

Regulatory and Policy Digest March 6, 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. Under Workstream 2 – *Transformational Utility Programs*, we are providing a periodic "Regulatory and Policy Update" e-mail to showcase notable regulatory and policy developments and trends relevant to data centers, large load flexibility, and their integration with the grid. This email is the first release.

Each update, rather than being exhaustive, 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 e-mail bulletins to become essential reading to provide you with broad perspective and insight.

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Retail Tariffs: Regulators in Virginia and the U.S. Midwest are leading development of new policies for large loads spurred by data center growth. Common issues include tariff applicability, cost allocation, contract term limits, and minimum monthly demand requirements, among others.

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Wholesale Markets: PJM and ERCOT have been at the forefront of addressing technical and jurisdictional challenges related to large loads in US structured markets. The Federal Energy Regulatory Commission (FERC) is currently conducting a consolidated proceeding in PJM to tackle multiple co-located load issues, including proposed changes to PJM's Open Access Transmission Tariff (OATT). Similarly, Texas Senate Bill 6 (SB6) establishes interconnection standards and introduces measures to enhance operational visibility for large loads. A notable provision in SB6 is the requirement for large loads to disclose pursuits of duplicative service requests, which, if widely adopted, could increase transparency and mitigate challenges associated with inflated interconnection queues. Outside the US, similar policy trends are emerging. Recently, the Commission for Regulation of Utilities (CRU) in Ireland proposed that all new data centers must provide generation and/or storage capacity to match their demand.

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Retail Tariffs

Indiana commission approves settlement with new rules for large loads

In an order issued on February 19, 2025, the Indiana Utility Regulatory Commission (IURC) approved, with one change, a comprehensive, all-party settlement agreement that establishes new rules for AEP subsidiary Indiana Michigan Power's (I&M) new large load customers. The settlement updates I&M's existing Tariff I.P. (Industrial Power), with terms that apply to new or expanded load with contract capacity of at least 70 MW at an individual site or 150 MW on an aggregated basis.

The agreement includes: (1) a 12-year minimum contract term; (2) an 80% minimum monthly billing demand; (3) increased collateral requirements; and (4) an exit fee of the minimum charge, capped at five years. The IURC's one change to the settlement agreement requires commission approval for reductions in contract capacity beyond 20%. The settlement allows for customer-specific contracts for services such as demand response, sustainability programs, or strategic partnerships. However, the order only briefly discusses issues related to cost allocation and load flexibility. Regarding the former,

cost allocation decisions were deferred to future proceedings. For the latter, the agreement provides for the utility to collaborate with the settling parties on the potential filing of a Clean Transition Tariff (targeted for October 1, 2025) and a meeting regarding demand response opportunities for large load customers.

Further reading:

- IURC Cause No. 46097
- Indiana Michigan Power News Release
- Utility Dive: Indiana regulators approve 'large load' interconnection rules

Evidentiary hearings completed in AEP Ohio data center tariff proceeding

In contrast to the AEP proceeding in Indiana discussed above, Ohio Power's (AEP Ohio) application to establish new tariffs for data centers was not settled and instead went to litigation. Evidentiary hearings for this case concluded on January 17, 2025. At the time of writing, the commission has not issued a decision on this matter.

The case features two competing joint stipulations. The first, filed October 10, 2024, is supported by data center companies, among other parties. This joint non-unanimous settlement proposes a new tariff for new load greater than 50 MW at a single location if AEP Ohio provides proof of a transmission capacity constraint. The agreement proposes collateral and exit fee requirements that vary based on monthly demand and contract term, along with a formula to calculate minimum monthly billing demand. Importantly, the stipulation states the new tariff "shall not be limited in its application to specific customer types, industries, businesses or operational profiles."

The second joint stipulation was filed on October 23, 2024, by AEP Ohio, with support from the staff of the Public Utilities Commission of Ohio, and the Ohio Consumers' Counsel, among other parties. It proposes a new tariff for new (or expansions of existing) load greater than 25 MW applicable specifically to data centers and mobile data centers. The agreement also requires these customers to pay a minimum monthly billing demand of 85% and addresses collateral and exit fee requirements.

While both stipulations discuss provisions for behind-the-meter generation and capacity reallocation, neither include terms related to demand flexibility programs such as demand response or non-emergency interruptible requirements.

Further reading:

- Ohio PUC Case Record 24-0508-EL-ATA
- Joint Stipulation filed by data center companies
- Joint Stipulation filed by AEP Ohio

Portland General Electric filing investigates new load connection costs

On December 20, 2024, Portland General Electric (PGE) filed a proposal to change policies and tariffs for new large load customers. The filing addresses cost allocation, investment recovery, and system planning requests, among other issues; however, it does not request to change the customer's actual rate, which would remain the same as the current general large customer rate. PGE's proposal aims to help mitigate the impact on transmission rates of new large customers with loads greater than 30 MW.

The filing does not propose a new customer class for these customers. Instead, the utility recommends dividing its General Large Load tariff customers into three main categories based on capacity and infrastructure requirements: (1) less than 1 MW; (2) 1 MW to 30 MW (with distinctions for line extension costs and substation transformer upgrades); and (3) greater than 30 MW, constituting "Large Load" customers which requires a new "Large Load Customer Agreement" that states additional terms.

For Large Load customers, PGE proposes an upfront deposit equal to two years of minimum system demand, a minimum transmission billing demand of 80% of allocated capacity, and an exit fee, among other provisions. Notably, the proposal allows for Large Load customers to increase their allocated capacity by participating in PGE's flexible load programs. A public meeting for this proceeding is scheduled for March 4, 2025.

Further reading: Oregon PUC Docket No. UE 430

Virginia explores data center impacts on utilities, customers

Multiple regulatory and policy proceedings in Virginia focus on how dramatic data center growth in the region affects utilities, their customers, and the grid. In December 2024, the Virginia State Corporation Commission held a Technical Conference on data centers, which included discussions around regulatory frameworks and cost allocation rules for large customers.

Lawmakers have also introduced various bills related to data centers. Senate Bill 960 – which called on the State Corporation Commission to conduct proceedings on data center cost allocation – and House Bills 2101 (cost allocation), 2035 (water and energy usage reporting, and 2027 (certificate of operation requirements), all failed to pass; however, House Bill 1601 – which addresses the siting of data centers and high energy use facilities, providing for the submission of various impact assessments prior to the approval of rezoning or special use permits – was passed.

Further reading:

- Virginia State Corporation Commission Technical Conference: PUR-2024-00144
- JLARC Report on impact of datacenters in Virginia
- Data center bills: <u>SB960</u>, <u>HB2101</u>, <u>HB2035</u>, <u>HB2027</u>, <u>HB1601</u>

Additional Retail Highlights

- Regulators approve Georgia Power rules changes for data centers: <u>Georgia PSC</u> <u>Docket No. 44280</u>, <u>Georgia PSC News Release</u>.
- Southern California Edison filed an application for a new dynamic rate for large customers: CPUC Proceeding A2412008. Proceeding is ongoing.
- NV Energy's filing for a Clean Transition Tariff is yet to be decided: <u>PUCN</u> Docket No. 24-05022. This case features an all-party stipulation that allows eligible customers to receive bundled electric service from new clean energy resources.

Wholesale Markets

FERC Technical Conference on Co-Located Loads

On November 1, 2024, FERC hosted a technical conference to address the growing interest in large co-locating loads (CLLs) such as data centers at generating facilities and the associated challenges including market integration. The conference featured three panels covering an overview of CLL issues and alternative approaches for serving large CLLs, development and operational challenges, and a roundtable with customer advocates, state public utility commissioners, and other state representatives on affordability, consumer impacts, and state policy considerations.

The conference highlighted the multifaceted challenges associated with large CLLs at generating facilities, such as ensuring resource adequacy, accurate load forecasting, maintaining operational reliability, and determining the allocation of transmission and grid

service costs. The flexibility of CLLs, including flexible consumption and backup generation accessible by the grid, was discussed as an innovative solution to support their integration into the power system while ensuring economic efficiency and grid reliability.

Recommended next steps include improving the load interconnection process, assessing tools and standards for reliability impacts, enhancing electricity market participation models, evaluating cost allocation methods, and developing new grid codes to accommodate emerging customer types. Participants underscored the need for clearer regulatory guidance from FERC on federal and state jurisdiction and emphasized the importance of improved coordination among FERC, state agencies, and other stakeholders.

Further Reading:

- EPRI "Quick Insight" summary of the proceedings.
- FERC Technical Conference on Large Loads and Co-located Facilities.

FERC Rejects PJM Amended Interconnection Service Agreement

On November 1, 2024, following the technical conference mentioned above, FERC rejected an amended interconnection service agreement (ISA) filed by PJM to increase colocated load (CLL) capacity at the Susquehanna Nuclear Facility and revise the treatment of this CLL, modifying an existing ISA between PJM, Susquehanna Nuclear, and PPL Electric Utilities Corporation.

The amended ISA had intended to accommodate a large co-located Amazon Web Services (AWS) data center behind the Susquehanna nuclear plant's point of interconnection, specifically increasing the load from the previously authorized 300 MW to 480 MW, a level that PJM stated would not significantly affect its transmission system. Under the amended ISA, the data center would not consume energy or power from the PJM system and Susquehanna would be able to prevent power flows from the grid to the data center in the event of loss of power from the nuclear plant. The amened ISA also outlined provisions for Susquehanna's obligations as a PJM Generation Capacity Resource to supply power to the grid when required.

FERC asserted in its rejection that PJM had not met the burden of proof to justify deviating from the pro forma ISA, maintaining that the novelty of the Susquehanna - AWS arrangement does not meet the required legal standard for non-conforming provisions. FERC warned that approving the agreement could establish a precedent for future

arrangements without adequately addressing concerns over grid reliability and consumer cost implications. Stakeholders opposed to the amended ISA argued that it would grant preferential treatment, bypass regulatory review, shift cost burdens to customers and other market participants, disrupt power flows, increases reliance on grid services if the colocated load fails to isolate from the grid, raise energy and capacity prices, and impact emissions. FERC advised PJM to revise its tariff to establish procedures to address these concerns. At the time of writing, PJM has not yet filed such a revision, while Susquehanna has petitioned the rejection in the U.S. Court of Appeals.

In contrast, the dissenting Commissioner asserted that the amended ISA adequately addressed reliability concerns and should have been accepted with oversight measures. The dissent argued that the amended ISA's unique nature justified approval as a non-conforming interconnection agreement and that its rejection could hinder both electric reliability and national security. Other supporters of the amended ISA argued that its rejection would disrupt commercial arrangements to serve data center load growth, and that co-located loads do not take service from the grid or shift costs.

Further Reading:

• FERC Order Rejecting Amendments to Interconnection Service Agreement

FERC February 2025 meeting, consolidation of co-located load proceedings

FERC held its open meeting on February 20, 2025 to discuss 17 consent items, which can be found on the <u>FERC Notice of Action web page</u>. The following points related to data centers are summarized on the <u>FERC news web page</u>.

FERC issued an order consolidating multiple ongoing proceedings about co-located loads into a show cause proceeding. The order requires PJM and its Transmission Owners to respond by March 24, 2025, with answers to 38 complex questions to either justify the current PJM Open Access Transmission Tariff for co-locating data centers with grid-scale generation as just and reasonable or propose revisions to the tariff. FERC also invites input from interested stakeholders within 30 days of the PJM response. This may serve as a template for other regions given PJM high concentration of data centers.

One prominent ongoing proceeding is Constellation's filed complaint with FERC on November 22, 2024, seeking rules regarding generators that only support fully isolated co-

located load facilities. In September 2024, Constellation announced the restart of its Three Mile Island (TMI) Unit 1 nuclear plant (renamed the "Crane Clean Energy Center") by 2028 to primarily supply electricity to Microsoft data centers under a 20-year power purchase agreement.

Co-location of data center loads with generation facilities is both a state vs. federal jurisdictional issue involving issues of fairness, resource adequacy, and transmission services and a technical issue with grid reliability and operational flexibility impacts. FERC is convening the following two meetings at their Washington D.C. headquarters to discuss these issues:

- <u>Federal-State Current Issues Collaborative:</u> April 30, 2025, 9:00 am 1:00 pm EDT. Contact: Robert Thormeyer, 202-502-8694, <u>Robert.Thormeyer@ferc.gov</u>.
- <u>Technical Conference on Resource Adequacy:</u> June 4-5, 2025. Contact: Timothy Bialecki, 202-502-8403, <u>Timothy.Bialecki@ferc.gov.</u>

Further reading:

- Susquehanna Interconnection Service Agreement, FERC Docket No. ER24-2172
- Show Cause Order, FERC Docket No. EL25-49-000
- Constellation asks FERC for PJM rules on data centers and other co-located load

PJM's market process reforms and co-located load proceedings

On February 11, 2025, FERC approved two PJM proposals aimed towards mitigating capacity shortage risk driven in part by significant load growth from data centers – Reliability Resource Initiative (RRI) and Surplus Interconnection Service (SIS).

RRI is a narrow, one-time plan to swiftly add up to 50 high-reliability projects to PJM's current interconnection cycle to alleviate near-term resource adequacy concerns. The application window for RRI projects opened on February 28 and closes on March 14. Applications are open for all types of resources with a minimum unforced capacity of 10 MW and will be evaluated based on market impact criteria and commercial operation date viability.

SIS allows existing generators with unused interconnection capacity to allocate or transfer that excess capacity to other new generating facilities without requiring a full interconnection process. The proposal will become effective March 7, 2025, and could be particularly beneficial for hybrid and co-located projects, such as those with on-site renewable resources with battery storage.

Further reading:

- Reliability Resource Initiative, FERC Docket No. ER25-712
- Surplus Interconnection Service, FERC Docket No. ER25-778

Texas looks to address large and co-located load impacts in ERCOT

Texas Senate Bill 6 (SB6), filed on February 12, 2025, aims to address co-location arrangements within ERCOT by establishing interconnection standards for large loads to minimize potential stranded infrastructure costs, define voltage ride-through requirements, and improve operational visibility for ERCOT and relevant utilities.

SB6 introduces transmission charges for co-located large load customers, based on a percentage of the customer's non-coincident peak demand. It also applies voltage standards to loads 75 MW or greater (ERCOT's definition of large load), but the Texas PUC can determine a lower threshold if necessary. The bill would also require large load customers to disclose pursuits of any duplicate service requests, with acceptance resulting in the withdrawal of the interconnection request. This requirement stands out as distinctive measure based on currently available information. SB6 also requires large load customers to disclose information about their on-site backup generators and provide proof of financial commitment as set by the PUC.

The bill further requires that any new net metering arrangement between a registered generator and an unaffiliated retail customer must file prior notice with ERCOT and the PUC if the customer's demand exceeds 10% of the generator's nameplate capacity without the owner proposing building equivalent local replacement capacity. Any new net metering arrangement is also subject to consent of the retail electric service provider and PUC review. SB6 also mandates that all large loads (except loads designated as critical industrial customer and critical natural gas facilities) coming online after December 31, 2025, have necessary equipment to allow remote disconnection during firm load shed.

Further reading:

Texas Senate Bill 6

Ireland regulators propose new policy for data centers

The Commission for the Regulation of Utilities (CRU) in Ireland has proposed a new electricity connection policy for data centers, requiring them to provide generation and/or storage capacity to match their demand. Data center load constitutes over 20% of electricity demand

in the Country and hosts several of the hyperscalers in Europe, alongside Frankfurt, London, Amsterdam, and Paris. This policy aims to enhance system adequacy, support renewable energy use, and manage grid constraints by mandating data centers to participate in the electricity market and report their renewable energy usage and emissions annually. The CRU is inviting comments from stakeholders until April 4, 2025, before finalizing the decision.

Further reading: CRU Review of Large Energy Users Connection Policy

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

We welcome your feedback! Contact DCFlex@epri.com.

For questions regarding this update, you can also contact:

Omar Siddiqui Miguel Ortega-Vazquez

osiddiqui@epri.com maov@epri.com

Adam Fuller Nikita Singhal

afuller@epri.com nsinghal@epri.com

3420 Hillview Avenue Palo Alto, CA 94304 https://dcflex.epri.com