy resources



Affordability

Rising cost pressures and member impact



Resiliency Threats

Threats from extreme weather and cyber security



Energy
Capacity &
Demand



Reliability
& System
Improvements



Grid
Modernization



Affordability &
Cost Control

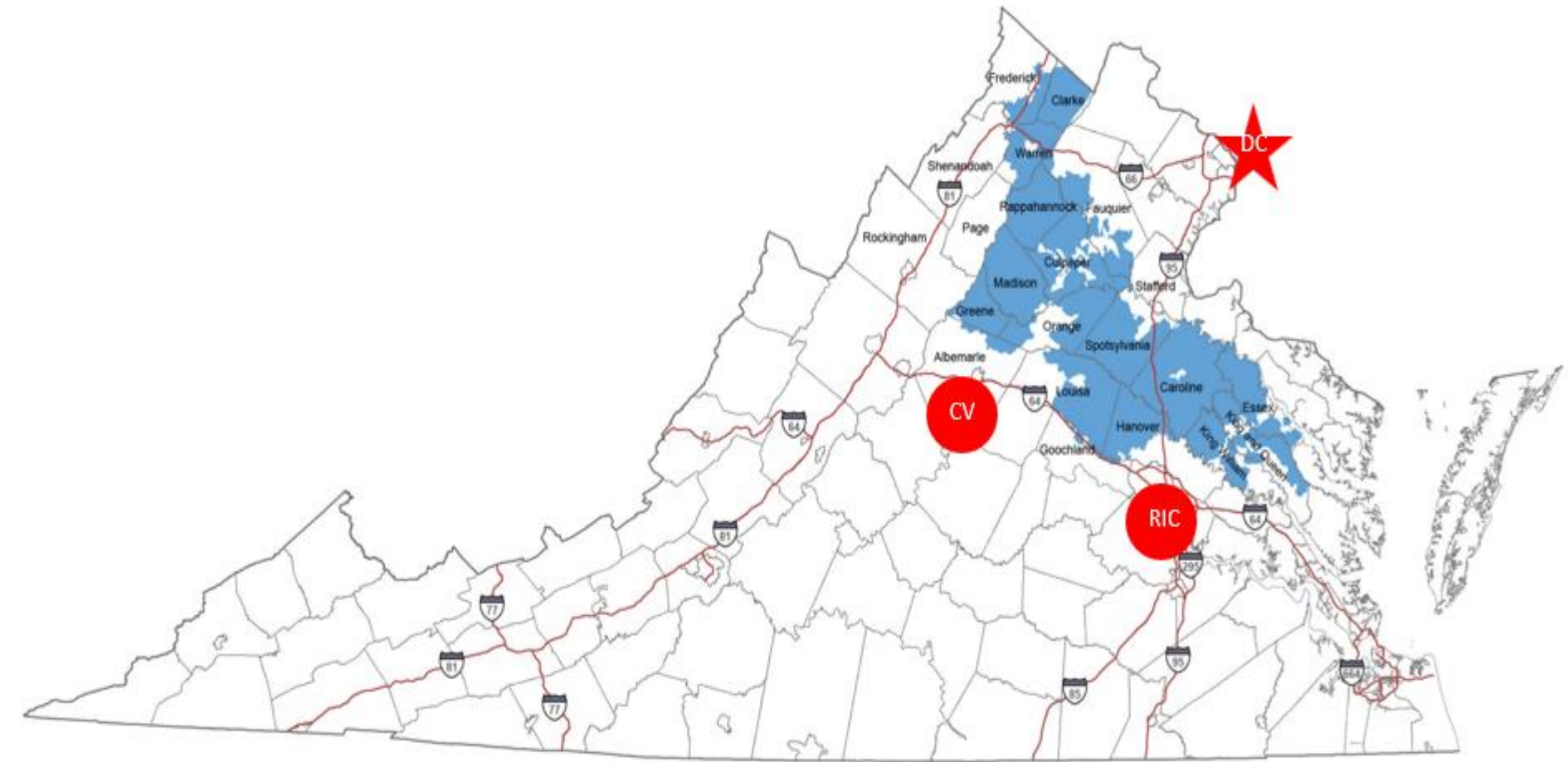


RAPPAHANNOCK INNOVATION ZONE

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

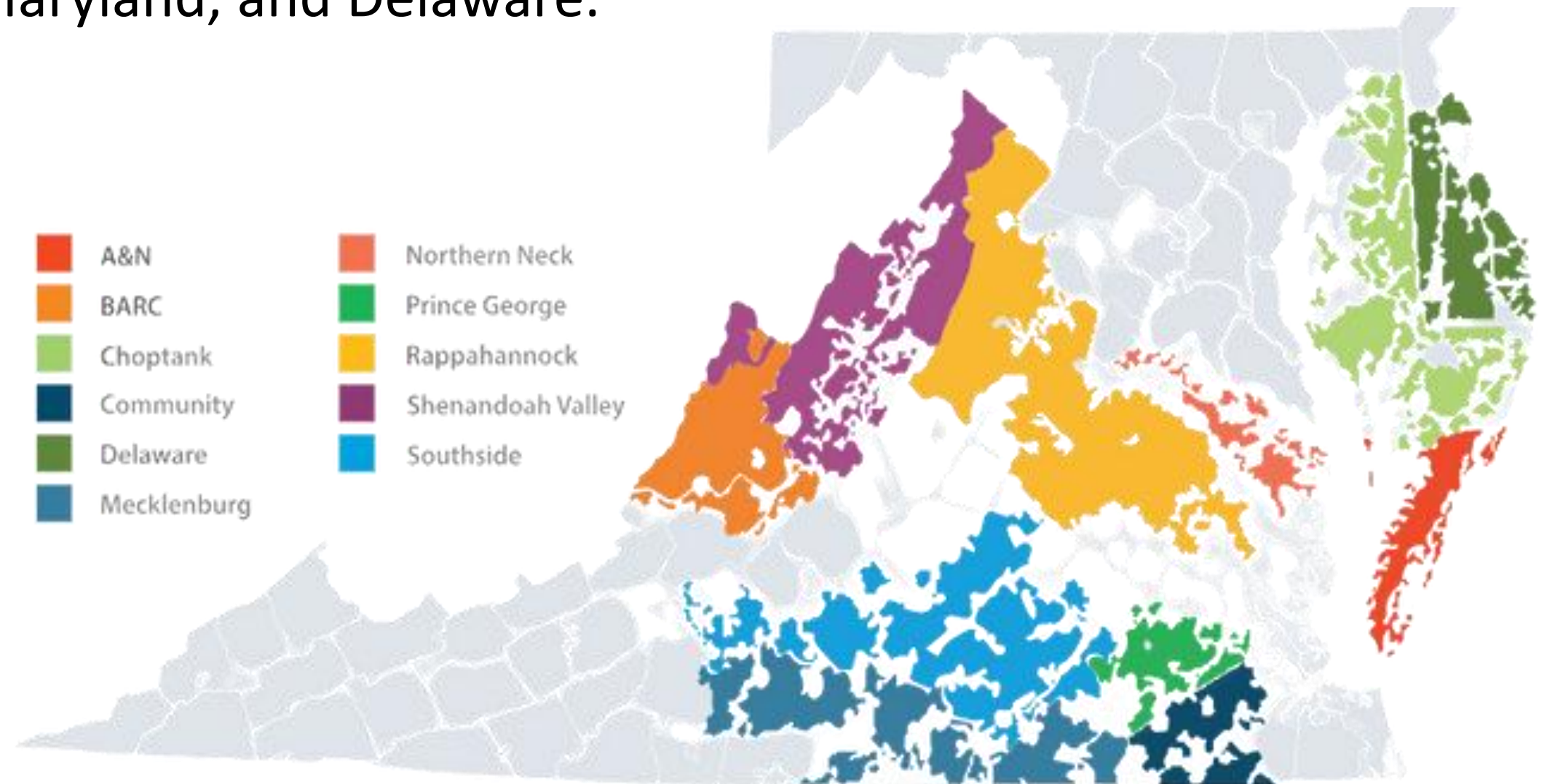


RAPPAHANNOCK ELECTRIC COOPERATIVE



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.

AMERICA'S **TOP STATES** FOR BUSINESS[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



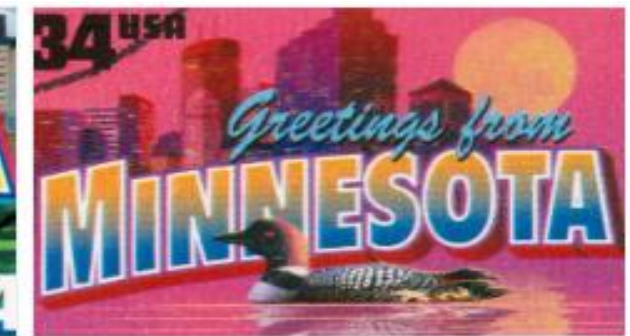
7. Georgia



8. Tennessee



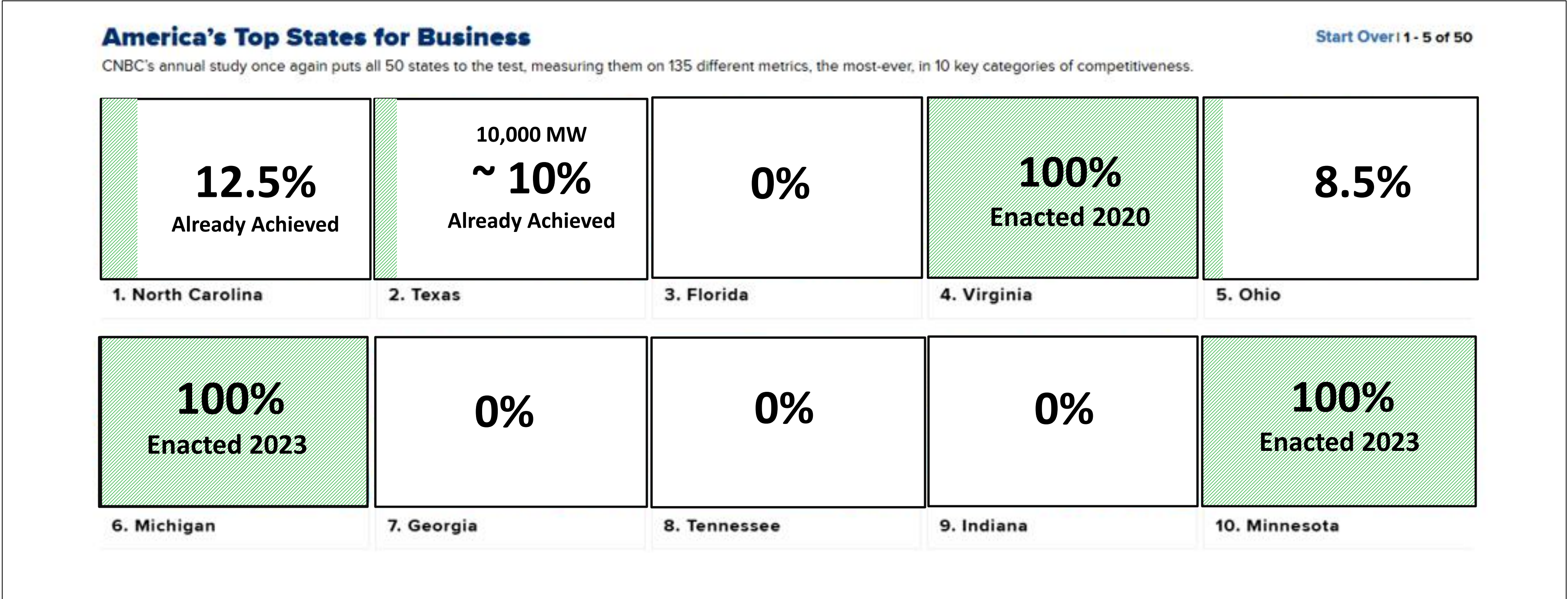
9. Indiana



10. Minnesota

WORKFORCE • INFRASTRUCTURE • ECONOMY • LIFE, HEALTH, INCLUSION • COST OF DOING BUSINESS...

Top States for Business – Renewable Portfolio/Decarbonization Mandates



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 reining 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...



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,...



Virginia Mercury

Capacity auction predicts higher energy bills; Youngkin, governors air frustrations in letter to PJM

Amid skyrocketing electricity costs, multiple governors are asking PJM to let them have more of a say in the grid operator's leadership.



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.



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...



Virginia Mercury

With Democrats in charge, Spanberger targets lower energy bills — and higher costs for data centers

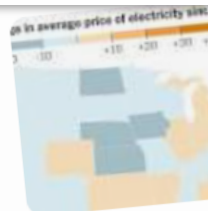
Fresh off a decisive election night, Gov.-elect Abigail Spanberger is promising a sharp turn in Virginia's energy policy, vowing to boost in...



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...



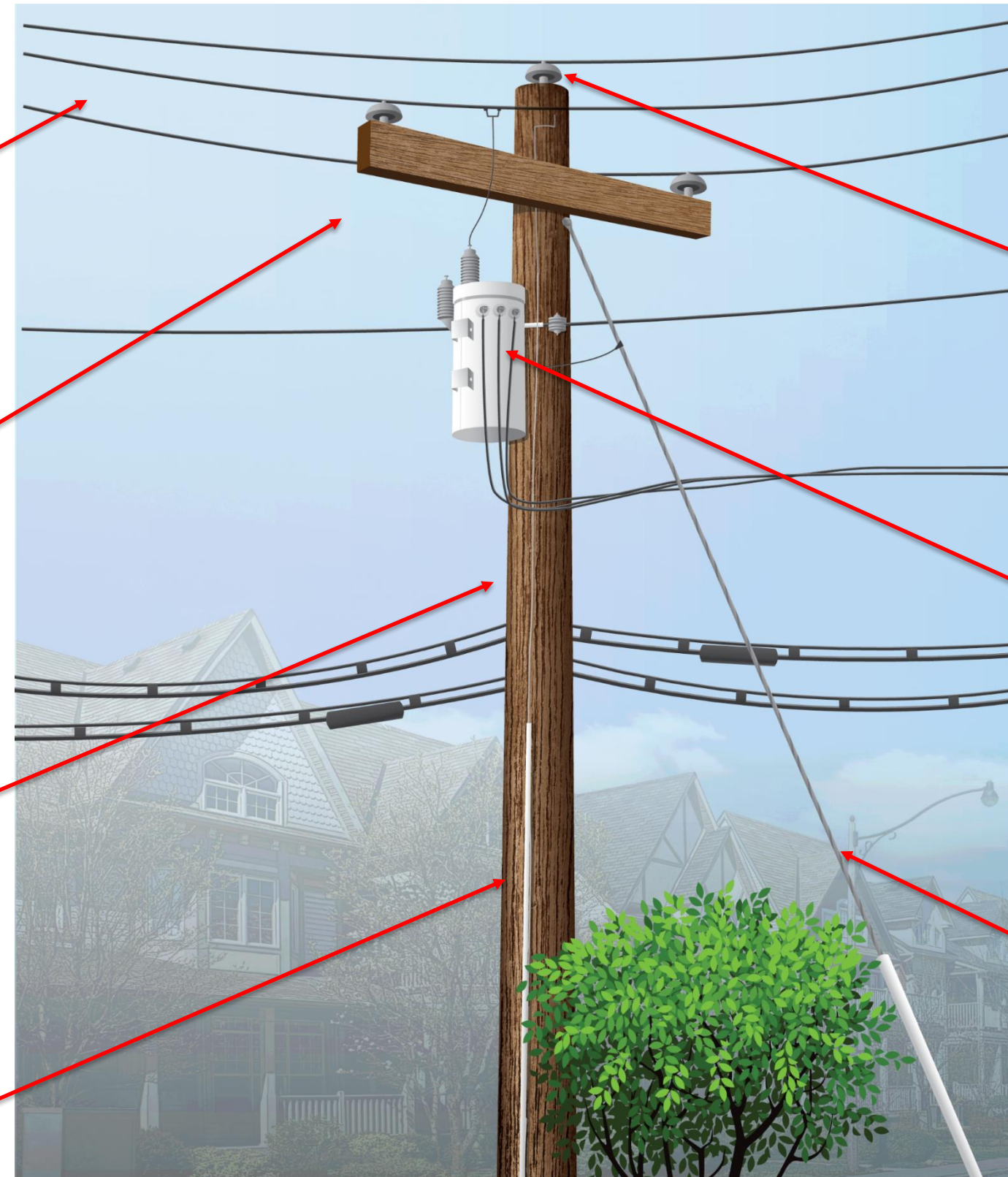
Virginia Mercury

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



Conductor +100%-124%

Insulator +99%

Cross Arm +118%

Transformer +146%

Pole +22%

Guy Wire +73%-83%

Ground Wire +85%

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

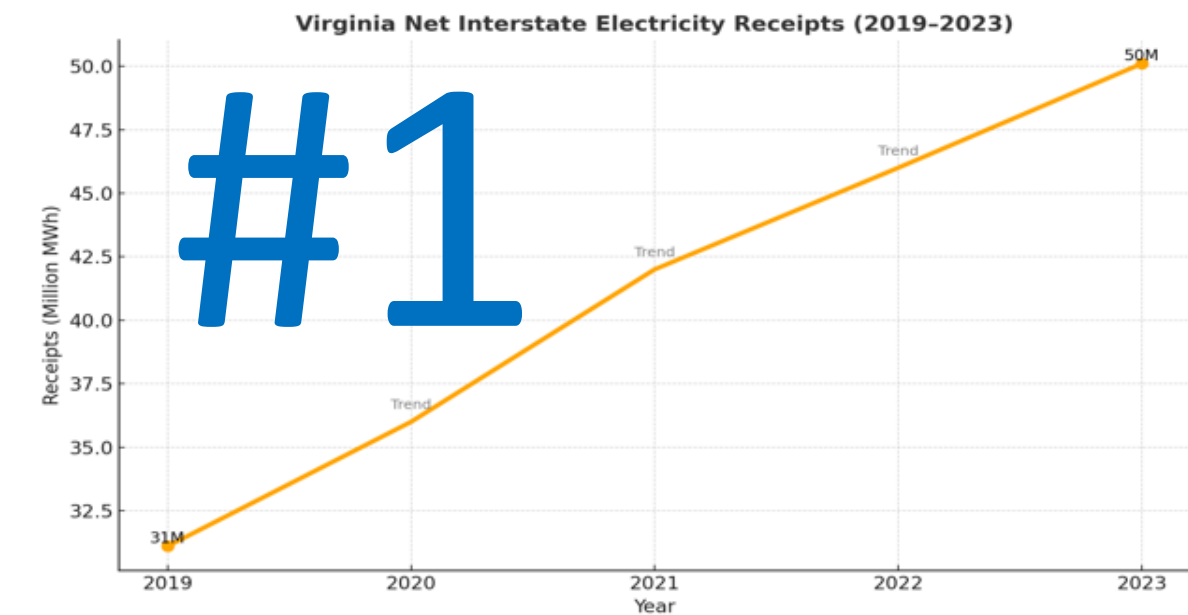
June 2024
\$28.92 MW- Day

June 2026
\$329.17 MW- Day

June 2027
\$333.44 MW- Day

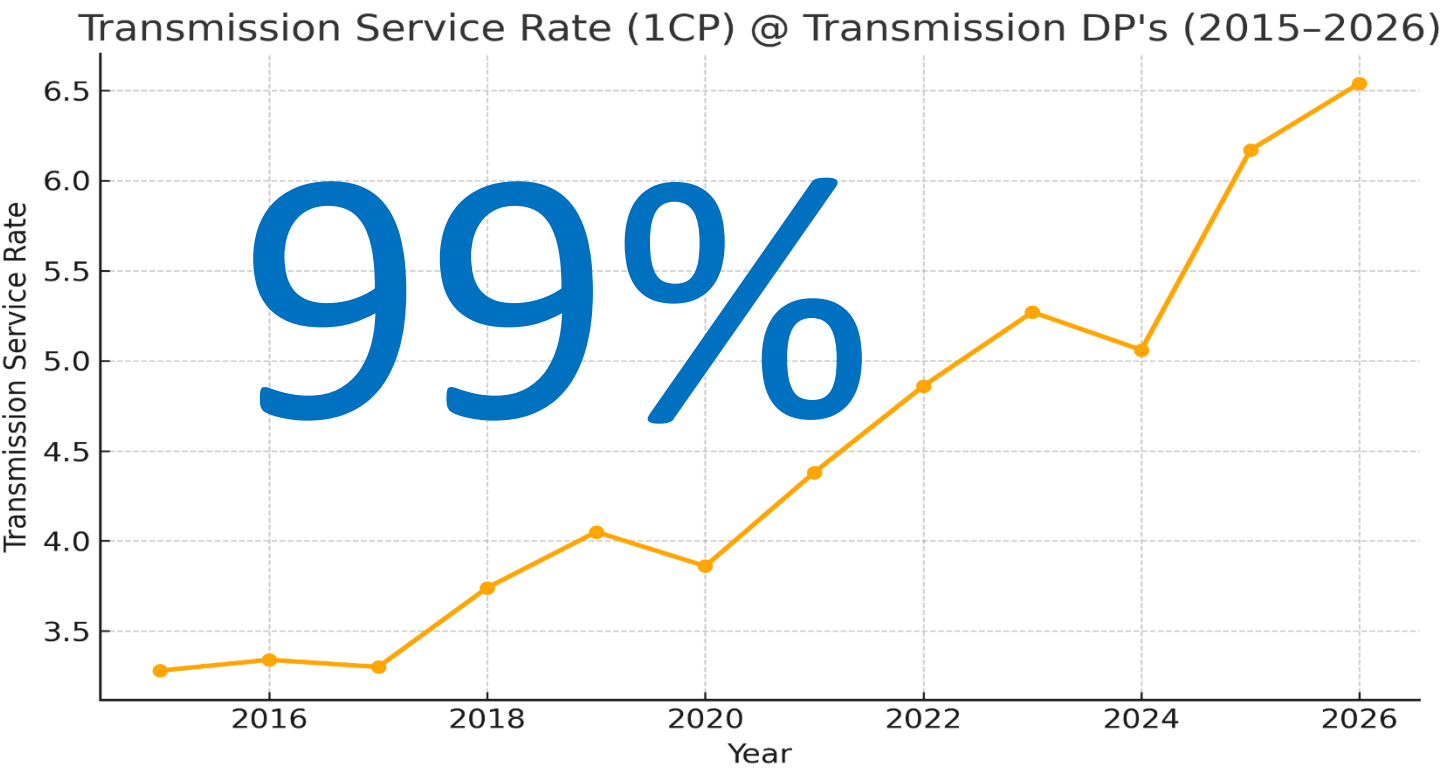
Imports

Virginia Net Interstate Electricity Receipts
(2019–2023)



Source: 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

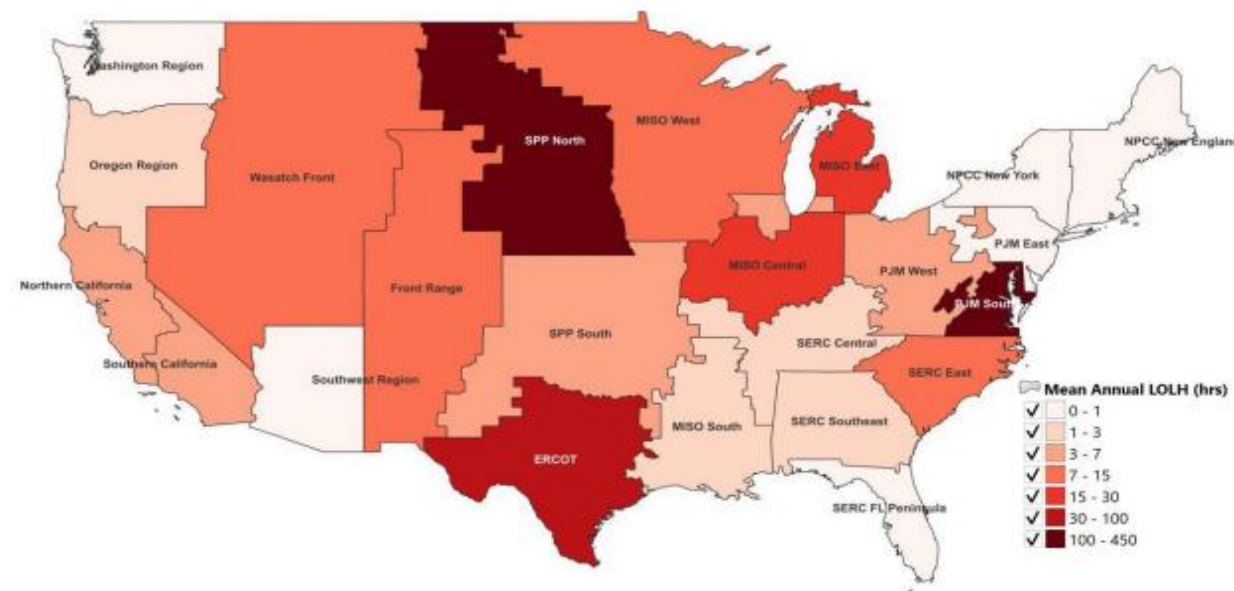


Figure 1. Mean Annual LOLH by Region (2030) – Plant Closures

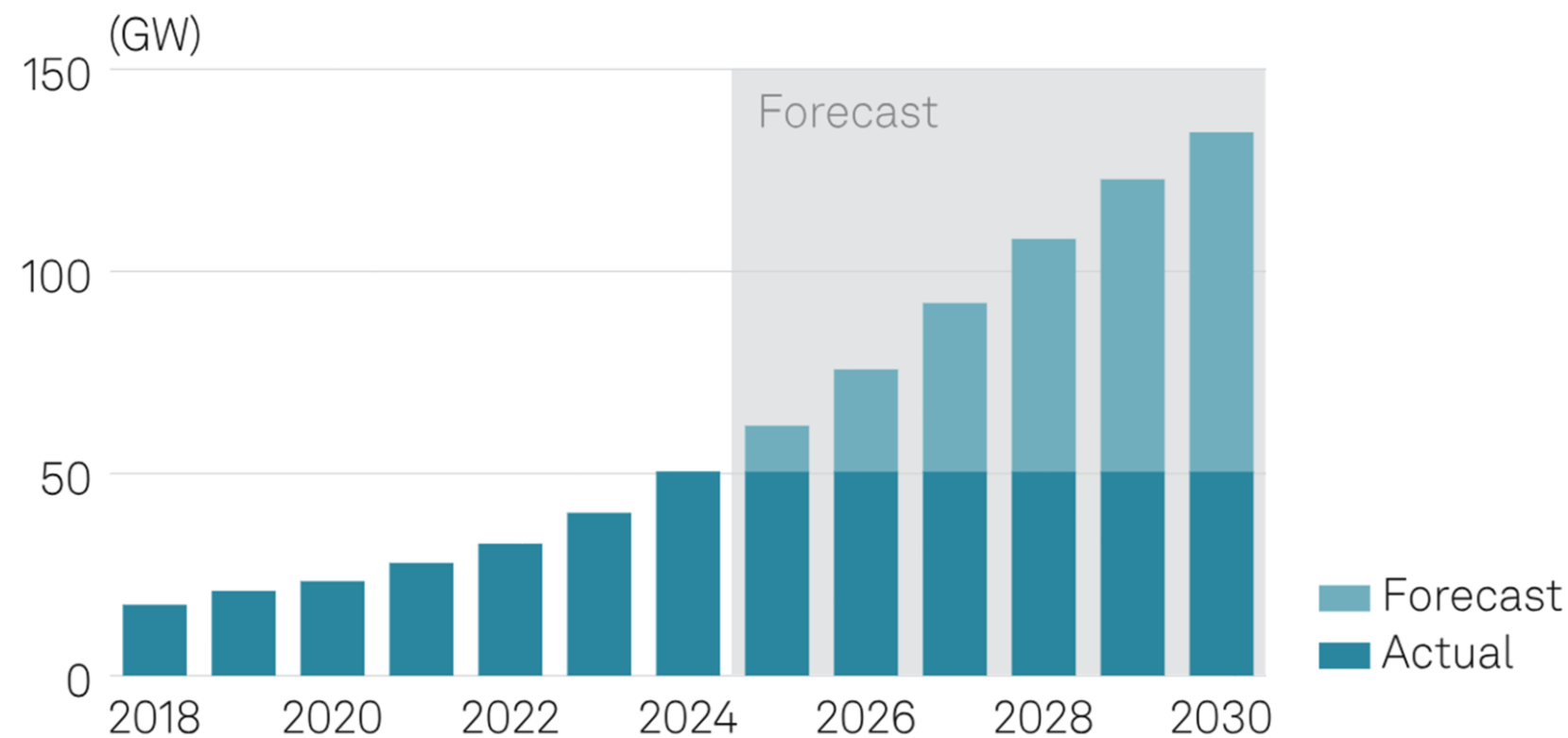


Figure 2. Mean Annual LOLH by Region (2030) – No Plant Closures

- 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

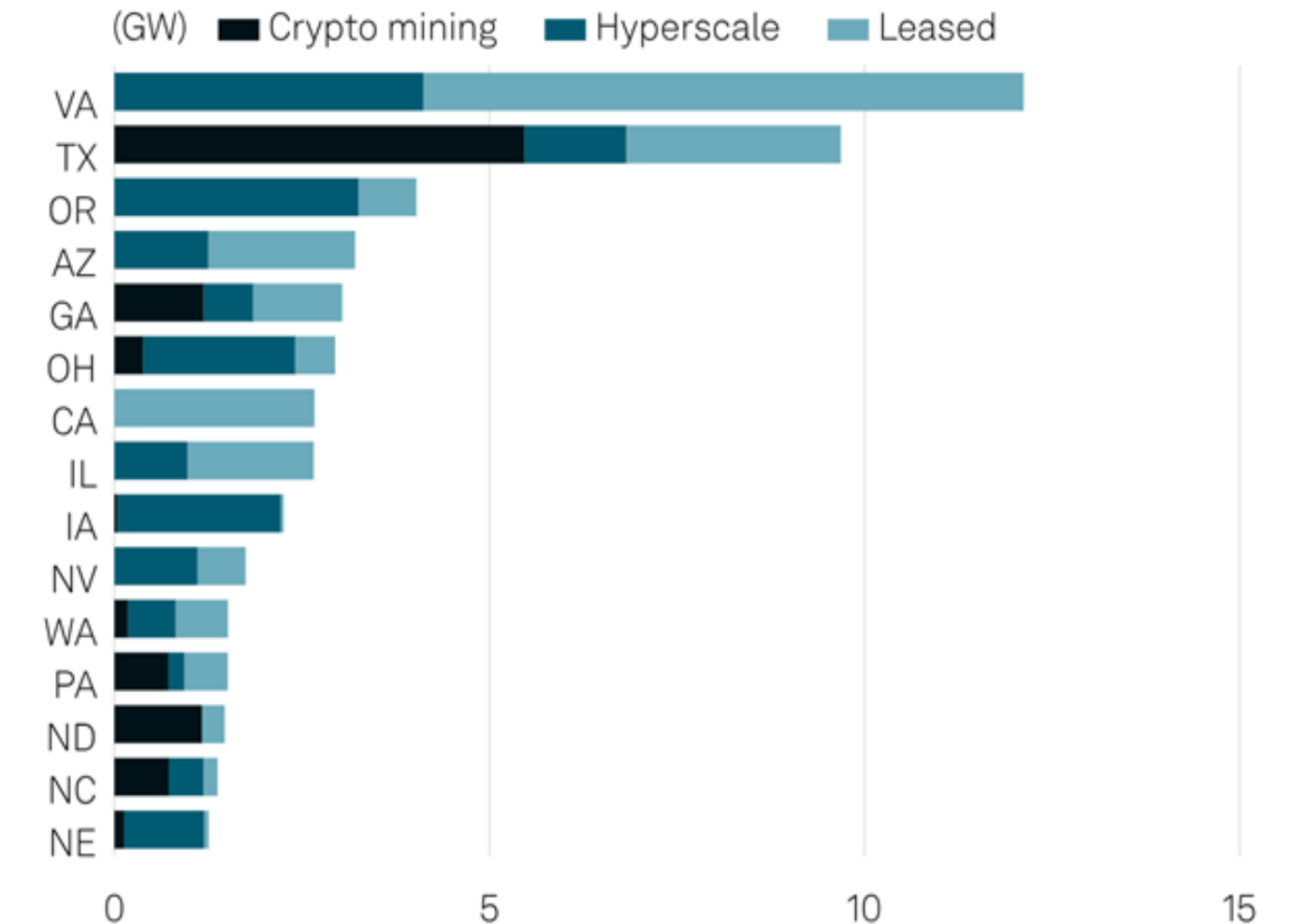
US power demand from data centers expected to more than double from current levels



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?

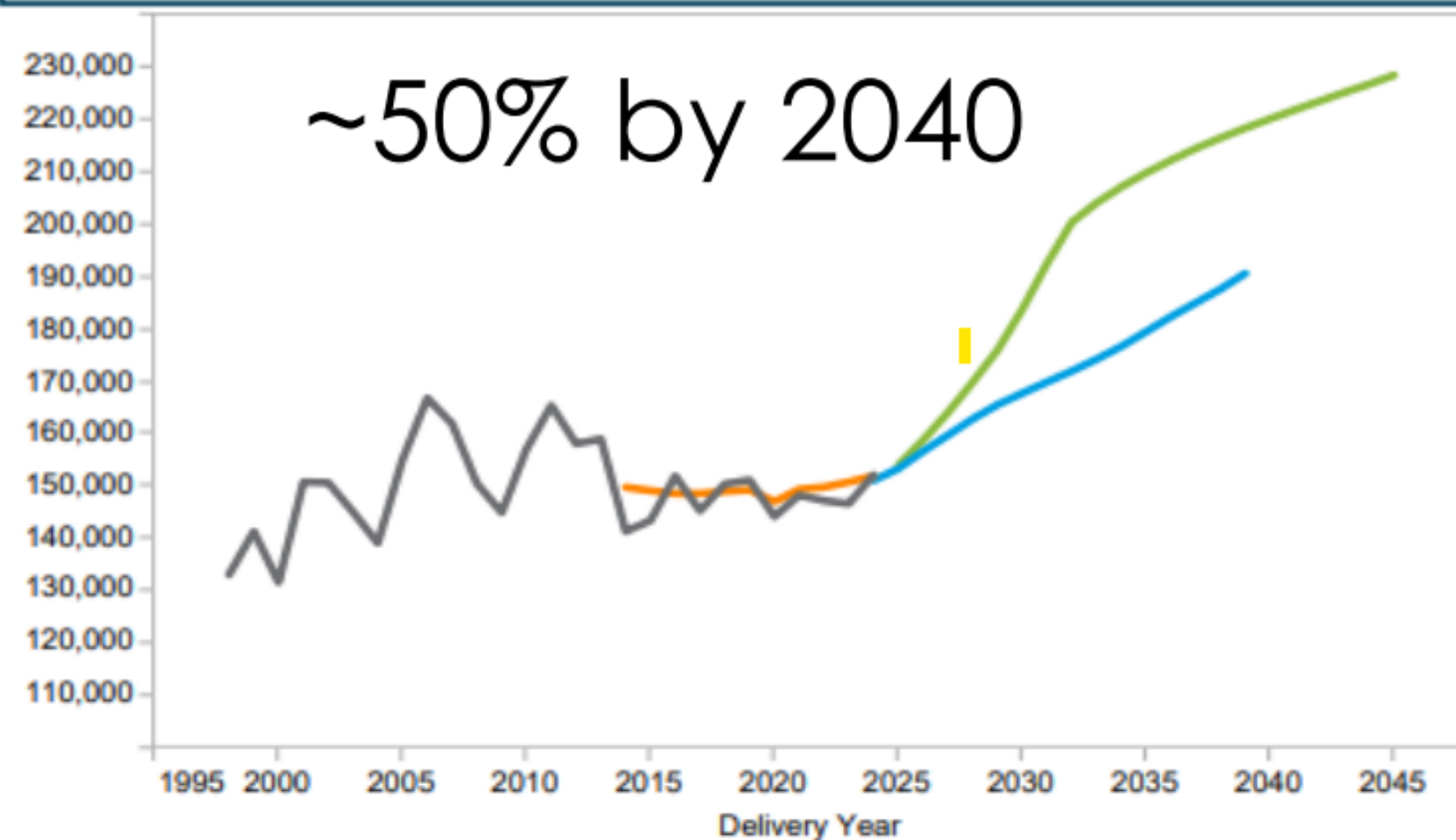
C

Can traditional infrastructure be deployed...can developing technologies deploy quickly?

PJM Energy Outlook

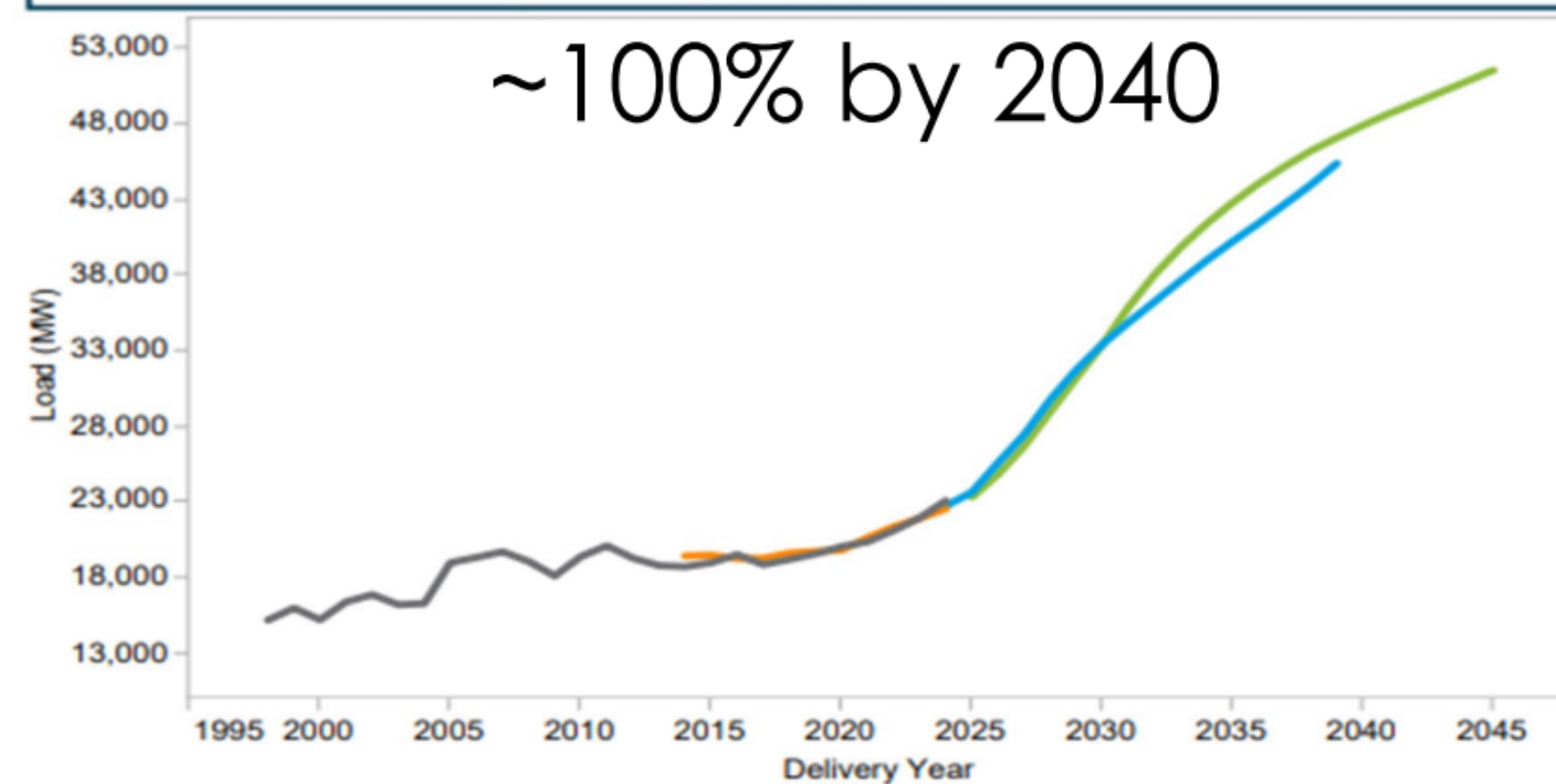
PJM RTO

Summer Peak



Dominion (DOM)

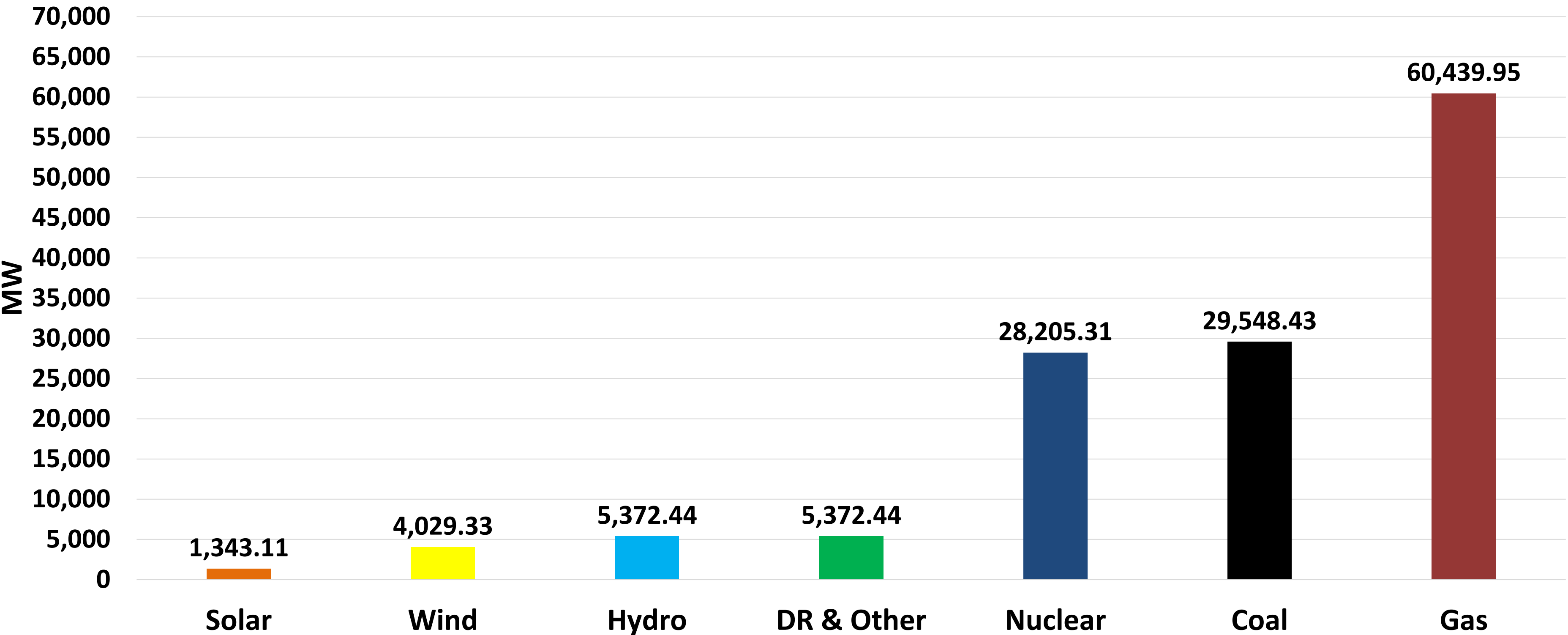
Summer Peak



“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



Total Cleared: 134,311 MW (UCAP)

Fundamentals of Siting Generation in Virginia

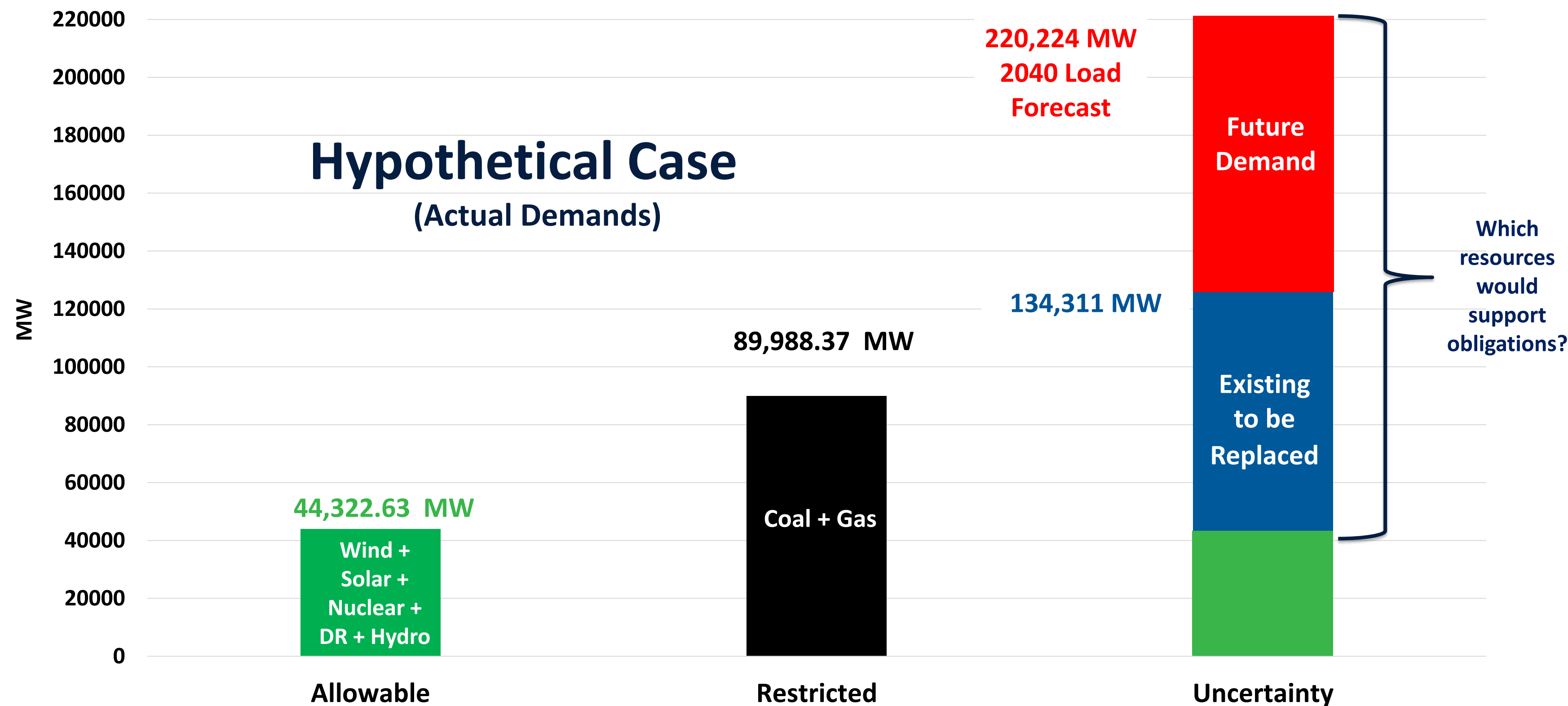
Increases Energy
Security and Reduces Risk

- ✓ 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**

	Solar + Storage	Natural Gas Combined Cycle	Conventional Nuclear
To Meet Capacity	<p>~200 Solar Farms (50MW each) with Batteries</p> <p>Investment: ~\$13B – \$19B</p> <p>Land Use: ~90,000 AC</p>	<p>10-15 Power Plants</p> <p>Investment: ~\$12B – \$16B</p> <p>Land Use: ~3,000 AC</p>	<p>5 Large-Scale Dual Reactor Sites</p> <p>Investment: ~\$90B – \$148B</p> <p>Land Use: ~10,000 AC</p>
To Meet Energy	<p>~500 Solar Farms (50 MW each)</p> <p>Investment: ~\$28.7B – 40B</p> <p>Land Use: ~200,000 AC</p> <p>~50,000,000 MWh</p>	<p>~52,500,000 MWh</p>	<p>~80,000,000 MWh</p>

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
ELECTRIC COOPERATIVE
RELIABLE • AFFORDABLE • FOCUSED ON YOU

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

 (540) 891-5880

 jhewa@myrec.coop
jhewa@brillit.co



brillitTM

 **hyperscale**
ENERGYTM services

 **hyperscale**
GENERATIONTM services