Executive Summary & Introduction

In our December 2024 Regulatory Bulletin, we predicted "*a dramatic inflection point for the electricity market where supply and demand diverge and a secular period of 'scarcity' has formally commenced.*" The results of 2025 validate that call, with no end in sight. We are seeing forecasted load growth unseen in 20 years and mind boggling in magnitude, at least half of which is driven by AI and data centers. Is there a bubble? Most assuredly. But apply whatever haircut you will against the load forecasts and what remains is still growth unseen in the last 20 years—which in today's environment of backlogged interconnection queues, supply chain constraints, permitting delays and dislocated regulatory regimes—means higher energy, ancillary services and capacity prices for the foreseeable future. Please work with your Calpine sales representative to manage and mitigate your energy risk.

1. The U.S. Department of Energy issued an Advanced Notice of Proposed Rulemaking (ANOPR) instructing FERC to initiate a rulemaking proceeding to "*rapidly accelerate the interconnection of large loads*," while FERC's newest commissioners, Chairman Swett and Commissioner LaCerte, acknowledged that connecting data centers to support artificial intelligence is a top priority for them.
2. In its latest Short-term Energy Outlook, the Energy Information Administration (EIA) said that U.S. wholesale electricity prices are expected to rise by 8.5% in 2026.
3. NERC, in its 2025-2026 Winter Reliability Assessment, says that peak demand on the bulk power system will be 20 GW higher this winter than last, up 2.5%, but total resources to meet the peak have only increased by 9.4 GW.
4. Grid Strategies' five year forecast of load says that U.S. utility load forecast data center demand for 2030 is likely overstated by 25 GW.
5. New York State's NYSERDA has published the Bulk Energy Storage (BES) compliance rate of $0 and the Tier 4 rate of $1.0336/MWh for the 2026 Compliance Year.
6. Invenergy has canceled its 2.4-GW offshore wind project, Leading Light Wind, off the New Jersey coast, citing unfavorable economic and regulatory conditions.

1.1 Risk Assessment Approach

Our analysis of the regulatory risk(s) to our customers is summarized in the rating(s) categories defined below:

Potential Financial Impact to Customers:

$+ Signifies potential increase in costs

$– Signifies potential decrease in costs

Magnitude of Risk to Customer(s):

Symbol	Impact	Description
	Major Impact	Represents a regulatory or policy change that is in the process of being enacted by Regulators (i.e., PUC, ISO, FERC, EDC) and is expected to result in a meaningful increase in cost(s) to load; likely require immediate action.
	Medium Impact	Represents a regulatory or policy change that is in the proposal process and being sponsored by one or more ISO stakeholders. Most of these Risk's will likely be elevated to RED. Medium Impact issues will require involvement but we expect to have time to coordinate load on these type(s) of issues.
	Actively Monitor	Represents regulatory or policy discussions or trends that may evolve to either RED or ORANGE categories. No immediate action item for load.
	For Your Information	Industry developments or information, while not directly impacting the customer, may be of interest or import to the customer.

We have identified various issues that coalesce with the ratings categories described above. Notwithstanding, these are the Regulatory or Policy issues we consider extremely relevant to our retail customers*. With respect to this Bulletin, the six categories which appear to represent the most significant impacts to retail customers are identified below and categorized according to ISO:

Section 2.1 – Policy
Section 2.2 – Capacity / System Reliability
Section 2.3 – Transmission
Section 2.4 – Ancillary Services
Section 2.5 – Energy
Section 2.6 – Industry Development

*Where appropriate, we have provided links to articles and other relevant information for reference purposes.

2.1 Policy

Issue #	Rating	Issue	Impact	Action/Result
2.1a DOE		**The U.S. Department of Energy (DOE) issued a letter and an Advanced Notice of Proposed Rulemaking (ANOPR) instructing FERC to initiate a rulemaking proceeding to "rapidly accelerate the interconnection of large loads," defined as 20 MW or greater, and enable customers to file joint, co-located load and generation interconnection requests to FERC directly.** The rise in AI, powered by data centers and hyperscalers, has led to a cascade of increasing load forecasts in virtually all regions of the U.S. But there is not yet a standardized regulatory regime. The current regulatory regime for interconnection to the grid is bifurcated: the process for new generating facilities falls under FERC jurisdiction while the interconnection of large loads under state jurisdiction. **In his letter, the Secretary of Energy stated that historically, FERC *"has not exerted jurisdiction over load interconnections,"* but that the interconnection of large loads directly into the interstate transmission system should be under FERC's purview.** W&C: DOE directs FERC to accelerate interconnection of data centers	Citing Section 403 of the DOE Organization Act, the Secretary directed FERC to consider a proposed rule and act by no later than April 30, 2026 to set forth a number of potential reforms to ensure timely and nondiscriminatory access to the transmission system for large industrial loads and data centers, based on the following precepts: **ANOPR outlines requirements, standardized study deposits, readiness requirements, withdrawal penalties, that have been effectuated as part of Order No. 1920.** **Large load interconnections should be classified in the same manner as generator interconnections.** · Given that FERC holds jurisdiction over wholesale electricity rates under the Federal Power Act (FPA), FERC has the mandate to ensure that wholesale rates are just and reasonable, which should be extended to large loads and data centers. · ANOPR raises an approach for load and hybrid facilities to be included with generating facilities, thereby allowing "efficient siting" and "minimizing the need for costly network upgrades."	**In asserting expanded legal authority to FERC over interconnections for large loads.** · ANOPR purports to limit the scope to interconnections that are directly tied to transmission facilities. · No authority vested to the states is infringed on as the ANOPR "does not exert jurisdiction over any retail sales" nor does it govern the siting, expansion, or modification of generation facilities, such that the states retain that jurisdiction under Section 201(b)(1) of the FPA. **ANOPR proposes to expedite interconnection studies for facilities that agree to be flexible and curtailable - to 60 days.** · Possible flexibility of large loads, such that the data centers can reduce their demand when prompted and/or shift to on-site backup generation if allowed. **ANOPR stipulates that large load and hybrid facilities would be responsible for 100% of the network upgrade costs assigned through the interconnection studies.** · The interconnection customer would retain the same rights as generators in directly funding network upgrades, rather than paying the electric utility to do so.

2.1 Policy

Issue #	Rating	Issue	Impact	Action/Result
2.1b FERC		**FERC's newest commissioners, Chairman Laura Swett and Commissioner David LaCerte said, at their first open meeting, that connecting data centers to support artificial intelligence is a top priority for them.** Chairman Swett said, *"my priority as chairman is to ensure that our country can connect and power data centers as quickly and durably as possible."* Swett also said she aims to streamline FERC regulations to bolster energy infrastructure maintenance and construction. UD: New FERC commissioners say connecting data centers is key priority	LaCerte echoed that sentiment, stating the AI race requires "bold action" to protect the economy and national security while shielding existing ratepayers from "undue costs," and added that the *"National Environmental Policy Act reviews across the federal government have run off course, failed to protect the environment and often only serve to delay or derail infrastructure projects."* Swett also stood by FERC's status as an independent agency, saying that the DOE Organization Act separated FERC from the department's review powers.	FERC is beginning to consider a proposal from the U.S. Department of Energy (DOE) for new rules governing the interconnection of data centers and other large loads to the transmission system *(see Sec. 2.1a of this Regulatory Bulletin)*. However, state utility regulators raised a series of concerns about the proposed rulemaking, including their role in overseeing retail power sales and the potential for data centers to impose costs on other electric retail customers.

2.2 Capacity / System Reliability

Issue #	Rating	Issue	Impact	Action/Result
2.2a NYISO	$ –	**In accordance with the Order Establishing Updated Energy Storage Goal and Deployment Policy filed on June 20, 2024 and the BES Implementation Plan filed on April 18, 2025, NYSERDA has calculated the initial LSE Bulk Energy Storage (BES) compliance rate of $0 for January 1, 2026 to December 31, 2026 (i.e., 2026 compliance year).** NYSERDA Bulk Energy Storage (BES) Compliance	In May 2027, NYSERDA will true up against the actual costs incurred for the 2026 compliance year and credit or charge the LSE as applicable.	*Please see our July 2025 Regulatory Bulletin, Sec. 2.2b for more on New York State's Bulk Energy Storage (BES) Program.*
2.2b PJM/NJ	$ –	**Invenergy has informed the New Jersey Board of Public Utilities (BPU) that it has canceled its 2.4-GW offshore wind project, Leading Light Wind.** Invenergy and the project's co-sponsor, energyRe, sought several delays from the BPU as they failed to meet filing deadlines due to issues like an inability to find a turbine supplier. OW.biz: 2.4 GW New Jersey offshore wind project axed by developers	Invenergy was granted a stay last September, then extended that stay three more times before finally abandoning the project.	Leading Light was set to become operational in 2030. In its filing, Invenergy cited financial, supply chain and regulatory obstacles as reasons the project is no longer viable.

2.2 Capacity / System Reliability

Issue #	Rating	Issue	Impact	Action/Result
2.2c U.S.	 **$+**	**According to Grid Strategies, significant load growth is likely to arrive as forecast, but uncertainties associated with data centers are complicating load growth projections.** The five-year forecast of U.S. utility peak load growth has increased from 24 GW to 166 GW over the past three years, by more than a factor of six. Data centers account for about 55% of demand growth in utility load forecasts over this period. The utility forecast for added data center load by 2030 is 90 GW, but market analysts indicate that data center growth is unlikely to require much more than 65 GW through 2030. GS: Power demand forecasts revised up for third year running, led by data centers	Thus, Grid Strategies believes that the data center portion of utility load forecasts is likely overstated by about 25 GW, attributable to three factors: **1. Double Counting** Overestimation could be due "simply to the challenge that utilities have in understanding whether a potential customer is pursuing just the site in their service area or whether they're pursuing multiple sites and they're not planning on building out all of them." **2. Unrealistically high load factors** Some of the large load forecasts may be using unrealistically high load factors for the new large loads such as 95% to 100%. **3. Overly optimistic schedules** Data center construction timelines could be pushed back due to supply chain constraints, backlogged orders for chips and other key components.	As a result, if large loads start to get put off or canceled, we could see many large revisions to forecasts. Regardless, even trimming 25 GW off the load growth forecast for 2030, *"we're still talking about somewhere in the neighborhood of 140 GW of growth over the next five years."* **By 2030, "forecasts indicate that total electricity use will increase by 32%." That is still a lot of load growth that will be difficult for the power sector to meet.** Please contact your Calpine sales representative to hedge your longer term energy needs.

2.2 Capacity / System Reliability

Issue #	Rating	Issue	Impact	Action/Result
2.2d NERC	 **$+**	**According to NERC's 2025-2026 Winter Reliability Assessment, peak demand on the bulk power system will be 20 GW higher this winter than last, up 2.5%, but total resources to meet the peak have only increased by 9.4 GW.** Nearly all of NERC's assessment areas *"are reporting year-on-year demand growth with some forecasting increases near 10%."* The U.S. West, Southeast and Mid-Atlantic regions, areas with significant data center development, have the highest growth rates. NERC is seeing steady demand growth at higher rates than previous years, *"landing on a system that's still racing to build new resources, navigating supply chain constraints and integrating large amounts of variable, inverter based generation."*	NERC said all regions of the bulk power system should have sufficient resources for expected peak demand this winter. However, several regions could face challenges in the event of extreme weather, adding that ***"pockets of elevated risk"*** **exist and** ***"the drivers are becoming more structural than seasonal."*** · New England could see gas shortages in extended extreme conditions. · In areas of the Southeast, reserves may not be sufficient for high demand scenarios. · In ERCOT, *"strong load growth is contributing to continued risk of supply shortfalls in extreme cold."*	NERC recommends that grid operators should review seasonal operating plans, generation owners should complete winter readiness and weatherization efforts, and balancing authorities should implement generator fuel surveys to monitor the adequacy of fuel supplies. More importantly, bringing resources online more quickly will require changes to policy and markets: *"We need permitting reform, predictable market rules, and policies that support private investment."*

2.3 Transmission

Issue #	Rating	Issue	Impact	Action/Result
2.3a NYISO	$+	**In accordance with the Order Adopting Modification to the Clean Energy Standard, filed on October 15, 2020, and the Tier 4 Implementation Plan, filed on June 13, 2025, NYSERDA has calculated the initial LSE Tier 4 rate as $1.0336 per MWh, to be applied to each LSE's actual wholesale load, applicable from January 1, 2026 to December 31, 2026 (2026 compliance year).** NYSERDA Tier 4 Compliance	By May 2027, NYSERDA will true up against the actual costs incurred for the 2026 compliance year and credit or charge the LSE as applicable.	*Please see our September and December 2021, and April 2022 Regulatory Bulletins, Secs. 2.1e, 2.3a and 2.2b, respectively, for more on New York State's Tier 4 program.*

2.5 Energy

Issue #	Rating	Issue	Impact	Action/Result
2.5a EIA	$+	**The Energy Information Administration (EIA) said in its latest Short-term Energy Outlook, that U.S. wholesale electricity prices are expected to continue rising in 2026.** The EIA forecast the load-weighted average of the 11 regional wholesale prices it tracks to be $47/MWh in 2025, up 23% from the 2024 average, and to reach $51/MWh in 2026, up another 8.5%, driven largely by a projected 45% increase at the ERCOT-North pricing hub.	Power prices in ERCOT tend to reflect large hourly spikes in the summer months due to high demand combined with relatively low supply in this region. Demand is also rising, with much of it concentrated in the West South Central region that includes Texas, Oklahoma, Louisiana and Arkansas, as a result of data center and cryptocurrency mining facilities.	**Electricity sales are set to increase across the U.S. by 2.4% in 2025 and 2.6% in 2026. In the West South Central region, sales will grow 4.4% in 2025 and 9.2% in 2026.** *Increases in Texas and nearby states contribute 34% of the growth in U.S. electricity sales in 2025 and 66% of the growth in 2026.*

3.0 Contact Information

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Public/ISO Regulatory Contacts:

· PJM - http://pjm.com/about-pjm/who-we-are/contact-us.aspx

· MISO - https://www.misoenergy.org/AboutUs/ContactUs/Pages/ContactUs.aspx

· NEISO - http://iso-ne.com/contact/contact_us.jsp

· NYISO - http://www.nyiso.com/public/markets_operations/services/customer_support/index.jsp

· ERCOT - http://ercot.com/about/contact/

· CAISO - http://www.caiso.com/Pages/ContactUs.aspx

· Public Utilities Commission - http://www.naruc.org/commissions/