

Electricity Affordability and Reliability

THE ISSUE

Data centers are **the leading driver of electric load growth** in the United States, and they have the potential to impact the affordability and reliability of the electric grid in several key ways. As electricity demand grows, grid operators will call on more expensive generation sources to help meet peak demand, and utilities will also have to invest in upgrades to the transmission and distribution systems. The cost of these upgrades would traditionally be shared among all ratepayers. At the same time, energy supply shortfalls associated with data centers **have been predicted** for several parts of the country. Data centers reacting in similar ways to small faults on the grid could also create grid imbalances that require operators to take action, lest a wide blackout be triggered.

THE TOOLKIT

State policymakers have unique jurisdiction over the retail electric system, and therefore have a wide range of tools at their disposal to help combat these risks. On the affordability side, these tools include:

Large load tariffs, which can address the impact that data centers have on the grid and shield ratepayers from rising electricity prices and the risk of stranded assets (e.g., **Oregon's HB 3546**).

Better data center contract review processes, which could lead to a more informed process at the Public Utility Commission when utilities, for lack of a large load tariff, enter into one-off contracts with data centers seeking service (e.g., **Colorado's "principles"** for data center contract review).

Using proactive siting and incentives to steer data centers to where they will have the least grid impact (e.g., **Florida Power and Light's large load tariff**, which provides incentives to locate near existing transmission capacity).

Encouraging data centers to co-locate with their own clean power, which has been studied in the context of "**Clean Transition Tariffs**" or "**Power Couples**."

Using data center surcharges to fund bill assistance programs (e.g., New York's **S 6394**).

Mandating studies of data center impacts on energy affordability (e.g., California **SB 57**).

On the reliability side, states can also incentivize or mandate demand response (e.g., Texas' **SB 6**) as well as ancillary services, like voltage regulation (e.g., Texas' proposed **SB 2222**). They can also put transparency requirements in place to help grid operators plan for load growth (e.g., New Jersey's **A5462**). These policies can also be combined with some of the affordability-related policies above to address electric system reliability.

FOR MORE DETAIL ON THESE POLICIES, see our complete State Data Center Policy Toolkit on Electricity Affordability and Reliability. These tools should be considered in tandem with the **full collection of toolkits**, addressing issues of energy affordability and reliability, taxes, transparency, and emissions. This work does not assess the wider societal and economic impacts of AI. **Learn more about our approach.**