Date of Hearing: April 22, 2026

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Cottie Petrie-Norris, Chair
AB 1975 (Schultz) – As Amended March 3, 2026

SUBJECT: Electrical corporations: grid utilization metric

SUMMARY: Requires the California Public Utilities Commission (CPUC), in a new or existing public proceeding to establish a grid utilization metric that calculates electrical load as a percentage of rated capacity. Specifically, **this bill**:

1) Requires the CPUC, on or before December 31, 2027, in a new or existing public proceeding, to establish a grid utilization metric that calculates electrical load as a percentage of rated capacity, to be measured separately based on peak load and average load, and to be calculated on individual distribution circuits and averaged across multiple distribution circuits.

2) Requires each large electrical corporation, each calendar quarter, to submit a publicly available report to the CPUC with the results of the large electrical corporation's grid utilization metric calculations on individual distribution circuits, individual substations, and the entire service territory of the large electrical corporation.

3) Requires the CPUC to annually establish a minimum value for the grid utilization metric within each large electrical corporation's distribution grid.

4) Requires the CPUC to develop a process to ensure the imposition of the minimum value encourages, and does not inhibit, electrification.

5) Requires that the minimum value increase annually at the CPUC's discretion and may be measured by distribution planning area or other segmentation.

6) Requires the CPUC to establish financial performance-based incentives or disincentives correlated with achieving the grid utilization metric minimum value, if the incentive or disincentive results in a net benefit for retail customers.

7) Requires the CPUC to leverage those incentives or disincentives to encourage large electrical corporations to propose the most cost-effective solutions for providing safe and reliable electrical service.

8) Requires each large electrical corporation, on or before July 31, 2028, to propose grid utilization programs to achieve the grid utilization metric minimum value.

9) Requires the CPUC, in evaluating those programs, to consider rate impacts, reliability of electrical service, maximizing the use of existing distribution grid infrastructure, and maximizing the use of demand flexibility technologies, and to only approve programs that are feasible and cost effective.

EXISTING LAW:

1) Provides that the California Constitution authorize the CPUC, among other things, to establish its own procedures, subject to statute and due process, and to fix rates and establish rules for all public utilities, subject to control by the Legislature. (California Constitution, Article XII, §§2,3, 5, and 6)

2) Establishes it is the policy of the state that each electrical corporation continue to operate its electric distribution grid in its service territory and to do so in a safe, reliable, efficient, and cost-effective manner. (Public Utilities Code §399.2)

3) Authorizes the CPUC to fix the rates and charges for every public utility, including electrical and gas corporations, and requires that those rates and charges be just and reasonable. (Public Utilities Code §451)

4) Requires the CPUC, in establishing residential electric and gas rates, to ensure that the rates are sufficient to enable the electric or gas corporation to recover a just and reasonable amount of revenue. (Public Utilities Code §739(d)(2))

5) Requires the CPUC, on or before February 1, 2023, and biennially thereafter, to report to the Legislature and the Governor on the progress toward modernizing the state's distribution and transmission grid and the impacts of distributed energy resources. (Public Utilities Code §913.6(a)

6) Establishes that it is the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100% of all retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045. (Public Utilities Code § 454.53)

FISCAL EFFECT: Unknown. This bill is keyed fiscal and will be referred to the Committee on Appropriations for its review.

BACKGROUND:

The Road to Grid Modernization. In 2007, Congress passed the Energy Independence and Security Act of 2007 in response to growing concerns over U.S. dependence on foreign oil, rising energy costs, and the need to reduce greenhouse gas emissions.[1] The Act established a national smart grid framework to modernize the electric grid using digital and communications technologies, and directed states to work towards smart grid deployment. In 2009, the American Recovery and Reinvestment Act made billions of dollars in federal grants available for smart grid deployments.[2] In response, California passed SB 17 (Padilla, Chapter 327, Statutes of 2009), which established the state's smart grid policy to modernize California's electrical transmission and distribution systems. It required each electrical corporation to submit a smart grid

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[1] Energy Independence and Security Act of 2007, Pub. L. No. 110-140, 121 Stat. 1492 (2007).
[2] American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5 (Feb. 17, 2009). The Act appropriated approximately $4.5 billion to the U.S. Department of Energy for smart grid investments, including the Smart Grid Investment Grant (SGIG) and Smart Grid Demonstration Program. https://www.energy.gov/oe/recovery-act-smart-grid-investment-grant-sgig-program

deployment plan to the CPUC for review and approval. Building on this foundation, AB 327 (Perea, Chapter 611, Statutes of 2013), among its many provisions, required each electrical corporation to submit to the CPUC a distribution resources plan to identify optimal locations for distributed resources and evaluate locational benefits, costs, and avoided investments in distribution infrastructure.

Distribution Investment Deferral Framework. In 2018, the CPUC established the Distribution Investment Deferral Framework (DIDF). The goal of DIDF was for IOUs to identify low-cost opportunities for Distributed Energy Resources (DERs) to defer traditional capital investments, and for the IOUs to pursue an open market solicitation for DER solutions. The DIDF process has focused on non-wired alternatives to distribution investments at specific grid locations. The CPUC adopted various metrics for identifying and selecting these opportunities, including metrics for cost-effectiveness, forecast certainty, and market assessment. The DIDF process also provided information on the actual cost of distribution system upgrades and the process of distribution planning to the CPUC and the public.

Although it has been revised several times, DIDF has not resulted in significant non-wire investments. The CPUC has reported that non-wires alternatives can fail for many reasons including changing project needs and locations, barriers to DER deployment such as interconnection delays, uncertainty in the contracting process, and developer failure. Therefore, DIDF has been considered ineffective at increasing DER implementation but has provided transparency into IOU distribution planning.[3]

California's Evolving Grid. Despite these efforts, integrating distributed energy resources into the electric grid remains a complex challenge. The electric grid is a vast interconnected system composed of power plants that generate electricity, high-voltage transmission lines that move electricity over long distances, and local distribution networks that deliver electricity to homes, schools, and businesses.[4] Historically, California's distribution system was designed to move electricity in one direction from centralized power plants through the transmission system to distribution substations, where voltage is reduced and power is delivered through local circuits and transformers to customers. However, the state's clean energy and climate policies, along with electrification goals in the transportation and building sectors, have accelerated the deployment of distributed energy resources such as rooftop solar and battery storage. As these resources expand, they can change the timing and location of electricity flows across distribution circuits, resulting in two-way power flows and new operational challenges for utilities.[5]

Upgrading the Grid Will Be Costly. The cost of upgrading California's distribution grid to keep up with growing electricity demand could be significant. A CPUC study estimated that approximately $50 billion may be required for distribution grid investments by 2035 under scenarios with high adoption of electric vehicle charging and other new loads if they are not managed to reduce peak demand.[6] The California Public Advocates Office conducted its own

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[3] CPUC, "Staff Proposal for the High DER Proceeding," April 5, 2024
[4] U.S. Energy Information Administration, "*Electricity Delivery to Consumers"*; https://www.eia.gov/energyexplained/electricity/delivery-to-consumers.php
[5] National Renewable Energy Laboratory*, "An Overview of Distributed Energy Resource (DER) Interconnection: Current Practices and Emerging Solutions"* April 2019; https://www.nrel.gov/docs/fy19osti/72102.pdf
[6] Kevala, "*Electrification Impacts Study Part 1: Bottom-Up Load Forecasting and System-Level Electrification Impacts Cost Estimates*," prepared for the California Public Utilities Commission, May 2023; https://www.kevala.com/resources/electrification-impacts-study-part-1

analysis and found demand management to be critical at reducing these investment costs. Their analysis reached a significantly lower estimate when EV charging load, in particular, was moved to better times of day, finding preliminary costs in the range of $15 billion to $20 billion through 2035, roughly one-third of the CPUC's initial estimate.[7]

COMMENTS:

1) *Author's Statement*. According to the author, "Grid expansion due to growing electricity demand is a primary cause of increasing electric rates. Given the significant increase in rates over the past decade and the burden these pose on California residents and businesses, measures are needed to decrease grid spending and put downward pressure on rates. This bill addresses this issue by requiring that utilities meet grid utilization metrics and implement programs to increase load flexibility to meet these requirements. The net result will be more use out of the existing grid and ratepayer savings."

2) *Metric Design.* This bill requires the CPUC, on or before December 31, 2027, to establish a grid utilization metric for each large electrical corporation that calculates electrical load as a percentage of rated capacity. The bill also requires the metric to be measured separately for peak and average load and to be calculated at the individual circuit level and aggregated across circuits. Additionally, each large electrical corporation is required to submit quarterly reports to the CPUC with the results of its grid utilization metric calculations. This approach presumes a single metric can be applied uniformly across all large electrical corporations.

   However, the one-size-fits-all model of this bill may not account for the significant variation across California's distribution systems in geography, load profiles, and system configuration. PG&E serves more than 70,000 square miles, across Northern and Central California, and encompassing agricultural regions, dense urban corridors, and remote rural communities.[8] SCE on the other hand covers roughly 50,000 square miles across 15 counties, spanning from the Los Angeles basin to inland desert and mountain communities[9] Differences of this scale raise questions about whether a uniform metric can provide consistent, comparable results across service territories.

   AB 1975 requires the CPUC to define the metric by a specific date but does not address how the CPUC should account for differences across service territories. This may result in a metric that does not reflect the conditions of each utility's system, limiting its usefulness for distribution planning and review of utility investments, including planning for load growth. To address this concern, *the committee recommends directing the CPUC to develop, to the extent feasible, a methodology for calculating a distribution grid utilization metric, rather than prescribing a specific metric in statute.*

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[7] California Public Advocates Office, *"The Costs of Upgrading the Distribution Grid for Electrification,* **June 14, 2023**, https://www.publicadvocates.cpuc.ca.gov/-/media/cal-advocates-website/files/press-room/reports-and-analyses/230614-cal-advocates-distribution-grid-impacts-study-fact-sheet.pdf
[8] PG&E, "Company Profile"; https://www.pge.com/en/about/company-information/company-profile.html
[9] SCE, "Southern California Edison's Service Area"; https://newsroom.edison.com/_gallery/get_file/?file_id=5cc32d492cfac24d21aecf4c&ir=1

Additionally, to provide a more consistent basis for comparison across systems with different load profiles, *the committee also recommends revising how the metric may be calculated, reframing the bill's calculation as a consideration not a mandated outcome. Instead of requiring separate peak and average load measurements, the metric is suggested to be calculated as an average over a defined period, expressed as a percentage.*

While recommending a broader, average calculation, the committee also recognizes the merit – as expressed by the author – in considering the different capacity constraints faced across electric service territories depending on location, customer class, and weather-driven demand patterns. Applying a uniform calculation across an entire service territory could obscure areas of the grid that are operating near or above capacity while others are underutilized. In addition, a single calculation period set in statute may also fail to reflect how demand shifts across service territories. Peak summer demand in SCE's inland desert communities, for instance, may look very different from winter demand in PG&E's northern territory. *As such, the committee therefore recommends that the CPUC determine both the geographic scope of each segment of the distribution system and the time period used in this calculation.*

3) *Reporting Requirements*. This measure requires each large electrical corporation to submit quarterly reports to the CPUC with the results of its grid utilization metric calculations on individual distribution circuits, individual substations, and across the entire service territory**.** Requiring quarterly reporting at multiple levels, including individual circuits and across the entire service territory, may be infeasible or expensive to implement. *Therefore, the committee recommends deleting prescriptive provisions and instead requiring that the CPUC determine the reporting frequency and geographic scope through a public proceeding.*

   As written, this bill requires each large electrical corporation to submit quarterly reports to CPUC with the results of its grid utilization metric. lt does not specify what information must be included in those reports, which may limit their usefulness for evaluating grid utilization. *The committee therefore recommends expanding the reporting requirements to include additional information, such as data sufficient to identify opportunities to improve grid utilization and reduce distribution system costs and data on the performance of programs intended to increase distribution system utilization.*

4) *Utilization Standard.* This bill requires CPUC to annually establish a minimum value for the grid utilization metric within each large electrical corporation's distribution grid, and to increase that value each year at the CPUC's discretion. Changes in the metric, however, may be driven by factors outside the utility's control, such as when customers charge electric vehicles, the pace of building electrification, or the interconnection of distributed energy resources. An annually increasing minimum does not distinguish between these factors and changes resulting from utility actions and could hold utilities accountable for outcomes they did not drive. *Therefore, the committee recommends replacing the annually increasing minimum metric requirement with a utilization*

standard that the CPUC may update over time. This gives the CPUC discretion to set and revise the standard as appropriate.

5) *Implementation and Incentives.* This bill requires the CPUC to establish financial performance-based incentives or disincentives correlated with achieving the grid utilization metric, and to leverage those incentives to encourage large electrical corporations to propose the most cost-effective solutions. The bill also requires each large electrical corporation to propose grid utilization programs by July 31, 2028, to achieve the metric minimum value. Establishing financial incentives and requiring program proposals before the CPUC has had sufficient time to observe utility performance and evaluate what is driving changes in utilization may be premature. *Given these reasons, the committee recommends making these provisions discretionary, allowing the CPUC to consider programs, rate designs, or incentives rather than requiring them*. Further, the committee recommends that incentives or disincentives can only be considered after the metric has been established, utility performance has been observed over a reasonable period, and the CPUC has evaluated the extent to which utility actions are driving changes in utilization.

6) *Clarifying Amendments.* This legislation contains several other provisions that may benefit from additional clarity. *As such, the committee recommends other technical amendments for clarification purposes.*

7) *Prior Legislation.*

AB 44 (Schultz, 2025) requires the CEC to create and share methods for adjusting LSEs' energy demand forecasts. These methods will be based on the use of technologies and programs that reliably reduce or shift electricity use, as agreed upon by the CEC, the CPUC, and the CAISO. Status: Vetoed by Governor.

AB 1117 (Schulz, 2025) requires electrical corporations to offer dynamic pricing tariffs to large customers that reflect hourly or sub hourly variations in electricity costs and grid conditions, with the goal of encouraging customers to shift electricity use to periods when demand and system costs are lower. Status: Held in Assembly Committee on Appropriations.

SB 500 (Stern, 2025) authorizes the CPUC to evaluate performance metrics and financial performance-based incentives to identify mechanisms that may serve to better align electrical corporation operations, expenditures, and investments with delivering safe and reliable electrical service and achieving public policy goals, while minimizing costs for ratepayers. Status: Chapter 765, Statutes of 2025.

SB 541 (Becker, 2025) requires state agencies to establish load-shifting targets and track progress toward those targets, including the use of technologies and programs that shift electricity demand to off-peak periods. Status: Vetoed by the Governor.

SB 947 (Dodd, 2024) would have required the CPUC to evaluate financial performance-based incentives and performance metric tracking to identify mechanisms to better align electrical corporation operations, expenditures, and investments with delivering safe and

reliable electrical service and achieving public policy goals, including safety and reliability. Status: Vetoed by the Governor.

AB 242 (Holden) repealed the annual smart grid reporting requirement and replaced it with a biennial reporting requirement, requiring the CPUC, in consultation with the Independent System Operator and the Energy Commission, to report to the Legislature and the Governor on or before February 1, 2023, and biennially thereafter, on the progress toward modernizing the state's distribution and transmission grid and the impacts of distributed energy resources. Status: Chapter 228, Statutes of 2021.

AB 327 (Perea), among its many provisions relating to electrical rates and net energy metering, required each electrical corporation to submit to the CPUC a distribution resources plan to identify optimal locations for the deployment of distributed resources, including an evaluation of locational benefits and costs on the distribution system, reductions in local generation capacity needs, and avoided investments in distribution infrastructure. Status: Chapter 611, Statutes of 2013.

SB 1438 (Padilla) would have established California's smart grid policy, declared it the policy of the state to modernize the state's electrical transmission and distribution system to maintain reliable and secure electrical service, and required the CPUC, by July 1, 2010, in consultation with the Energy Commission and the Independent System Operator, to determine the requirements for a smart grid deployment plan consistent with state policy and federal law, including the Energy Independence and Security Act of 2007, and required that the smart grid improve overall efficiency, reliability, and cost-effectiveness of electrical system operations, planning, and maintenance. Status: Held in the Assembly Appropriations Committee.

SB 17 (Padilla), established California's smart grid policy, declared it the policy of the state to modernize the state's electrical transmission and distribution system to maintain safe, reliable, efficient, and secure electrical service, required the CPUC to determine smart grid deployment plan requirements, and required each electrical corporation to submit a smart grid deployment plan to the CPUC for approval. Status: Chapter 327, Statutes of 2009.

REGISTERED SUPPORT / OPPOSITION:

Support

350 Bay Area
350 Humboldt: Grass Roots Climate Action
Alliance of Californians for Community Empowerment
Altadena Energy and Solar
Brighten Solar
California Solar & Storage Association
Calpirg
Center for Community Energy
Center for Environmental Health
City of Pico Rivera
Cleanearth4kids.org

Cleantech Energy Solutions INC.
Climate Action California
Community Environmental Council
Derapi
Emerald Eco
Environment California
Environmental Protection Information Center
Excite Energy
Living Green Solar
Open Doors Management
Peak Demand
Physicians for Social Responsibility
Qcells
Rise Energy
Sierra Club California
Six Rivers Solar
Solar Insure
Sunrun
The Climate Center
Voltus
Vote Sola

Support If Amended

California Community Choice Association
The Utility Reform Network (TURN)

Opposition

San Diego Gas and Electric Company

Oppose Unless Amended

Edison International and Affiliates, Including Southern California Edison
Pacific Gas and Electric Company

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