

# Spring 2025

## ENERGY INDUSTRY UPDATE



### 1. What is the purpose of the EIU Power Brief?

**Answer:**

The EIU Power Brief serves as a complementary publication to the traditional Energy Industry Update (EIU), offering shorter, more frequent insights into timely topics shaping the energy and utility sectors. It is designed in a PowerPoint-style format to enhance accessibility and provide clients with focused, digestible content.

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### 2. How are utilities adjusting their capital expenditure (capex) plans in 2025?

**Answer:**

Utilities are significantly increasing capex plans, with changes ranging from under 5% to nearly 40% over previous projections. Key drivers include:

- Grid modernization
  - Transmission and distribution upgrades
  - Renewables and low-carbon generation
  - IT and energy efficiency investments
- Rate base growth is projected between 7% and 10% CAGR for many utilities.
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### 3. What external challenges are complicating utility capex plans?

**Answer:**

Major challenges include:

- Supply chain disruptions and long equipment lead times
- Rising tariffs on key imports like steel, copper, and aluminum
- Potential defunding or delay of IRA provisions due to federal litigation and policy freezes

#### **4. How are data centers impacting electricity demand?**

**Answer:**

Data centers are driving a surge in electricity demand:

- U.S. data center power demand was ~46 GW in Q3 2024, with 59 GW additional forecasted by 2029
  - PJM Dominion, non-ISO West, and Southeast regions are experiencing the greatest growth in such demand
  - Growth is heavily tied to AI and hyperscale computing
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#### **5. What innovative approaches are being considered for managing large loads like data centers?**

**Answer:**

Utilities and partners are exploring flexibility solutions:

- EPRI's DCFlex program with tech giants to demonstrate operational flexibility
  - One study suggests that modest curtailments could enable nearly 100 GW of new load with minimal impact
  - Regulatory efforts to manage co-location and backup generation needs are also underway
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#### **6. How is nuclear energy being revitalized in North America?**

**Answer:**

There is growing momentum for nuclear development:

- At least 14 major projects (restarts, SMRs, Gen IV reactors) are in development or being considered
  - Tech firms like Amazon, Microsoft, and Google are signing multi-GW nuclear procurement deals
  - Federal acts (e.g., ADVANCE Act) and executive orders are streamlining nuclear regulatory processes and funding support
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#### **7. What is storm recovery securitization, and why is it gaining traction?**

**Answer:**

Storm recovery securitization allows utilities to finance storm-related costs through bond issuances, reducing short-term customer rate impacts:

- Popular in hurricane-prone states and now expanding to winter storm-prone regions
- 57 petitions filed since 2006; more than one-third were due to Winter Storm Uri (2021), which triggered ~\$16B in securitized costs

## **8. What are the current challenges with grid reliability?**

### **Answer:**

Grid reliability is under strain due to:

- Growth in electric load and electrification
  - Retirements of dispatchable thermal generation
  - Inadequate interconnection and backup fuel planning
  - Winter is a critical vulnerability, prompting NERC and FERC to mandate cold weather emergency planning and enhance gas-electric coordination.
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## **9. What are some region-specific concerns, particularly in the U.S. Northeast?**

### **Answer:**

ISO-New England and Northeast Power Coordinating Council studies show:

- Clean energy transitions introduce high supply-demand variability
  - Many gas-fired generators lack firm fuel supply contracts
  - Dependence on LNG terminals and loss of oil-fired reserves heighten risk during extreme cold spells
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## **10. What are the key energy policy shifts under the new Trump administration?**

### **Answer:**

The administration is focused on:

- Deregulation and repeal of climate-focused initiatives
  - Support for domestic fossil and nuclear energy development
  - Suspension or reassessment of Inflation Reduction Act and Infrastructure Investment and Jobs Act disbursements
  - Emphasis on making the United States a leader in energy-intensive AI infrastructure
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## **11. What are the implications of the recent tariff policies?**

### **Answer:**

Tariffs on imports from Canada, Mexico, and China, as well as materials like steel and copper, have:

- Increased input costs for utilities
- Created supply chain unpredictability
- Prompted reassessment of procurement strategies and regulatory treatments

## **12. What trends are emerging in fossil generation retirements?**

### **Answer:**

Despite recently announced federal policy support for fossil fuels:

- Over 13 GW of capacity is projected to retire in 2025
- However, several major retirements have been deferred due to grid reliability needs and delayed renewables interconnection
- Utilities are delaying coal retirements into the 2030s and 2040s