



Dominion Energy
Virginia and North Carolina
2024 Integrated Resource Plan (IRP)

Topic Specific Workshop 3 –
Reliability

July 24, 2024



The Legislation (Va. Code § 56–599 D)

As part of preparing any integrated resource plan pursuant to this section, each utility shall conduct outreach to engage the public in a stakeholder review process and **provide opportunities for the public to contribute information, input, and ideas on the utility's integrated resource plan, including the plan's development methodology, modeling inputs, and assumptions, as well as the ability for the public to make relevant inquiries, to the utility when formulating its integrated resource plan.** Each utility shall report its public outreach efforts to the Commission. The stakeholder review process shall include representatives from multiple interest groups, including residential and industrial classes of ratepayers. Each utility shall, at the time of the filing of its integrated resource plan, report on any stakeholder meetings that have occurred prior to the filing date.

PJM Interconnection (PJM):

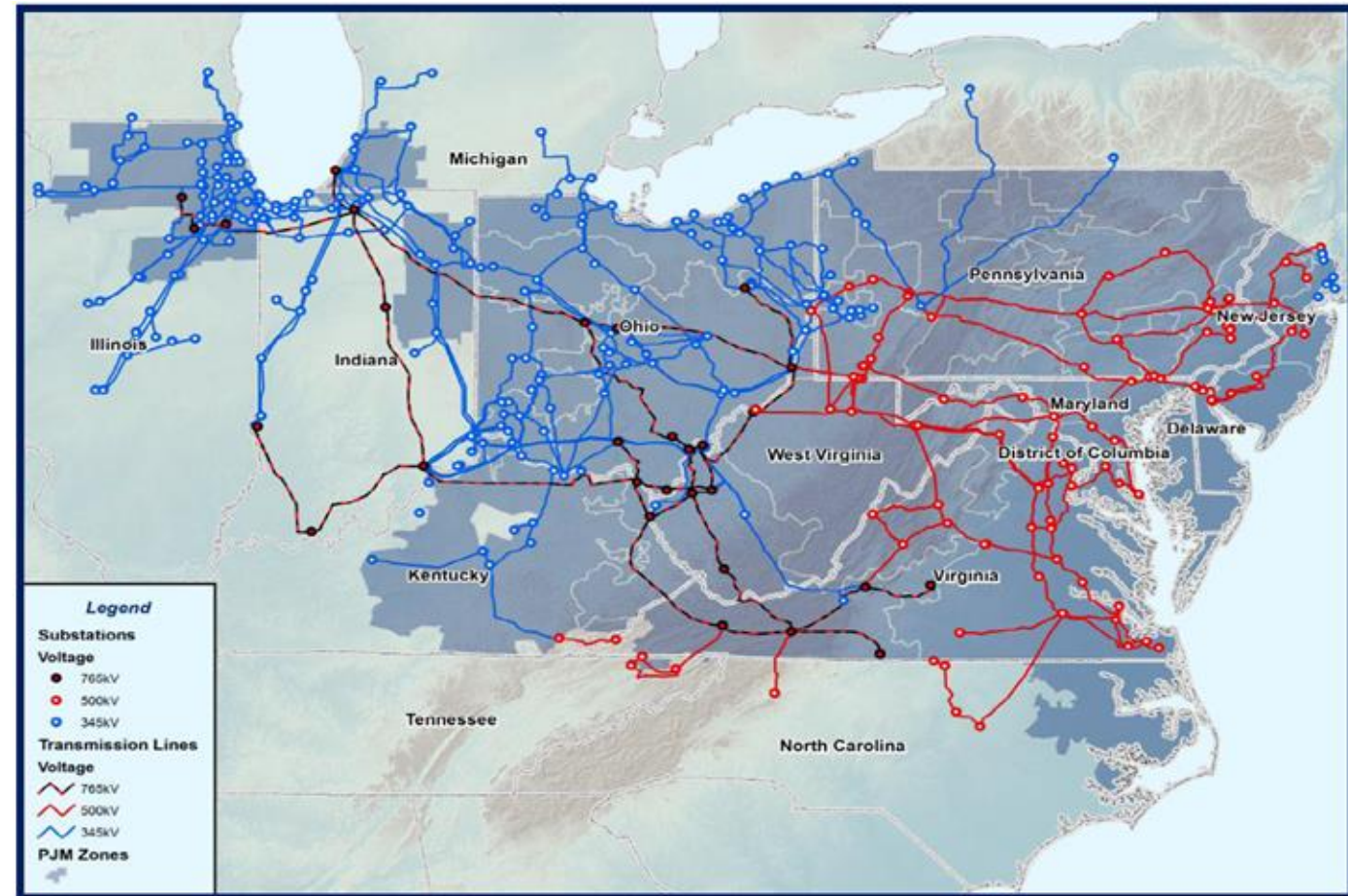
- Regional Transmission Organization (RTO)
- Neutral, independent party that operates a competitive wholesale electricity market in 13 states and the District of Columbia

Dominion (DOM) Zone:

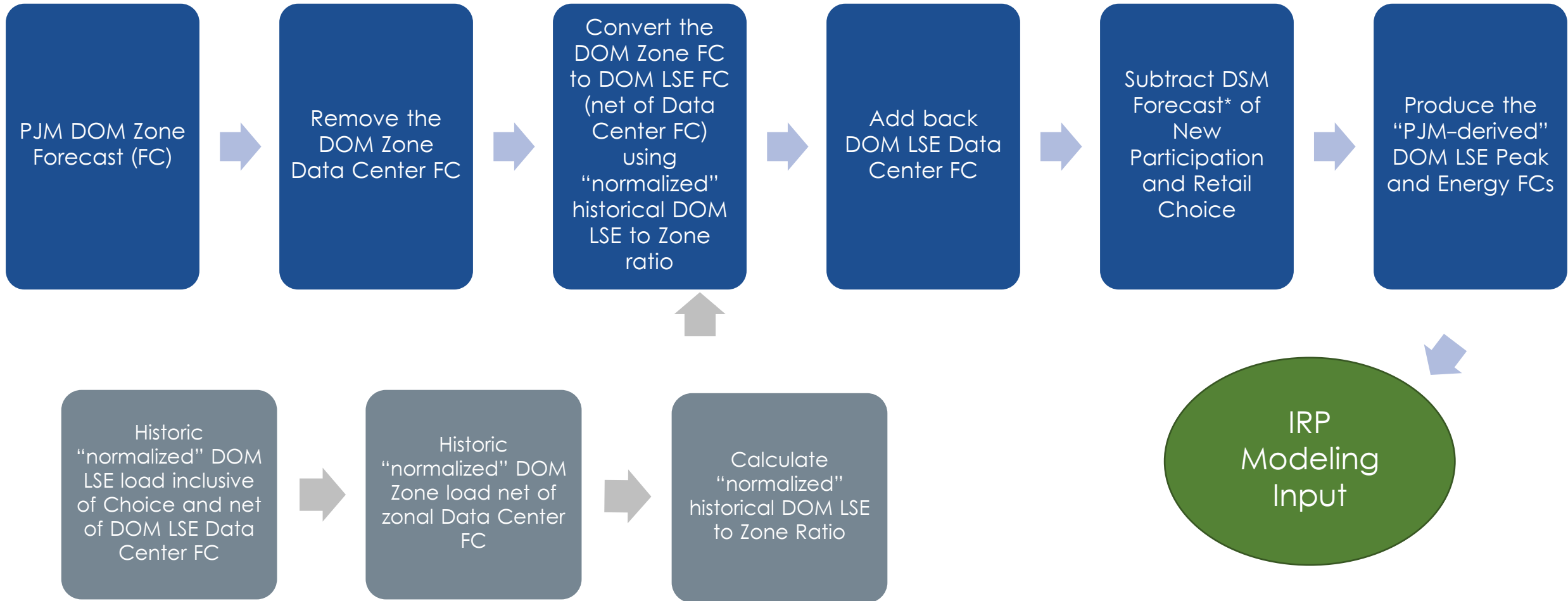
- One of twenty-one transmission zones in PJM
- Includes Dominion Energy, Cooperatives, and Municipalities

DOM LSE (Load Serving Entity):

- Includes Dominion Energy only



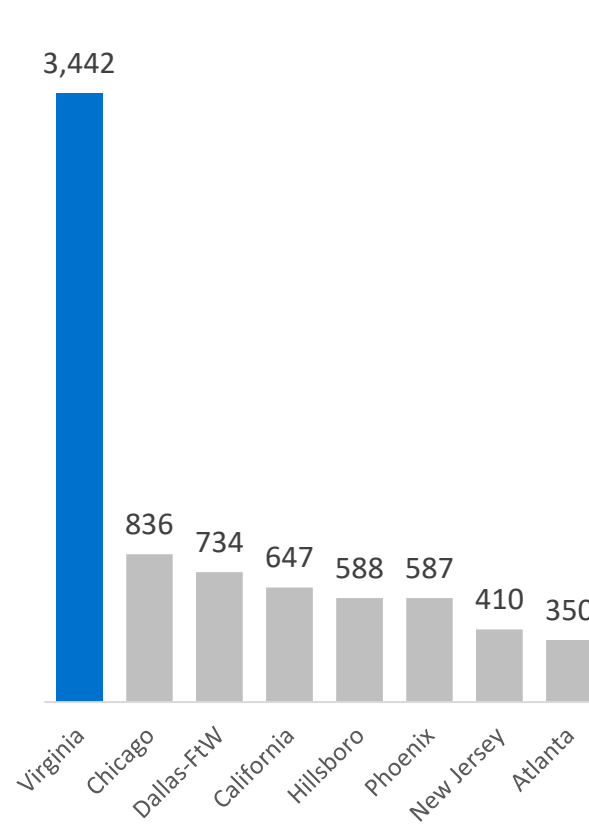
PJM Derived DOM LSE Load Forecast – Methodology



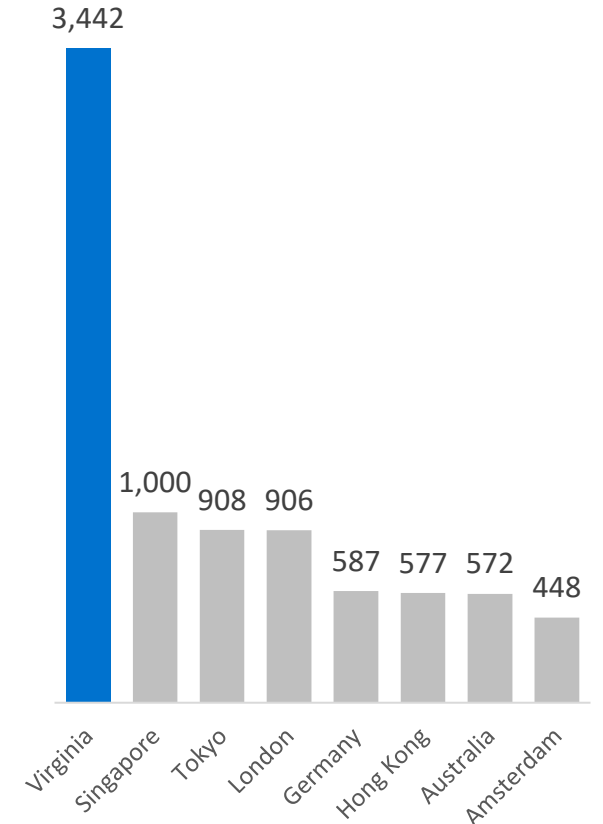
Required to utilize PJM FC which is at the DOM Zone Level. PJM DOM Zone FC is translated into DOM LSE for IRP modeling.

Drivers of growth of data centers:

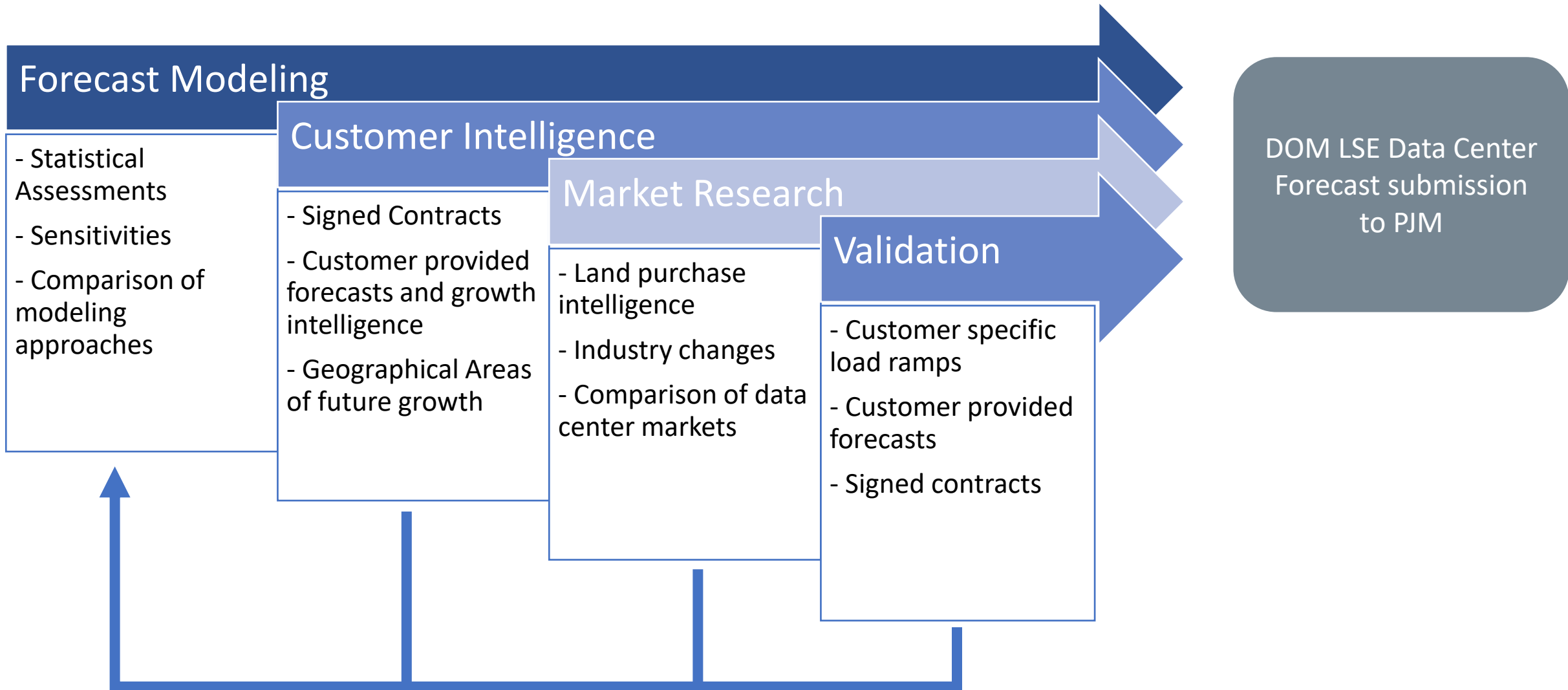
- Artificial intelligence
- 5G technology
- Internet of Things (IOT)
- Online software and applications
- Migration to the Cloud
- Smartphones
- Apps
- Digitization of data
- Virtual / Augmented Reality?



**United States
(MWs)**

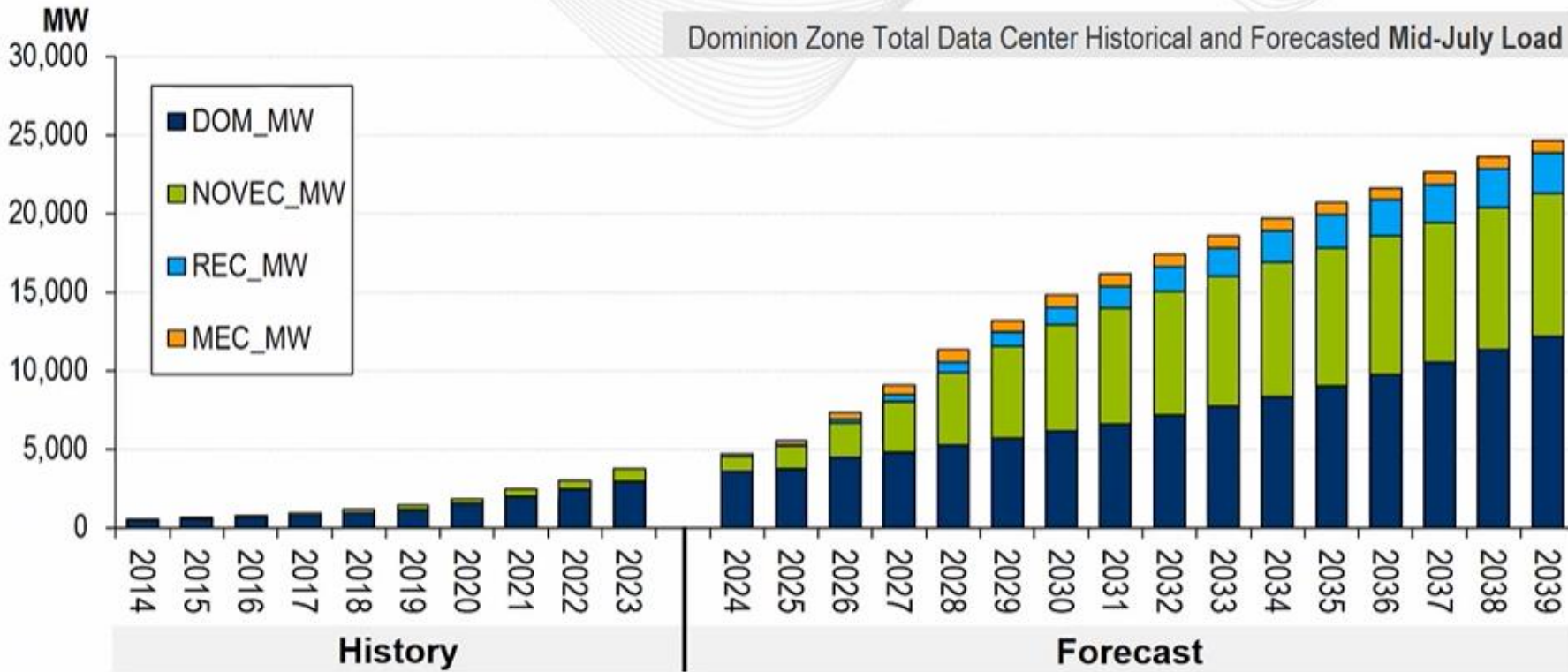


**Globally
(MWs)**





Dominion Data Center Load



- DOM – Dominion Energy
- NOVEC – Northern Virginia Electric Cooperative
- REC – Rappahannock Electric Cooperative
- MEC – Mecklenburg Electric Cooperative

Proposed program spending of \$870M by 2028

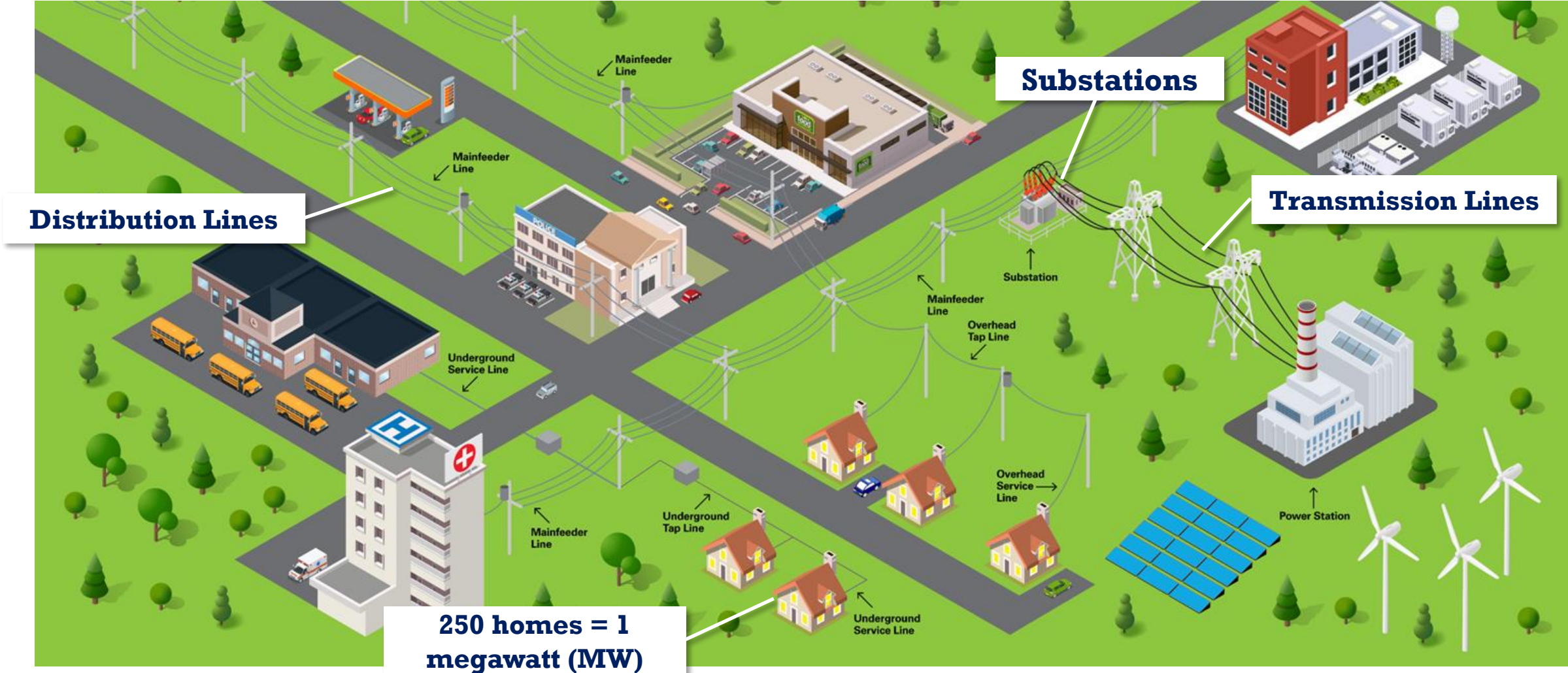
\$797M proposed spending since July 2018



In 2023, the Company's programs achieved:

- \$18 million in customer bill savings
- 92 million gallons of water saved per year
- 524,000 metric tons of CO₂ avoided
- 7,043 GWh of lifetime savings (enough to power over 586,000 homes)
- Non-Residential New Construction achieved net annual energy savings of 25,875 MWh/year, 331% of planned energy savings
- Non-Residential Agriculture achieved net annual energy savings of 5,720 MWh/year, 153% of planned energy savings
- Non-Residential Building Optimization achieved net annual energy savings of 14,091 MWh/year, 153% of planned energy savings

Upgrading and Investing in our Energy Infrastructure



- The IRP Transmission Line Import/Export Study evaluated only the capability of the transmission network under variation contingencies.
 - It does not indicate whether generation is available for import.
 - Study served as input to the IRP energy adequacy analysis.
- Even if Transmission has a high import capability, historical behavior shows that the system does not run on imports for long periods of time.
- Energy Market is not designed to rely on imports as baseload resource.
 - Locational Marginal Pricing influences the curve = Imports are expensive.

