Americans for a
Clean Energy Grid

January 21, 2026

Large Loads and the Impact on the Grid: Current State of Play

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About ACEG

Americans for a Clean Energy Grid (ACEG) is a public interest advocacy coalition focused on the need to expand, integrate, and modernize the North American high-capacity grid. ACEG brings together a diverse coalition—including business, labor, environmental groups, utilities, and developers—to advocate for policies that recognize the multifaceted benefits of a robust electric grid.

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Agenda

- What makes for a good location for a data center?
- How does a customer interconnect with the grid?
  - How does it work today?
  - What are other possible models?
  - What are the federal proposals?
- How do large loads impact the grid?
  - Considerations in planning for large loads
- Bonus issue

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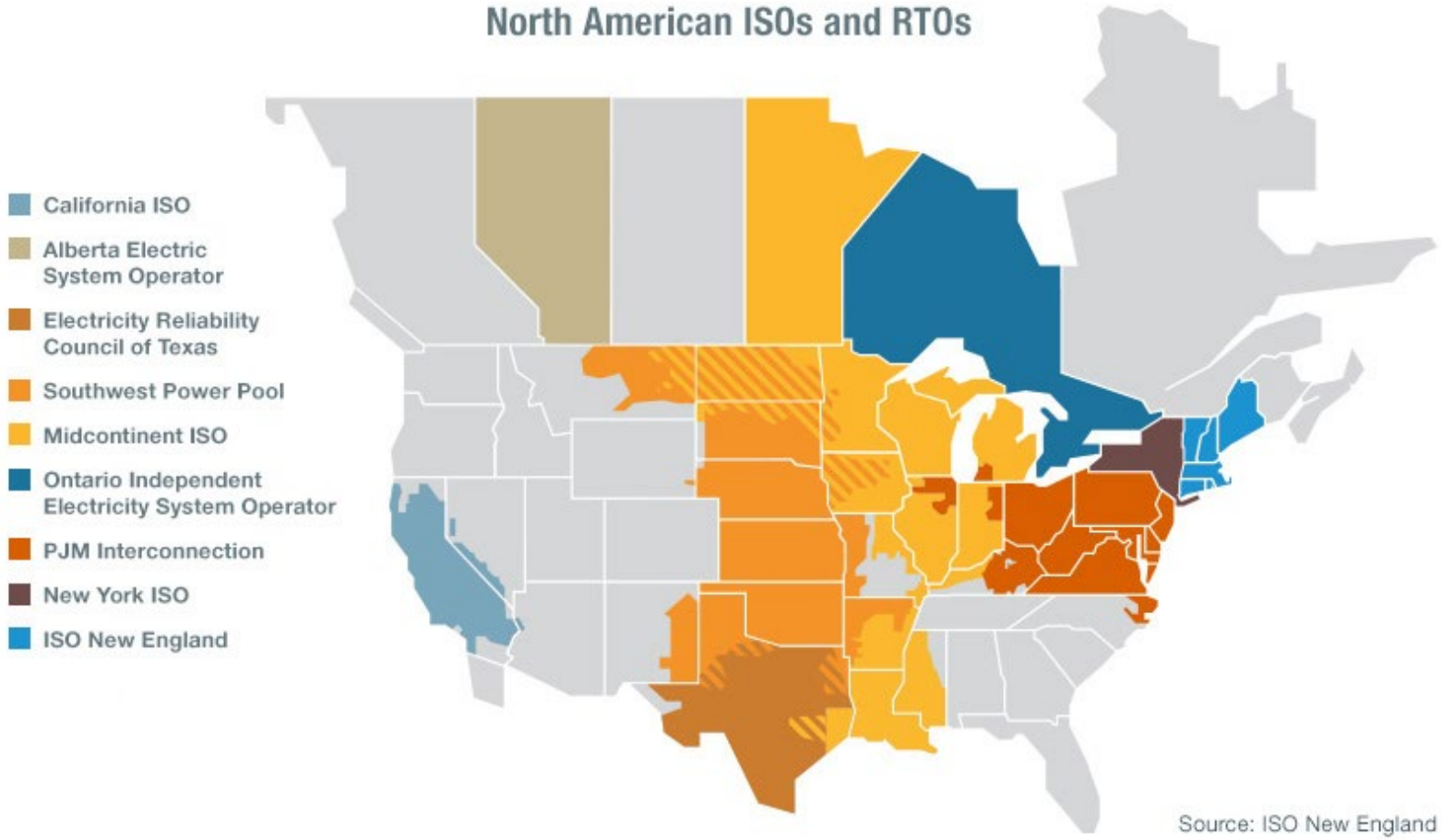
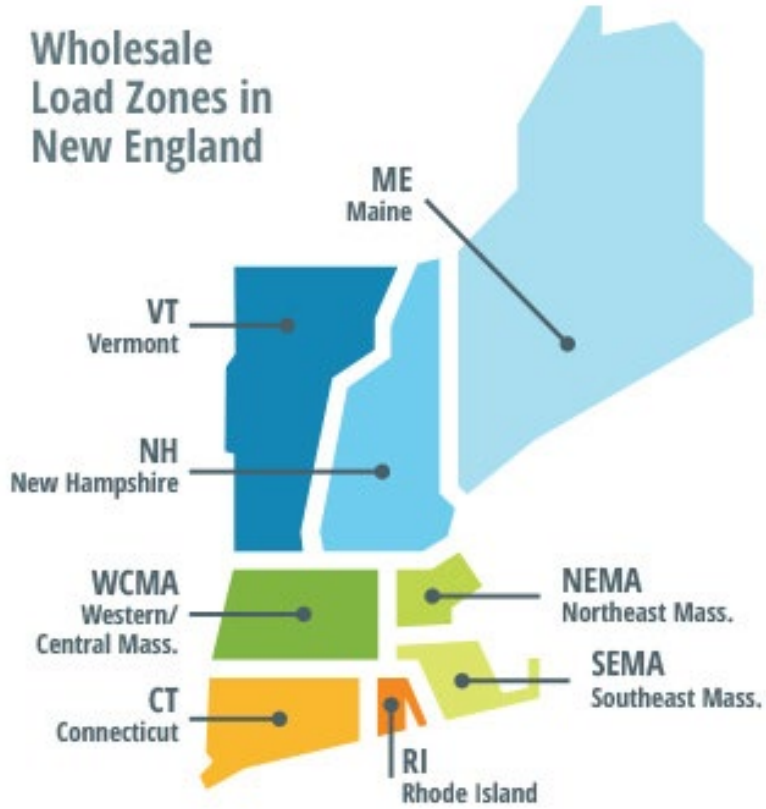
What makes for a good location for a data center?



Source: ISO New England



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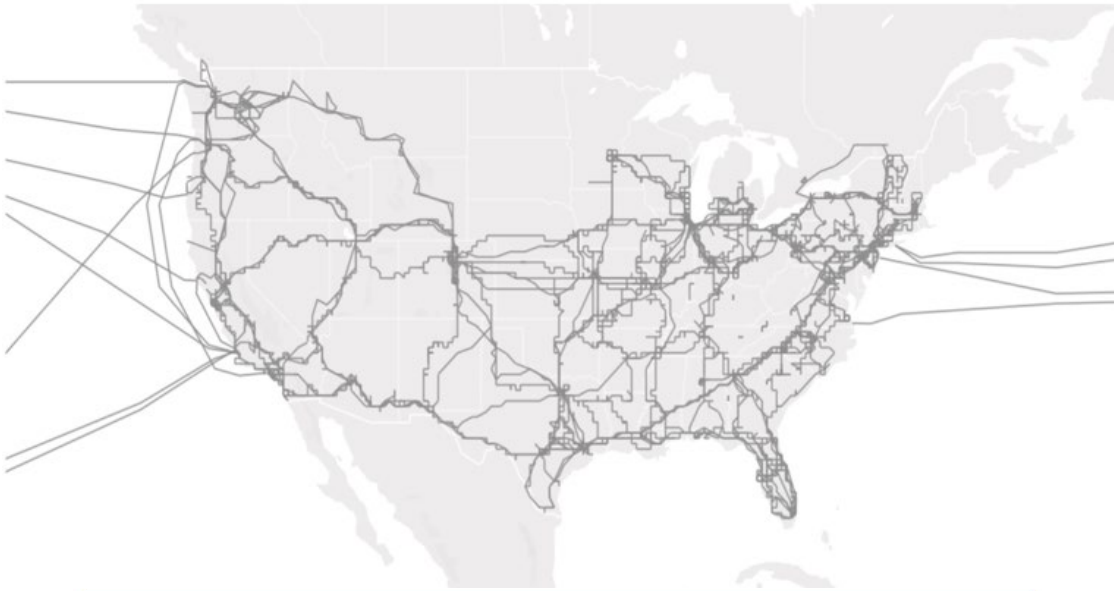
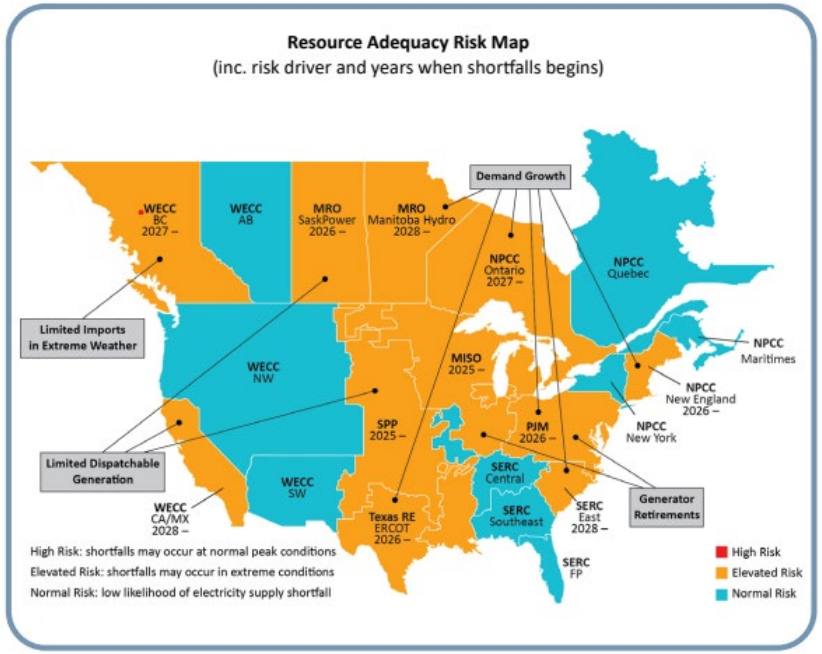
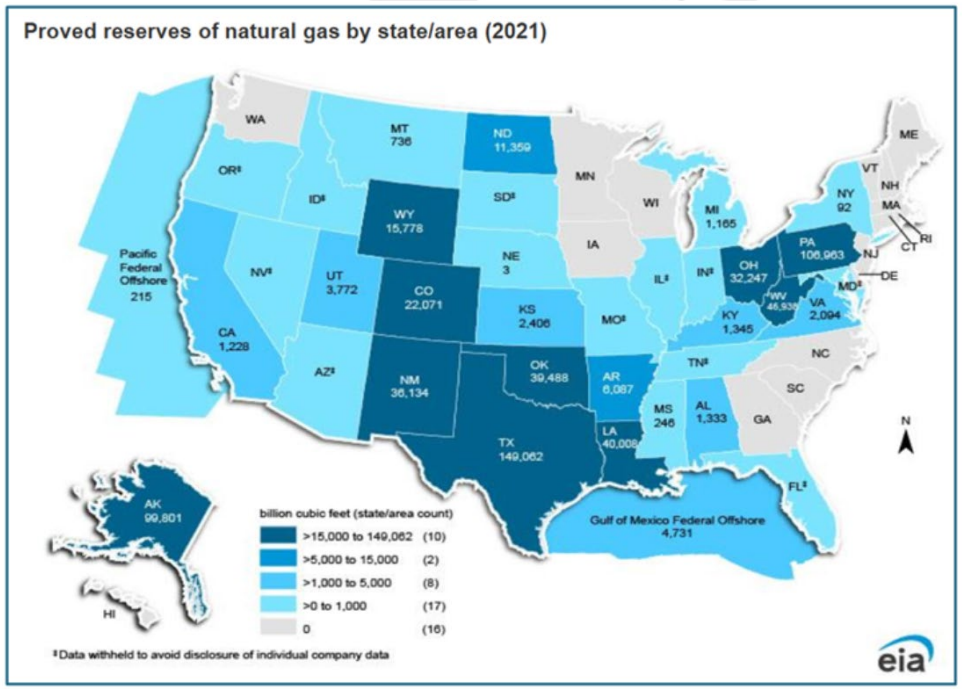
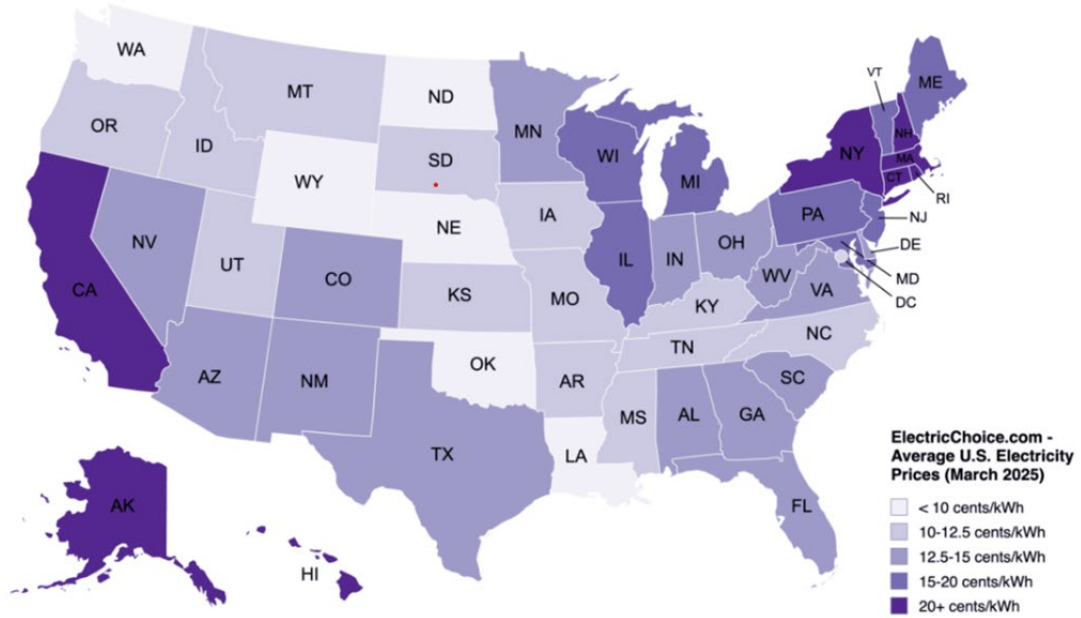
Access to Fiber









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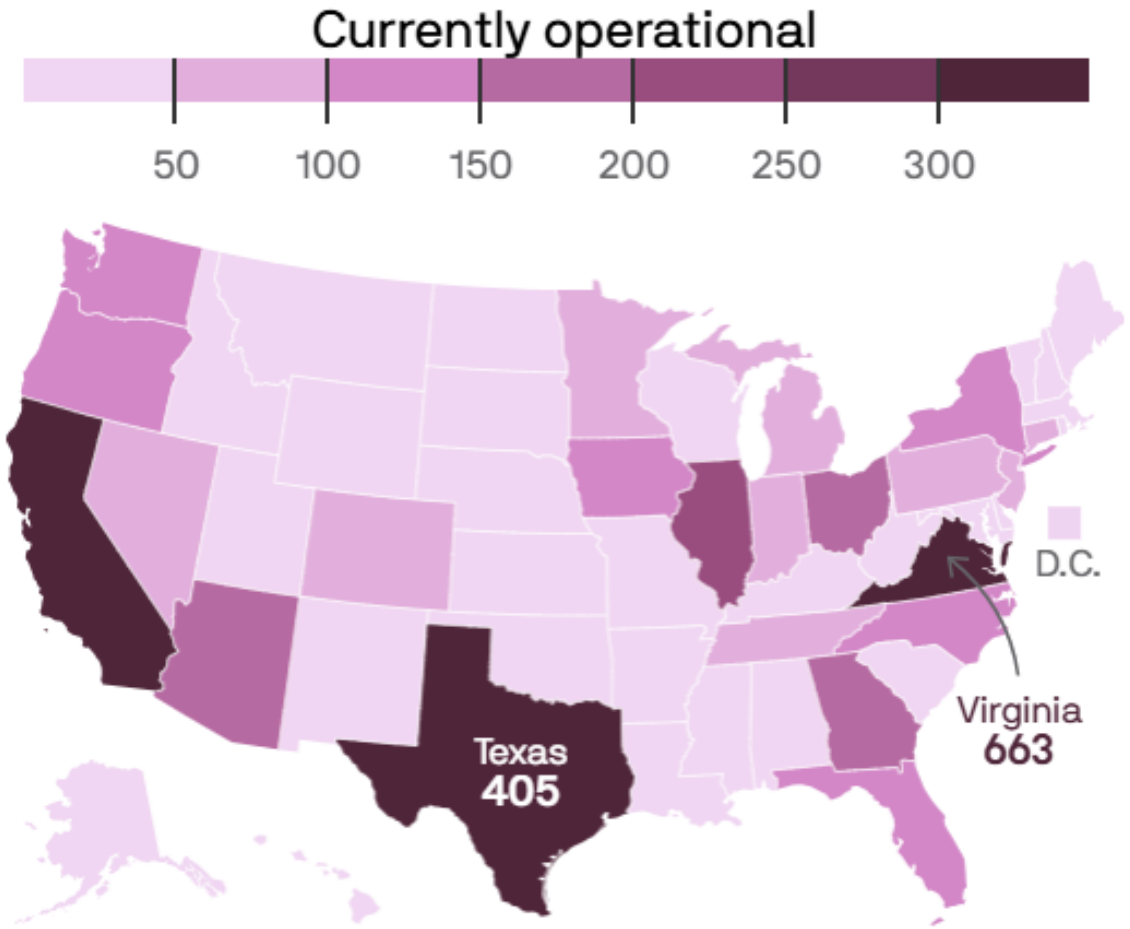
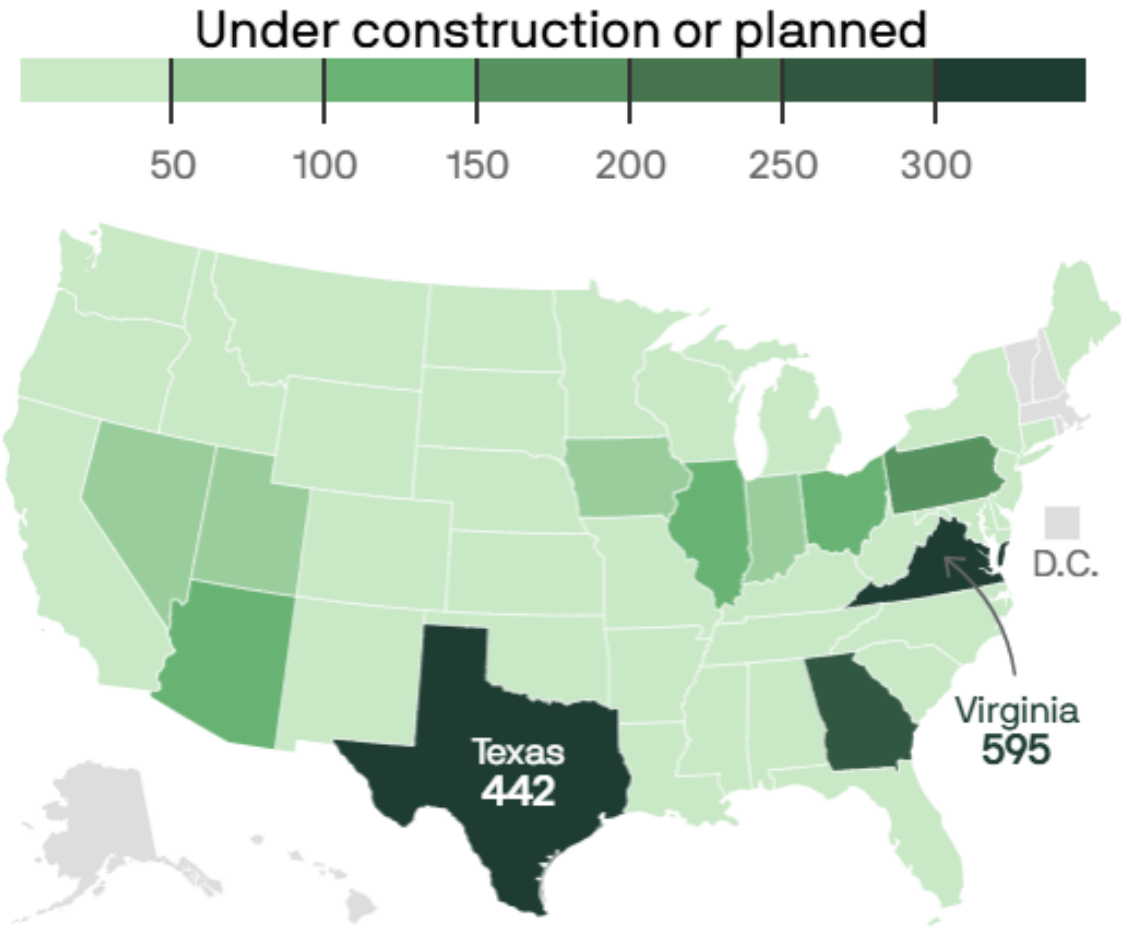
Current Data Centers

As of Oct. 29, 2025





Data: American Edge Project and Technology Councils of North America; Map: Axios Visuals

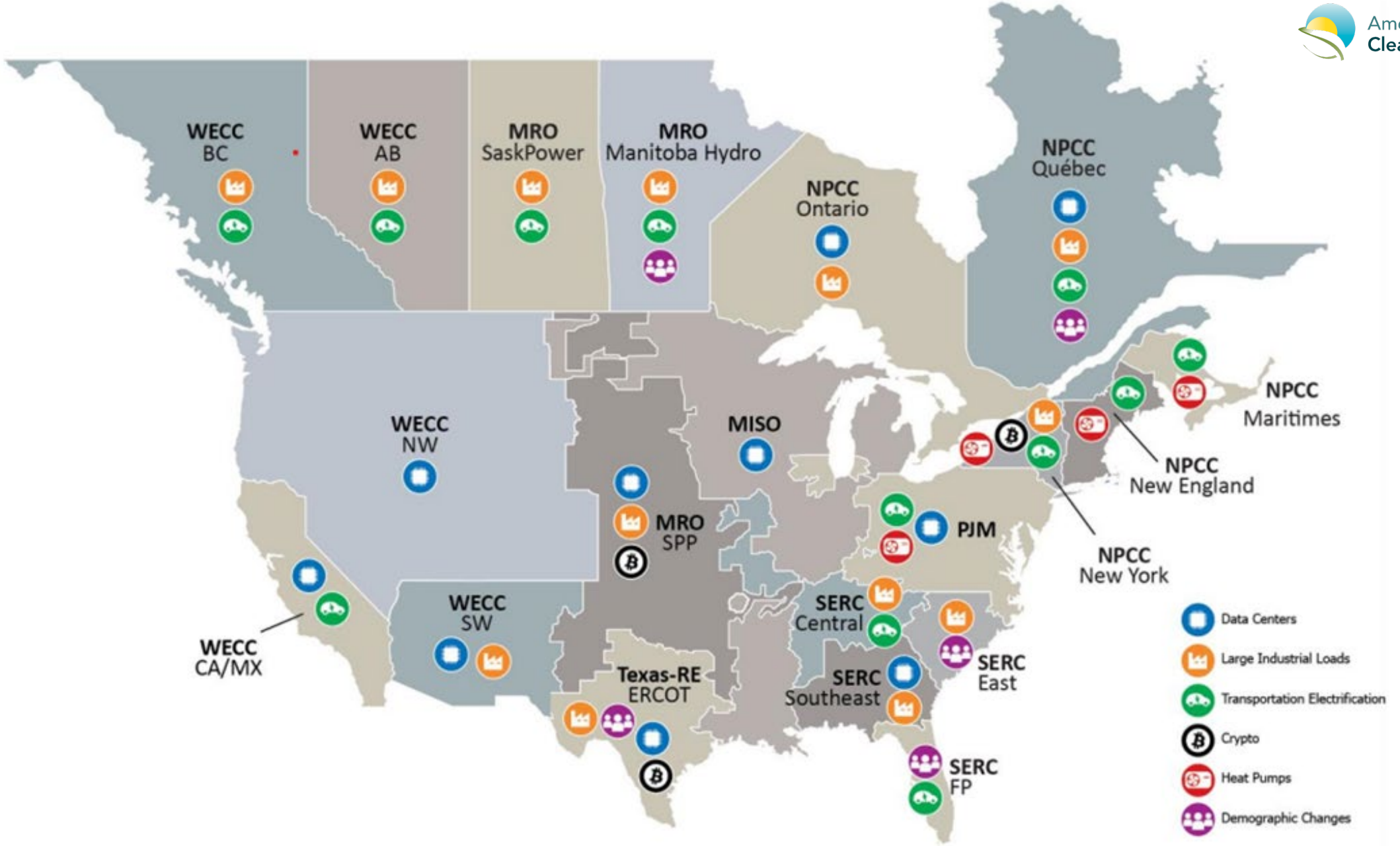


Figure 3: Data Centers Driving Load Growth in the United States[34]

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PJM & Data Centers: What's the story?

- Some states are de-regulated, but not all
- Wildly different generation sources:
  - WV/OH/PA coal and gas
  - NJ/MD/VA OSW and renewables
- Not much transmission in recent years
- Many data centers:
  - NOVA bc access to fiber and national security
  - OH/PA bc access to natural gas
- Capacity market prices have spiked
  - 2023 - $34/ MWday
  - 2024 - $270/ MW, hit retail bills in June 2025
  - 2025 - $329/ MW, 6.6GW shortfall

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How does a customer connect to the grid?

- Call your local utility!
- Service to customers is a retail service, regulated by the states
- Rules for customer interconnection are set by state PUC
  - Different than generator interconnection, which is regulated by FERC
- What are some potential pitfalls of large load customers?
  - Customers are not required to take service for any length of time, if at all
    - Can lead to stranded costs or inaccurate forecasts leading to grid buildout that doesn't match where facilities are needed
  - Mismatch between when costs are recovered and when customers pay
  - From data center perspective, rules can differ by location

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What are other business models?

- Co-locate with a retired – then restarted – generation facility:
  - There is a limited supply of mothballed nuclear facilities
  - Interconnection with the grid still requires load must pay for grid service
- Build on an islanded basis with new behind the meter generation:
  - Does not provide resilience of interconnection with the grid
  - Not permitted in all instances
- Interconnect with the grid on a wholesale basis
  - Only works where there is retail deregulation

What is the federal proposal to connect data centers to the grid?

U.S. DOE sent a letter and ANOPR to FERC under section 403(b)

- Proposes that FERC exercise greater jurisdiction over transmission to allow large loads to interconnect
- Does not mandate electric service, which is regulated by states

Key features of the ANOPR:

- Applies to load >20 MW
- Applies to transmission outside organized markets – to 100kV (BPS level)
- States will still regulate retail sales and siting and permitting of generation
- Hybrid (co-located) facilities studied on net basis
- Expedited process for large loads who are curtailable or dispatchable
- “Any contrary view of the proposed reforms conflicts with the FPA's core purposes.”

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What is the federal proposal: 14 principles

1. Applies to IX with transmission only
2. Applies to net load >20 MW
3. Load should be studied with gen
4. Load should be subject to study milestones like generation
5. Hybrid facilities should be studied on a net load basis
6. Hybrid IX should include “system protection facilities” to ensure amount of injection/withdrawal is limited to the amount studied
7. **Large loads that agree to be curtailable/ dispatchable should have their interconnection expedited**
8. Load/hybrid facilities should be required to pay 100% network upgrades
9. Load IX customers should have same rights to build as Gen IX customers
10. Existing gen seeking to serve a large load must ensure network upgrades are in place for reliability
11. Utilities are responsible for transmission service, including hybrid net load
12. Utilities must provide ancillary services to peak load
13. Utilities must have implementation plan
14. Utilities must comply with NERC and OATT requirements

What is the federal proposal: What comes next

- FERC sought 2 rounds of comments, by the end of November:
  - NARUC expressed concerns about potential infringement on state jx
  - Walmart asked for a 50 MW threshold, prefers working with utilities
  - ACEG noted need for multi-value tx planning and robust forecasting

- Next Steps:
  - DOE sought to reassure states; FERC wants to avoid years of litigation
  - DOE requested action by April 30, 2026 – could be a NOPR
  - *Pro forma* process would eliminate constant reinvention of the wheel
  - FERC won't NOT act – very conscious of fine line under current admin

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What's the latest?

On January 16, 2026, the White House announced:

- Alongside Govs. Josh Shapiro, Wes Moore, Glen Youngkin, and Mike DeWine
- Prices are spiking due to Biden-era retirements and resource policies
- PJM should hold an emergency auction –
  - Separate capacity auction for new large loads
  - 15-year Power Purchase Agreements
  - Data centers must pay "whether they show up and use the power or not"
- December 2025: FERC issued its own orders on PJM show cause order
- November 2025: IMM filed a complaint asking that FERC not allow PJM to interconnect any new large loads unless they can be reliably served

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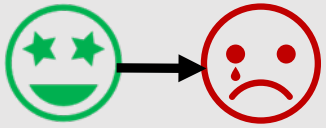
How do large loads impact the grid?

Proposal	Customer	Large load	Utility
Require large loads to flex usage with price signals			
Require large loads to bring own generation to grid			
Require large loads to co-locate with gen/ island			
Require large loads to sign long-term contracts			
Require large loads to pay for grid upgrades			
Require large loads only seek service from utilities			

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Considerations in planning for large loads

- Balance the need for Speed to Power with long term grid needs
- How to balance retail / wholesale, utility / independent power?
- The aging grid will require investment, and new hyperscalers want to invest in the grid – could be a great match, if planned well
  - What does it mean for everyone to “pay their fair share”?
- Pipelines require 20-year contracts for stability to build – should a similar requirement apply to building infrastructure for new load?
- How to ensure forecasts are accurate? A third-party validator, at the regional level, could reduce forum-shopping &/or overbuilding
- FERC requires serving all; NERC provides for curtailment

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Wildcard: Wildfire liability

- California was the beginning –
  - Court Interpretation of state constitution found that damage in provision of utility service was a kind of condemnation for public use – most damages were then passed on to ratepayers, until a minor disallowance upended expectations
  - **Theory of Inverse Condemnation** – has led to spiked rates in California
- Class action lawsuit in Oregon for tort liability – at one point, the utility faced **$46B in claims** – most have now been settled for total of $1.6B
- Public Service Co. of Colorado debt rating has been downgraded to nearly junk, raising borrowing costs for the utility, which flows through to customers
- In Hawaii, some independent power producers couldn't enter into PPAs with the utility bc lack of creditworthiness made it hard to get financing

Strongly recommend the legislature deals with this <u>before</u> the fire

Please feel free to reach out with any questions!

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Thank you!

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