



Panel Discussion: The State of Electric Transmission

April 7, 2025



**Dominion
Energy®**

Dominion Energy Virginia

Reliable, affordable and increasingly clean energy.



3.6 M
Customers



18,802+
Megawatts of Generation



40
Years of EnergyShare Program



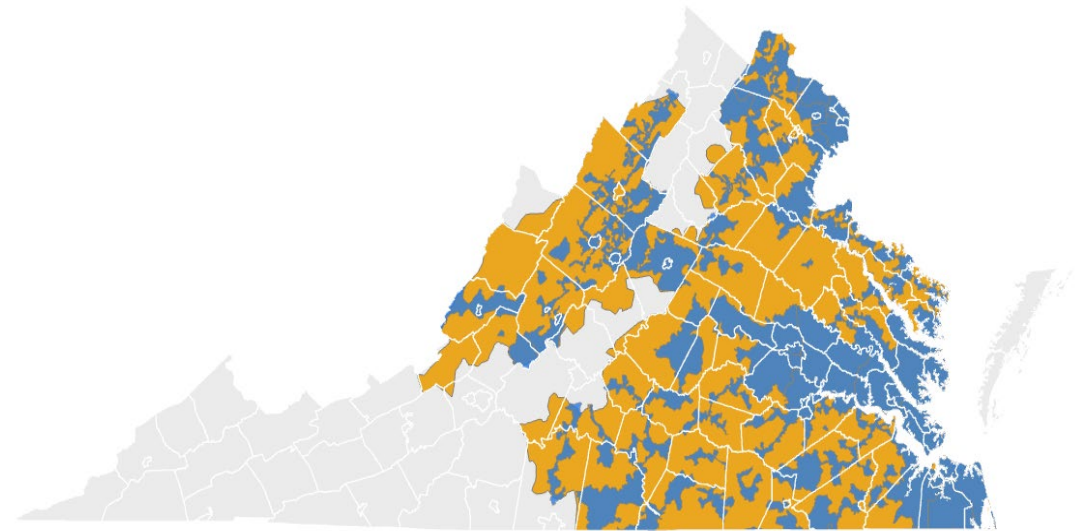
65,000+
Miles of Power Lines
(Transmission & Distribution)



14,400+
Employees & Contractors



Headquarters:
Richmond, Va.



 Distribution and Transmission Service Territory
 Transmission Service Territory

Transmission is Popular



Metropolitan Washington
Council of Governments

880K new jobs coming to Northern Virginia over next 20 years

Department of Energy

DOE Announces \$45 Million for Next-Generation Cyber Tools to Protect the Power Grid

Funding Will Support Projects that Will Help Make American Energy Systems Secure, Resilient, and Reliable



DOMINION ENERGY

Power lines that run to the data centers in Ashburn, Virginia, are under strain as temperatures rise, Dominion Energy says. The company says it is working to ensure that the power grid can handle the increased demand.

Dominion Warns of Power Crunch for New Ashburn Data Centers

3/23/23 • 3 min read • 7 Comments

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Transcript: Why We Need to Build a More Robust Power Grid

It's not enough to just build renewable power.

The Washington Post

Democracy Dies in Darkness

BUSINESS

A summer of blackouts? Wheezing power grid leaves states at risk.

Why the grid could buckle in large areas of the country as temperatures rise

By Evan Halper

June 2, 2022 at 6:00 a.m. EDT

GatesNotes

THE BLOG OF BILL GATES

ON THE GRID

The surprising key to a clean energy future

If you care about climate change, you should care about transmission.

By Bill Gates | January 24, 2023 • 5 minute read

PLANET

The Atlantic

Unfortunately, I Care About Power Lines Now

If America wants to fight climate change—or enjoy the benefits of a modern economy—it must get much better at building electricity transmission. Yikes.

By Robinson Meyer

INSIDENOVA

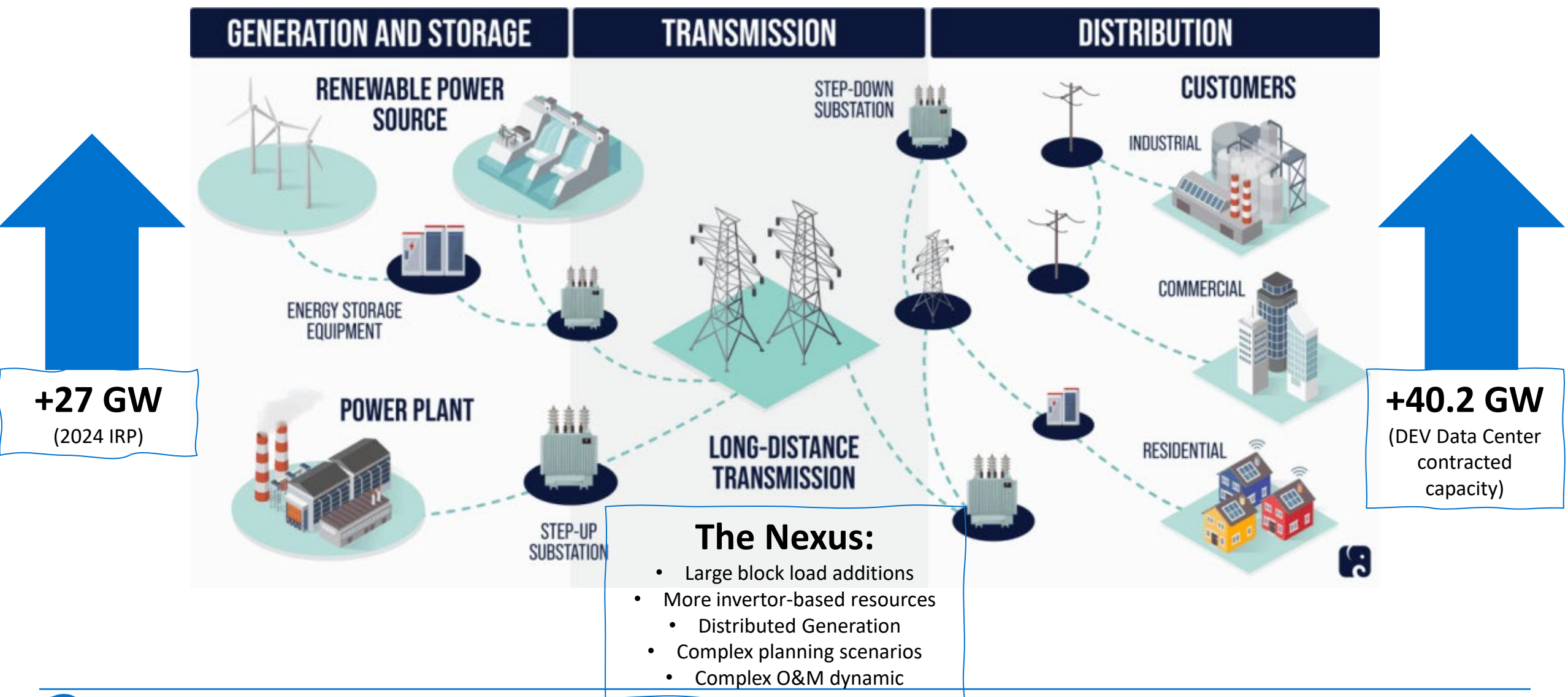
Northern Virginia leads growth in Washington region

Des Moines Register

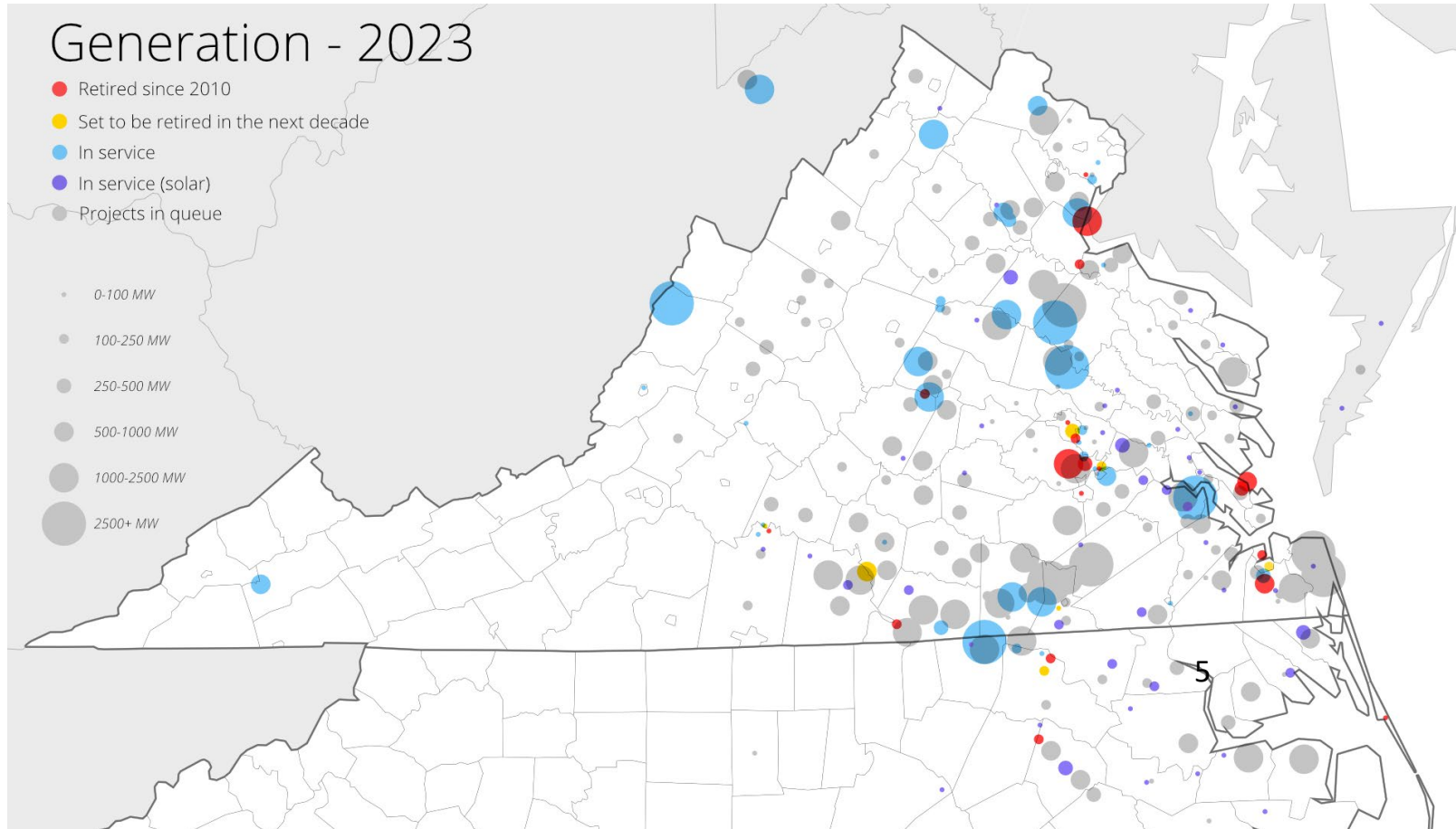
Opinion: Want clean and reliable power? Invest in the grid.

We cannot afford any further delays as this transition will bring down costs for consumers, create jobs, and reduce fossil fuel pollution.

The Grid's Venn Diagram



Generation Mix



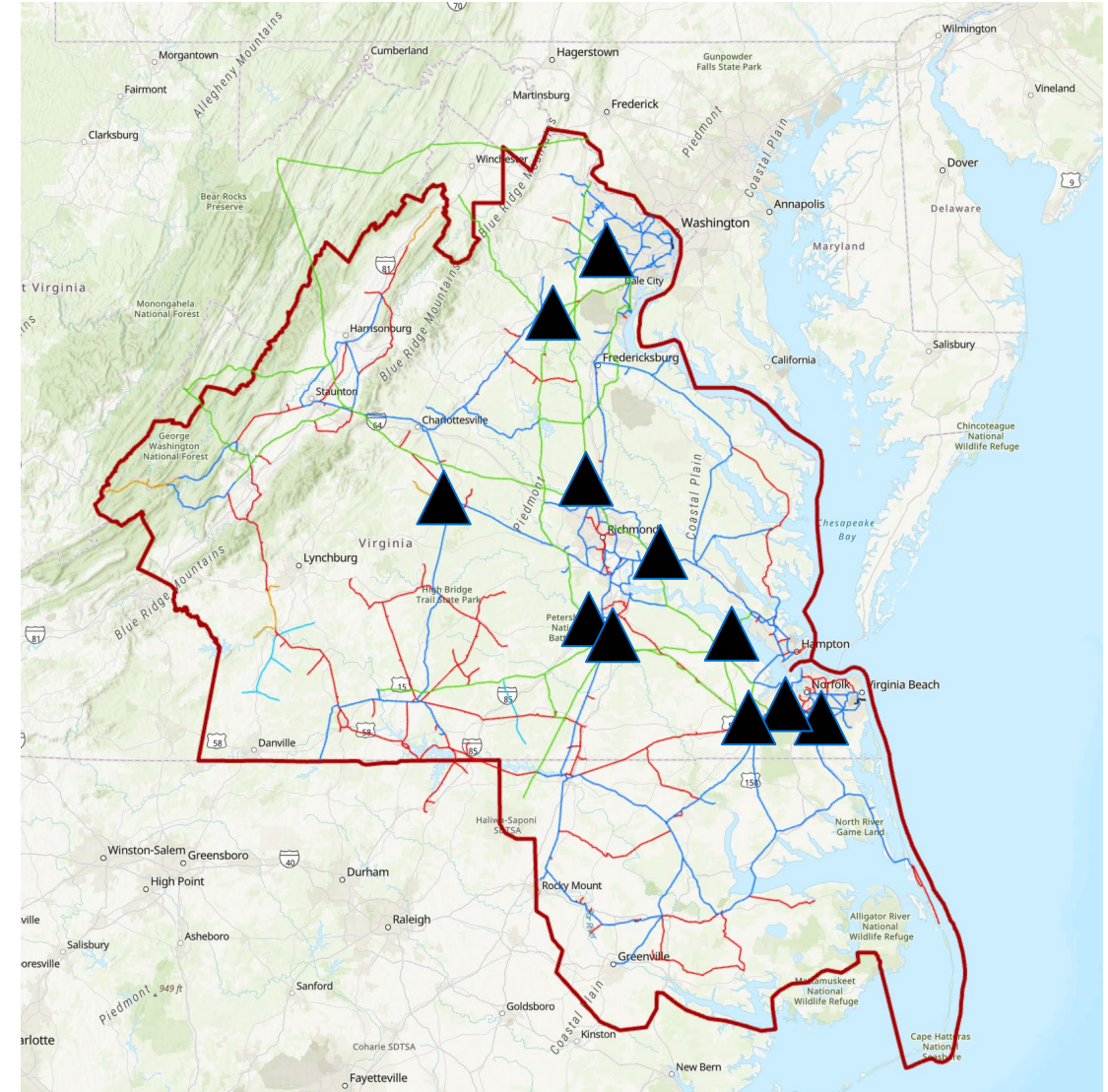
The DOM zone is the most active zone for network upgrade projects in TC.

- Represents Approximately 7,000 MW
- Dom Zone = 77 discrete projects within the DOM zone.
- The network upgrades in the DOM Zone = approximately \$4 Billion.
 - 267 network upgrades identified in PJM for TC1 projects.
 - **106 network upgrade projects** within DOM zone.
 - 36 network upgrade projects within next most active GI zone

Network Upgrades Example - CVOW

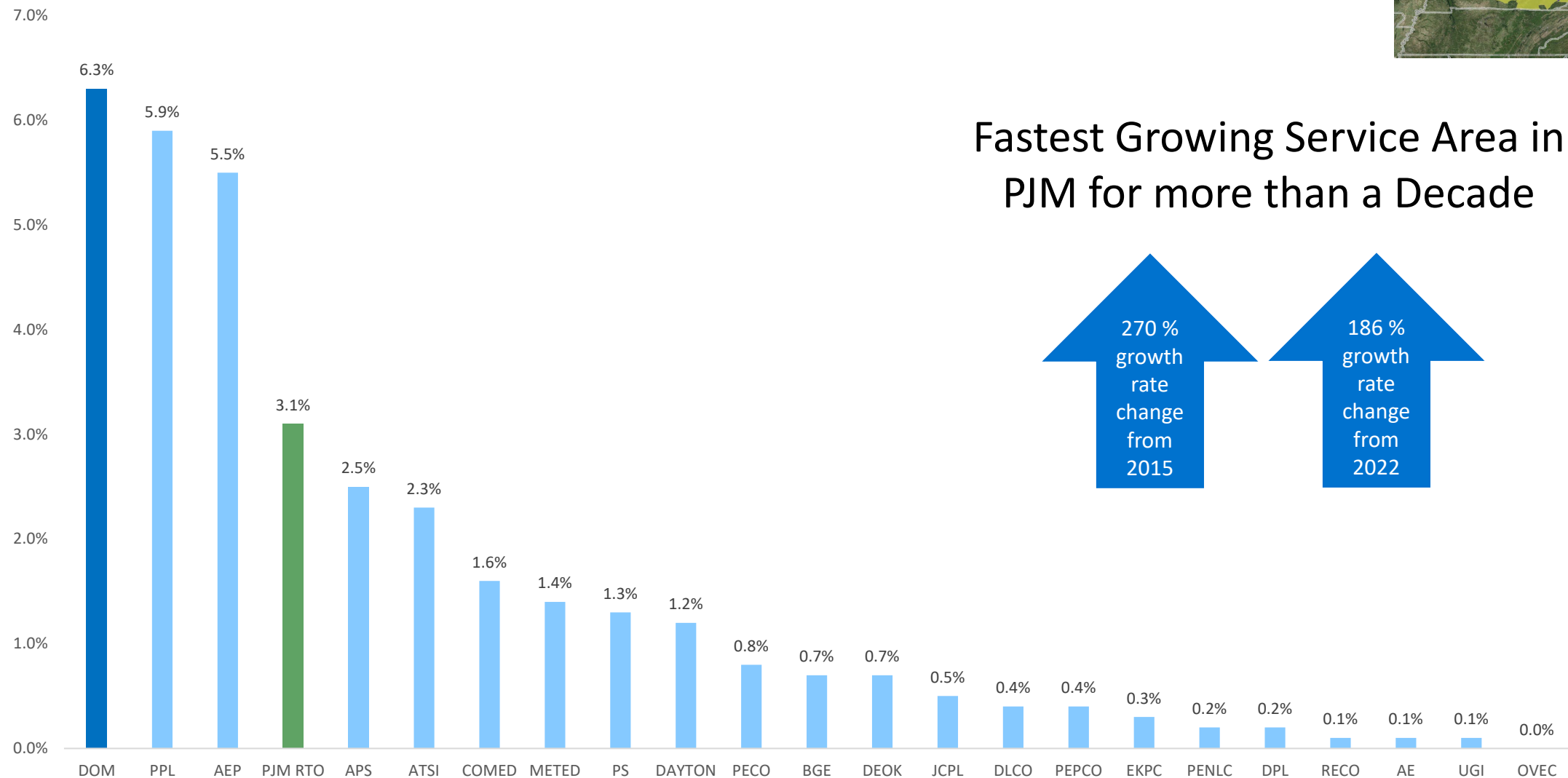
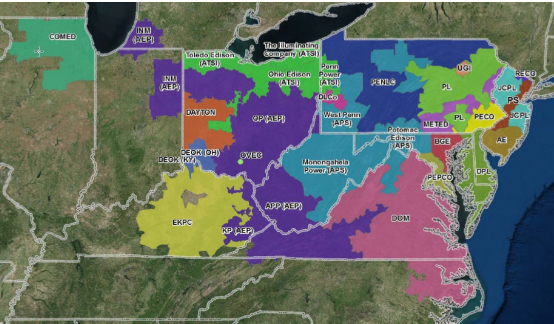
Pending PJM

- Transmission Lines: ~342 miles
 - 17 projects
 - 12 Rebuilds: (6) 500 kV, (5) 230 kV, (1) 115 kV
 - 4 New builds – all 500 kV
 - 1 Reconductor – 230 kV
- Substations: ▲
 - 10 projects
 - Expansions
 - Additional and Replacement Transformers
 - Replacement Circuit Breakers
 - Additional substation work



Fastest Growing Service Area in PJM

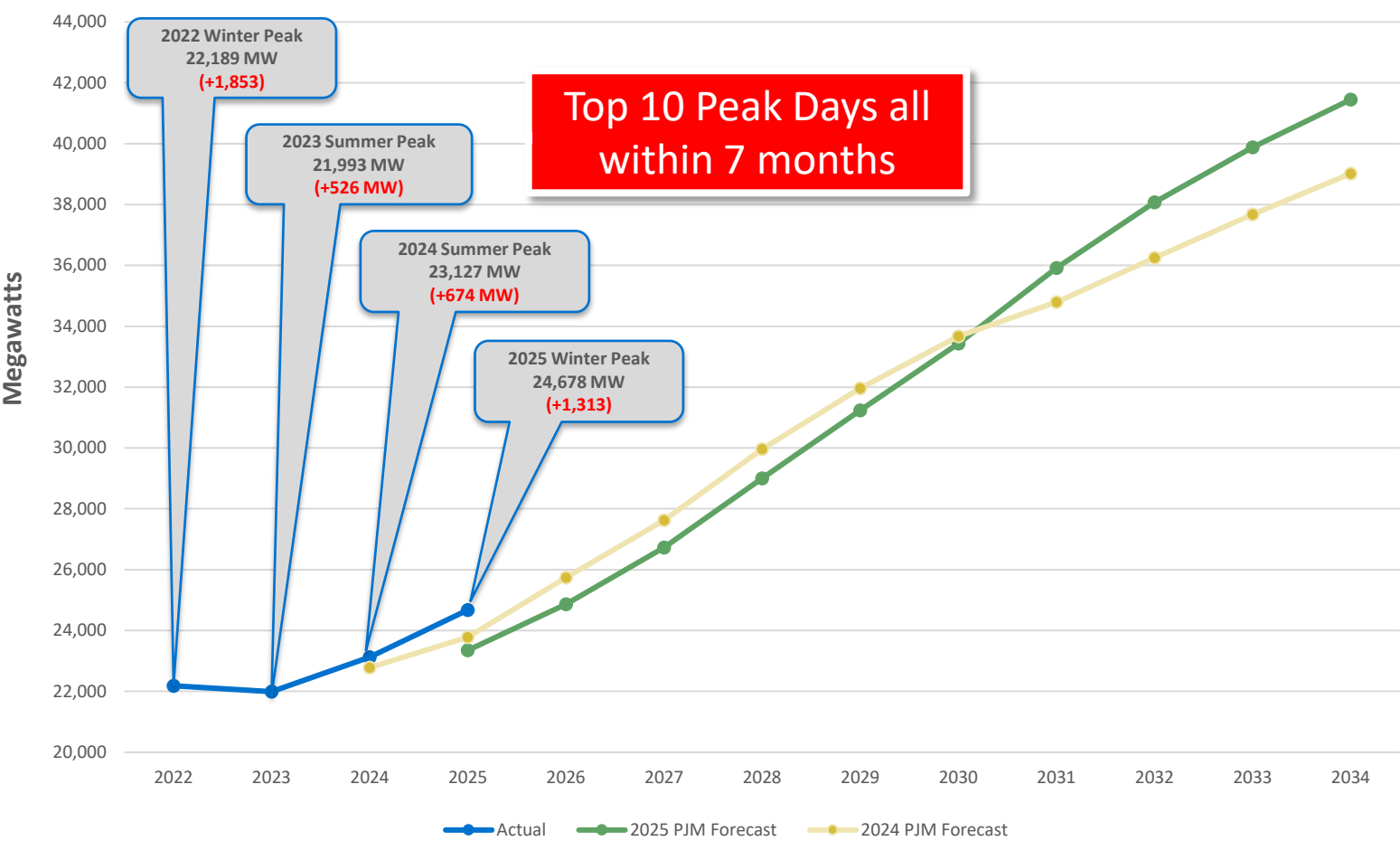
PJM Summer Peak Load Growth Rate (2025-2035)



2025 PJM Load Forecast

DOM Zone

DOM Zone Forecasts vs. Actuals



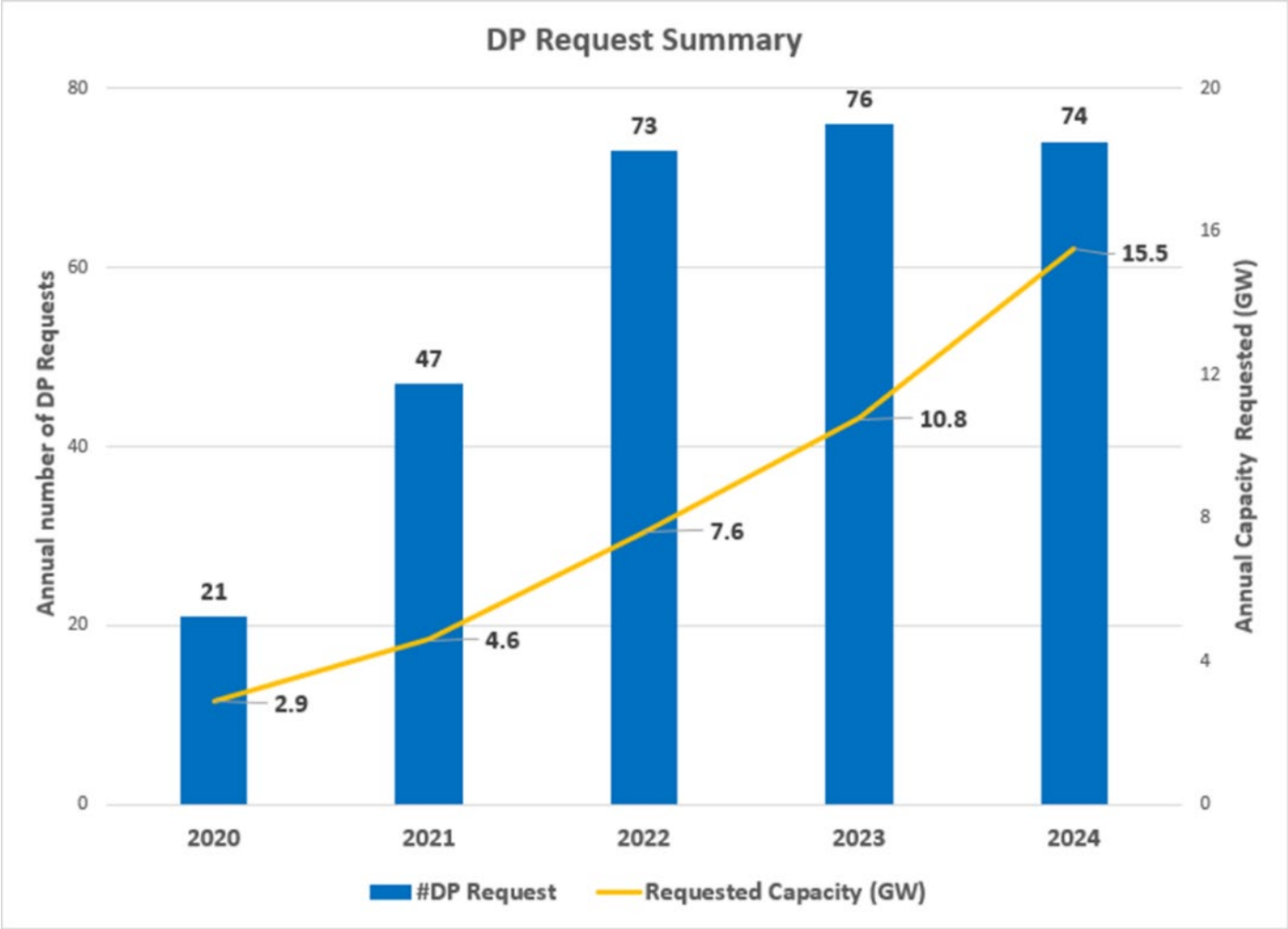
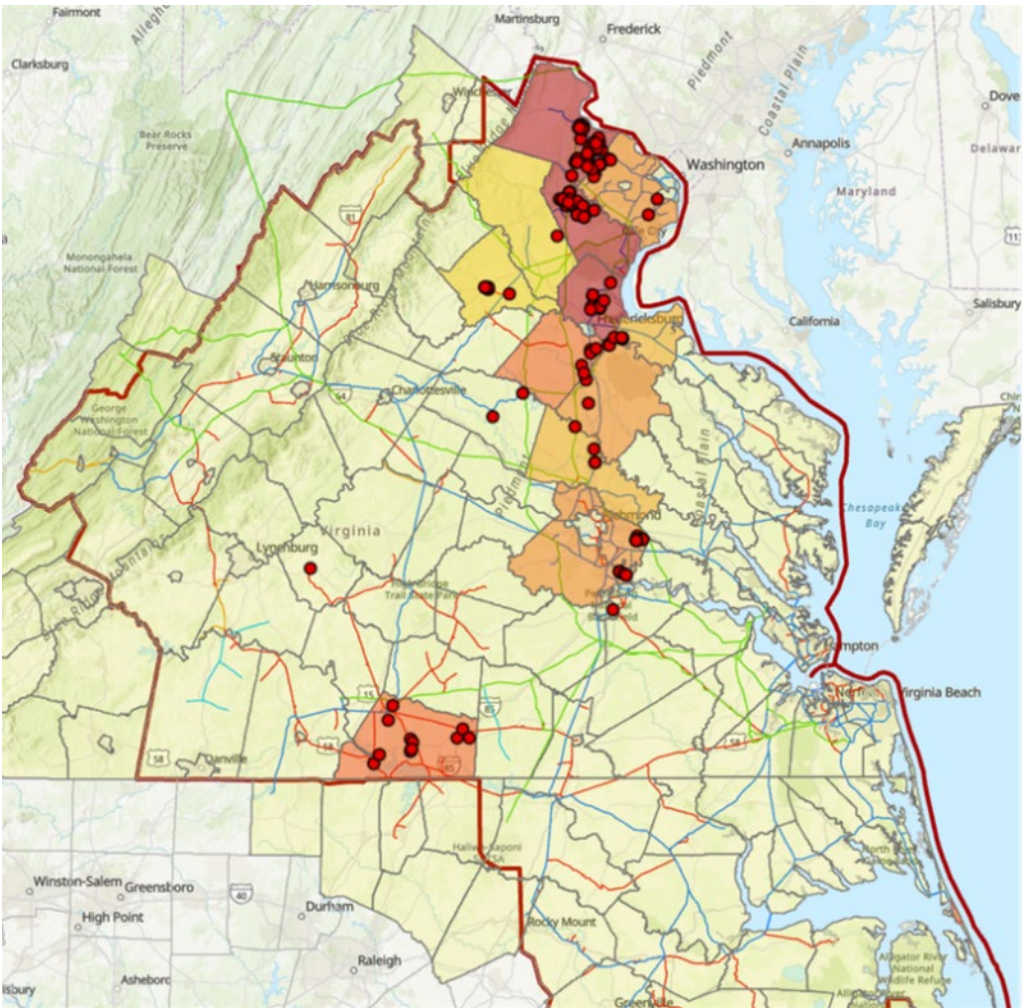
% Growth in DOM Zone

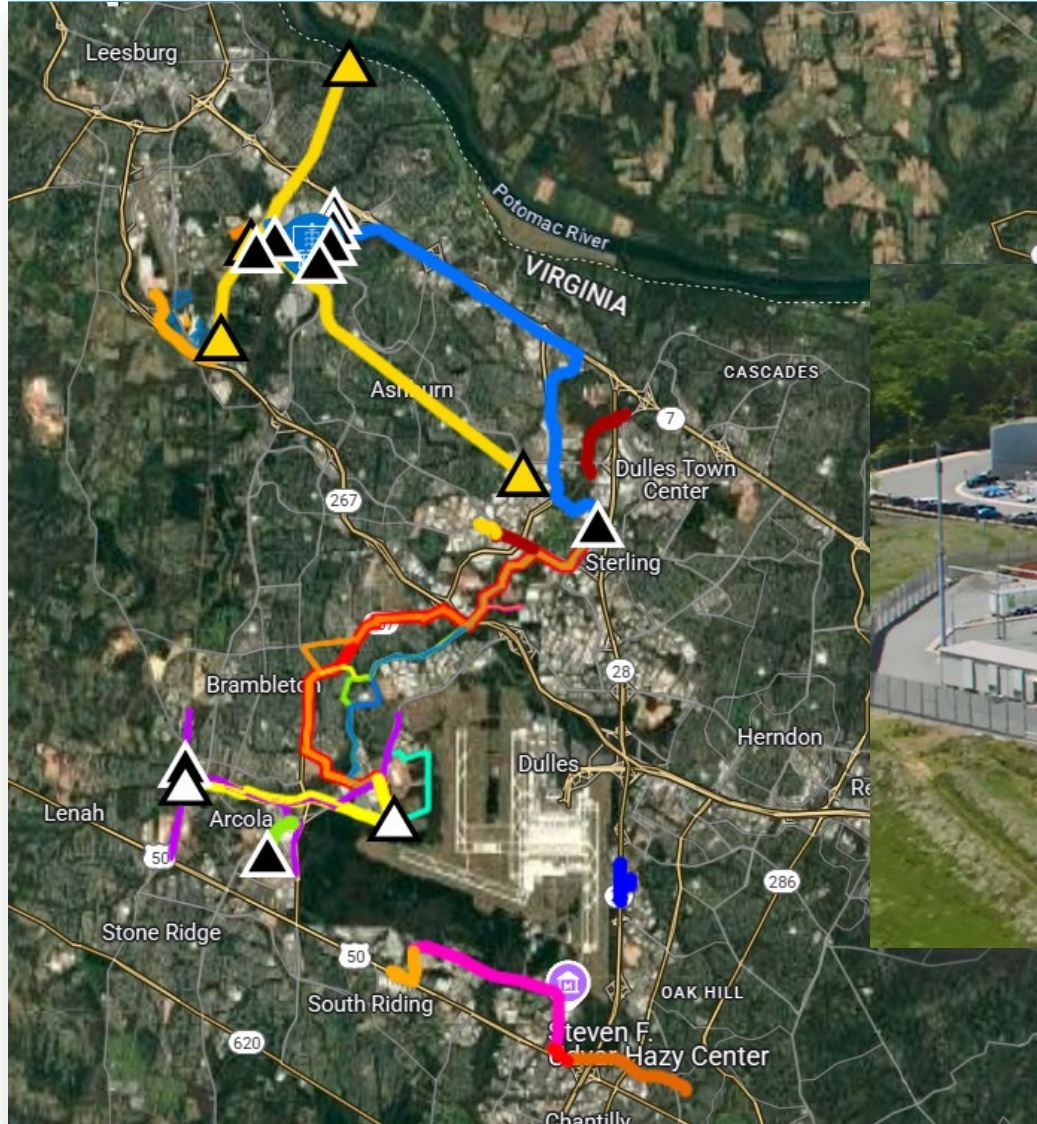
	10-year	YOY change	15-year	YOY change
Summer Peak	6.3%	+0.7	4.9%	+0.1
Winter Peak	6.0%	+0.9	4.7%	+0.4

Notable Updates

- **Near term: Slight moderation in demand**
 - Reflects the resetting delivery point request expectations
 - Slight reduction in DEV and electric co-op load
- **Long term: Continued year-over-year increase in growth**
 - No material change to the DEV forecast
 - Significant increases in growth in electric co-op territories due to data centers

Meeting Load Growth







Thank you