



Regulatory, Policy, and Technology Trends Digest

May 8, 2025

Dear DCFlex Advisor,

Thank you for your participation in DCFlex, which explores how flexible data center operations can support the electric grid, enable better asset utilization, and advance the clean energy transition. We are pleased to issue our second “Regulatory, Policy, and Technology Trends Digest”, a product of *Workstream 2 – Transformational Utility Programs*, which showcases notable developments and trends in regulations, policies, power agreements, and energy technologies relevant to data centers, large load flexibility, and their integration with the grid.

In this Issue

[Retail Tariffs](#): Regulators in Nevada have approved a novel Clean Transition Tariff jointly filed by NV Energy and Google to expedite the development of carbon-free generation to serve a Google data center. Meanwhile, lawmakers in Missouri, Maryland, and South Carolina have been advancing tariffs for large load customers to avoid allocating costs to ratepayers at-large. In addition, Texas Senate Bill 6 that imposes interconnection requirements and disclosures on large-load customers is currently at the House State Affairs Committee with a public hearing scheduled for May 7, 2025. Common issues addressed by these regulatory and legislative measures include tariff applicability, cost allocation, contract term limits, and minimum monthly demand requirements.

- [Nevada PUC approves NV Energy Clean Transition Tariff](#)
- [Missouri law requires new tariffs for large loads](#)
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[Wholesale Markets](#): PJM answered FERC's show/cause proceeding by justifying its Open Access Transmission Tariff (OATT) and introduced five additional options for integrating large loads. Meanwhile, MISO and SPP are trying to expedite data centers through their respective interconnection queues via special Expedited Resource Adequacy Studies (ERAS). Both organizations' efforts are popular with states, utilities, and data centers, but have received push-back from other stakeholder entities including IPPs and policy-advocates. NERC has recently addressed the reliability aspect of large load integration, which may change reliability standards.

- [PJM Filing with FERC on Open Access Transmission Tariff \(OATT\)](#)
- [SPP Expedited Resource Adequacy Study \(ERAS\)](#)
- [MISO Expedited Resource Addition Study \(ERAS\)](#)
- [NERC incident review addressing reliability impacts of large load integration](#)

[Technologies Powering Data Centers](#): A mix of traditional and emerging generation technologies are being tapped for supplemental and bridge power for new data centers. Established natural gas technologies lead these recent announcements, though in parallel, smaller-scale cleaner energy options are also being evaluated in various designs.

- [GE Vernova gas turbine projects](#)
- [Verne to use HVO to power backup generators at London data center](#)
- [Bloom extends fuel cell supply agreement with Equinix](#)
- [Kairos Power completes reactor vessel installation for new SMR unit](#)
- [Civo partners with Orbital to pilot carbon removal technology at UK data center](#)
- [5 GW data center with BTM hydrogen power in Laredo, Texas](#)
- [Last Energy plans to deploy 600 MW of microreactors for Texas data centers](#)

Retail Tariffs

Nevada PUC approves NV Energy Clean Transition Tariff

On March 11, 2025, the Public Utilities Commission of Nevada approved an all-party stipulation in NV Energy's filing for a Clean Transition Tariff (CTT). The innovative rate structure, submitted jointly with Google, creates an umbrella structure enabling eligible existing large loads of at least 5 MW to procure bundled electric service from new carbon-

free energy resources to meet specific corporate energy goals. Under the CTT, NV Energy will contract new carbon-free generation resources and deliver the dedicated output to the customer via a unique Energy Supply Agreement (ESA). The ESA covers the life of the CTT generation facility and includes a pricing premium that bridges the cost gap to conventional supply. The CTT does not provide terms for load flexibility such as demand response or interruptible requirements.

Further reading:

- [PUCN](#) Docket Nos. 24-05022 and 24-05023

Missouri law requires new tariffs for large loads

Missouri Governor Mike Kehoe signed [Senate Bill 4](#) (SB 4) into law on April 9, 2025. The new law impacts various aspects of the state's ratemaking rules, including requirements for utilities to propose new tariffs for large loads. Larger utilities – those with more than 250,000 customers – must develop new tariffs for loads of 100 MW or more. SB 4 states these new tariffs “should ensure such customers' rates will reflect a representative share of the costs incurred to serve the customers and prevent other customer classes' rates from reflecting any unjust or unreasonable costs arising from service to such customers.” Smaller utilities – those with 250,000 or fewer customers – must submit the tariffs for loads of 50 MW or more. The law does not include terms related to load flexibility for large loads.

Maryland Next Generation Energy Act sent to Governor

Maryland joint legislation ([HB1035](#) / [SB937](#)), the “Next Generation Energy Act”, has been sent to the Governor after passing both the house and senate. HB1035 requires the state's utilities to submit specific rate schedules for large load customers (those with 100 MW of demand and a load factor over 80%) to the Public Service Commission (PSC) by September 1, 2026. When evaluating the proposed rates, the bill requires the PSC to consider residential customer protection from financial risks, and cost allocation that does not result in unreasonable subsidization, among other factors. SB937 provides for a general prohibition of co-located generation for large load customers without either (1) increasing that generation to meet 100% of the customer's load, or (2) obtaining a Certification of Public Convenience & Necessity (CPCN) to construct the generation.

South Carolina Energy Security Act targets cost recovery

[South Carolina H. 3309](#), or the “South Carolina Energy Security Act”, is working its way through the legislative session, currently in the senate. The bill includes provisions for commercial data centers, with demand of 100 MW or more, “designed to ensure all costs associated with serving or preparing to serve commercial data centers are recovered solely, or at least substantially, from commercial data centers.” These proposed provisions include longer contract terms with a minimum of 15 years; minimum billing requirements; exit fees; and collateral requirements. In addition, the bill provides that utilities may offer discounted rates to qualifying or transformational customers, and interruptible and real-time pricing options and riders for other clean energy attributes.

Texas bill proposes new interconnection requirements

Texas [Senate Bill 6](#) (SB 6) passed the Senate on March 19, 2025, and is now moving on to House Committee. The bill proposes terms related to demand management services for customers with demand of at least 75 MW. These include requirements for the installation of curtailment equipment, the deployment of backup generation, and the development of interruptible services to be used during emergency conditions and extreme weather events. If enacted, SB 6 would also establish planning and interconnection standards. Large load customers seeking interconnection would be required to disclose to the utility whether they are pursuing substantially similar interconnection requests in other states. In addition, these customers would be required to pay a \$100,000 study fee for initial transmission screening and demonstrate financial commitment to the interconnection plans.

Additional Retail Highlights

- [Georgia Senate Bill 34](#) would prohibit certain costs to serve data centers from being included in rates for other customers. The bill is currently in the senate.
- [New Jersey Senate Bill S4143](#) would require: (1) the submission of an energy usage plan to state regulators for proposed AI data centers; and (2) all electricity for AI data centers to be derived from new clean energy sources.

Wholesale Markets

PJM Filing with FERC on Open Access Transmission Tariff (OATT)

PJM filings with FERC regarding large load developers and utilities were addressed in the previous Regulatory and Policy Digest. As part of EL25-49-000, FERC directed PJM to either justify its Open Access Transmission Tariff (OATT) or explain what changes to the OATT would address FERC's concerns. PJM replied to FERC on March 24, 2025, stating that its OATT remained just and reasonable, but adding that "improvements and clarifications may be appropriate based on Commission guidance". PJM then requested that FERC provide "detailed guiding principles" so that it can update its tariff, asking for a deadline from the Commission given the implication of "national interests". PJM provided five additional options for large load co-location/integration in its Attachment A (adding to three existing options for a total of eight), summarizing them according to 15 different parameters (e.g., generation revenue, PJM obligation to serve, required studies, etc.). For example, one new option is to implement "protection mechanisms" to prevent grid energy from reaching co-located load when the associated generator is offline. PJM stressed that some states' regulations would allow for certain co-location setups, while other states' may not. Section II includes a detailed writeup on the eight options and Section III of the response includes PJM's answers to specific questions from FERC (e.g., "explain whether co-location relies upon the transmission system to receive power from its co-located generation").

SPP Expedited Resource Adequacy Study (ERAS)

[SPP's Revision Request 668](#) covers its [Expedited Resource Adequacy Study \(ERAS\)](#) recommendation to create an interim special process. This new study would provide load responsible entities (LREs) with generation capacity needed to comply with their resource adequacy requirements as set forth in the SPP Tariff. The benefit is that LREs will be better able to meet load increases and avoid reliability violations. SPP estimates that an ERAS request will lead to a generation interconnection agreement at least 6 months sooner than the Definitive Interconnection System Impact Study (DISIS) process (i.e., based on 2024 cluster data). The driving force of this initiative is the influx of large loads (e.g., data centers). ERAS is defined as "an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of Transmission System and, if applicable, an Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, or that may be caused by the withdrawal or addition of an Interconnection Request, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in this Attachment AW." Although utilities

tended to show support, many IPPs voted against the initiative, which has currently been approved by stakeholder groups and awaiting further approval from the MOPC and RSC.

MISO Expedited Resource Addition Study (ERAS)

[MISO's Expedited Resource Addition Study \(ERAS\)](#) is based on "ensuring resource adequacy and meeting large load additions by expediting the interconnection process for certain electric generation facilities". It also serves as a method of expediting large load integration. States, utilities, the Organization of MISO states, and data centers have shown support (similar to the situation in SPP) and some have claimed that the effort will reduce project delays and allow states to reach planned demand growth. As with the SPP ERAS, there has been some pushback from IPPs (e.g., NextEra Energy Resources) as well as eight previous FERC commissioners.

NERC incident review addressing reliability impacts of large load integration

NERC released a presentation on April 17, 2025 as part of [Docket No. AD25-10-000](#) meant to address its "Activities and Plans to Address Reliability Impacts from Large Load Integration". It included slides on load loss events including the loss of a 1,500 MW data center. NERC's incident review recommended: (1) requiring models for large loads to enable studies to determine risk to BES for coincident large load losses; (2) determining if a large load should be a NERC Registered Entity; and (3) new standards or modifications to existing standards. NERC is drafting a whitepaper that will include the characteristics and risks of emerging large loads, and an assessment of gaps in existing practices, requirements, and reliability standards for emerging large loads. Reliability guidelines are expected in Q1 of 2026 and updates to reliability standards are expected. NERC noted that cyber security will have to be addressed, but that system performance behaviors are a higher priority due to their greater probability and impact. Although this is not specific to RTO/ISO markets, it may impact their designs, processes, and studies.

Technologies Powering Data Centers

To keep up with the continued demand for AI and cloud services, data center developers are actively exploring supplemental and bridge power solutions under various configurations (e.g., on-site, behind the meter, co-located). Natural gas fueled technologies are leading the trend where grid capacity is limited. In parallel, several smaller-scale pilots are exploring clean energy applications as well (e.g., nuclear, fuel cells, hydrogen, carbon capture).

- GE Vernova: GWs of gas turbine projects lining up in the coming years.
 - [Chevron, GE Vernova, Engine No.1 Join Race to Co-Locate Natural Gas Plants for U.S. Data Centers](#): 4 GW co-located “behind the meter” gas plants to go online nationwide by 2027 using 7HA turbines.
 - [Natural gas plant planned for Stargate AI data center campus](#): 360 MW provided by GE Vernova and Solar Turbines (a Caterpillar subsidiary) at first site in Abilene, TX.
 - [VoltaGrid partners with Vantage to provide 1 GW of offgrid power for US data center portfolio](#) using their gas microgrid technology.
- [Verne to use HVO to power backup generators at London data center](#): Growing use of HVO (hydrotreated vegetable oil or renewable diesel) to reduce emissions from backup generators, particularly in Europe where the HVO supply chain is maturing. This may enable the use of these generators for demand flexibility beyond emergency power.
- [Bloom extends fuel cell supply agreement with Equinix](#) for 100 MW across 19 data centers and signed a partnership with carbon capture firm Chart.
- [SMR firm Kairos Power completes reactor vessel installation for new test unit](#) for its second non-nuclear test unit in New Mexico. In October 2024, [Google, Kairos Power ink 500-MW advanced nuclear reactor deal](#).
- [Civo partners with Orbital to pilot carbon removal technology at UK data center](#).
- [Up to 5 GW data center with behind-the-meter hydrogen power promised for Laredo, Texas](#).
- [Last Energy plans to deploy 600 MW of microreactors to power Texas data centers](#).

Each Regulatory, Policy, and Technology Trends Digest issue is a curated selection of timely and impactful regulatory and policy highlights with succinct contextual commentary and resources for deeper dives. Our aim is for these digests to become essential reading to provide you with broad perspective and insight.

DCFlex will continue to monitor relevant regulatory and policy developments and keep you informed of key filings, proceedings, decisions, and their implications.

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