SENATE COMMITTEE ON ENERGY, UTILITIES AND COMMUNICATIONS
Senator Benjamin Allen, Chair
2025 - 2026 Regular

Bill No:	AB 2516	**Hearing Date:**	6/24/2026
Author:	Petrie-Norris		
Version:	4/13/2026 Amended		
Urgency:	No	**Fiscal:**	Yes
Consultant:	Nidia Bautista		

SUBJECT: California Grid Manufacturing Initiative

DIGEST: This bill creates the California Grid Manufacturing Initiative to aggregate demand for and centralize procurement of critical electricity grid components and to provide financial assistance to projects that manufacture such components in California, among other requirements.

ANALYSIS:

Existing law:

1) Establishes the California Public Utilities Commission (CPUC) and authorizes it to regulate public utilities, including electrical corporations. (Article 12 of the California Constitution)

2) Establishes the Governor's Office of Business and Economic Development (GO-Biz) within the Governor's office and requires GO-Biz to serve the Governor as the lead entity for economic strategy and the marketing of California on issues relating to business development, private sector investment, and economic growth. (Government Code §12100.50 *et seq*.)

3) Creates within GO-Biz the Energy Unit to accelerate the planning, financing, and execution of critical energy infrastructure projects, as specified. (Government Code §12100.110)

4) Establishes, pursuant to the Bergeson-Peace Infrastructure and Economic Development Bank Act, the California Infrastructure and Economic Development Bank (I-Bank) within GO-Biz and, among other things, authorizes the I-Bank to make loans, issue bonds, and provide financial assistance for various types of projects that qualify as economic development or public development facilities, as provided. (Government Code §63000 *et seq*.)

5) Defines a "local publicly owned electric utility (electric POU)" to mean a municipality or municipal corporation operating as a "public utility" furnishing electric service as provided in Section 10001, a municipal utility district furnishing electric service formed pursuant to Division 6 (commencing with Section 11501), a public utility district furnishing electric services formed pursuant to the Public Utility District Act set forth in Division 7 (commencing with Section 15501), an irrigation district furnishing electric services formed pursuant to the Irrigation District Law set forth in Division 11 (commencing with Section 20500) of the Water Code, or a joint powers authority that includes one or more of these agencies and that owns generation or transmission facilities, or furnishes electric services over its own or its member's electric distribution system. (Public Utilities Code §224.3)

6) Establishes the policy that all of the state's retail electricity be supplied with a mix of Renewables Portfolio Standard (RPS)-eligible and zero-carbon resources by December 31, 2045, for a total of 100% clean energy. (Public Utilities Code § 454.53)

This bill:

1) Requires the Energy Unit, in coordination with other specified state entities, to establish the California Grid Manufacturing Initiative.

2) Requires the Energy Unit to identify and procure critical electricity grid components, as defined, and to incentivize new or existing in-state manufacturing of electricity grid components.

3) Requires the Energy Unit to develop a process for each public utility, as defined, on or before January 1, 2028, and regularly thereafter, to submit a projection of its purchasing needs for critical electricity grid components for which the public utility has not entered into a purchase agreement and for which the public utility affirmatively seeks the assistance of the Energy Unit in coordinating resources and leveraging purchasing power.

4) Provides that, if the Energy Unit determines that centralized procurement is warranted for a critical electrical grid component, a participating public utility may, prior to the issuance of a solicitation by the Energy Unit for that component, submit to the Energy Unit the conditions under which the public utility commits to purchase those components from the initiative, as provided. Under this bill, if a procurement by the Energy Unit satisfies the conditions submitted by a public utility, the public utility's commitment to purchase the component from the initiative would be binding, as provided. By imposing new

duties on local publicly owned electric utilities, this bill would impose a state-mandated local program.

5) Authorizes the Energy Unit to issue requests for proposals or other competitive solicitations to procure critical electricity grid components, as provided, and would authorize the Energy Unit to provide financial assistance to projects that establish or expand manufacturing capacity in California for electrical grid components, as specified. This bill would also authorize the Energy Unit to enter into production joint ventures with qualified private suppliers, as provided, and to provide bond financing and other assistance.

6) Authorizes the CPUC to authorize the recovery of costs incurred under the initiative only to the extent it determines those costs are just and reasonable, cost-effective, and aligned with state energy policy, as provided. To the extent the procurement results in costs below prevailing market prices for grid components, this bill would require the commission to ensure that the difference is credited to ratepayers, as provided.

7) Creates the California Grid Manufacturing Initiative Revolving Fund in the State Treasury, and the Manufacturing Incentive Account and the Procurement Account within the revolving fund, for the purpose of providing financial assistance pursuant to the initiative. Makes the moneys in the revolving fund continuously appropriated for expenditure in accordance with the initiative. Authorizes the I-Bank, on behalf of the Energy Unit, to issue revenue bonds to finance procurement and manufacturing of electricity grid components, and would require the proceeds of the bonds to be deposited into the respective accounts and used exclusively for the purposes of the initiative. Makes an appropriation by establishing a continuously appropriated fund.

Background

Grid infrastructure build-out. California's electric grid is expanding to meet the state's clean energy and electrification goals, replace aging infrastructure, and support reliability and wildfire resilience. This effort requires significant investment in both transmission and distribution systems, along with a steady supply of critical electricity grid components such as transformers, conductors, switchgear, and other transmission and distribution equipment, including substation components. This is in addition to the normal upgrades needed to maintain the current electrical grid system, including addressing damages from storms and other natural disasters and the natural end of life of aging infrastructure. These components are essential to bringing new generation online, upgrading existing distribution and transmission infrastructure, and ensuring the electrical

grid operates safely and reliably. For example, large step-up transformers are used to move electricity over long distances, while step down distribution transformers deliver power to homes and businesses. These generally have a 40-year average life. In 2014, the U.S. Department of Energy (DOE) report estimated that the average age of these large power transformers in the country's electrical grid was 38-40 years. Conductors and transmission lines must also be upgraded or reconductored to carry increasing loads. In addition, substation equipment and switchgear are necessary to manage and control the flow of electricity across the system. Given the scale of planned upgrades, maintaining a consistent and reliable supply of these components will be critical to keeping generation interconnection, distribution, and transmission projects on track.

Supply chain constraints. The supply of critical electricity grid components remains constrained due to global supply chain disruptions, limited manufacturing capacity, and growing demand from electrification and new generation development. Demand for transformers in the United States has increased significantly in recent years, while domestic production capacity has not kept pace, contributing to extended lead times that can reach two to four years for certain large power transformers. Wood Mackensie reported that demand for generator large step-up transformers has increased 274% between 2019 and 2025. Current backlogs have been reported to be well over 144 weeks with average time frames reported at 125 weeks (well over 2 years).[1] Utilities have reported delays in obtaining large power transformers needed for transmission projects, as well as distribution transformers required for system upgrades and new customer connections. At the same time, prices for this equipment have risen substantially, with industry data showing increases of roughly 45 to 95 percent since 2019.[2] These conditions can delay transmission upgrades and, in turn, delay the interconnection of renewable energy and storage projects. As a result, limited availability of critical grid components continues to affect both the timing and cost of grid development which ultimately affect ratepayers.

Utility specific procurement of electrical grid components. Procurement of critical grid components in California is primarily undertaken on a utility-specific basis, with each utility independently developing load forecasts, issuing solicitations, and executing contracts. This decentralized approach results in fragmented and often intermittent demand, which can limit opportunities to consolidate purchasing, standardize specifications, and provide the long-term certainty needed to support

[1] https://www.industrialsage.com/power-transformer-lead-times-us-grid-shortage/

[2] Wood Mackenzie, "Transformer troubles: manufacturing and policy constraints hit US transformer supply" August 13, 2025. https://www.woodmac.com/news/opinion/transformer-troubles-manufacturing-and-policy-constraints-hit-us-transformer-supply/

domestic manufacturing. This can have implications for market outcomes. Smaller, less predictable procurement volumes may weaken utilities' negotiating position with suppliers, particularly for capital-intensive, long-lead-time equipment such as large power transformers, circuit breakers, and high-voltage cables. Variability in utility specifications may also necessitate customized production runs, increasing per-unit costs and reducing the efficiencies associated with standardized manufacturing. Additionally, the absence of coordinated, forward-looking procurement commitments at a statewide level may constrain manufacturers' willingness to invest in expanded production capacity or new facilities, given the significant capital investment required for grid equipment manufacturing.

GO-Biz/Energy Unit. The California GO-Biz serves as the state's lead entity for economic development and supports businesses and project developers in navigating state requirements, particularly for projects involving multiple agencies or jurisdictions. Within GO-Biz, the Energy Unit focuses on energy and infrastructure projects, including renewable generation, energy storage, and transmission. The unit coordinates with the CPUC, California Energy Commission (CEC), and California Independent System Operator (CAISO), as well as local governments and utilities, with a focus on permitting and project timelines. The Energy Unit has supported implementation of the state's Clean Energy Permitting Playbook, which outlines actions to improve interagency coordination and streamline permitting for clean energy and transmission projects. It is also been involved in efforts related to the Transmission Accelerator, which, pursuant to SB 254 (Becker, Chapter 119, Statutes of 2025) is intended to facilitate financing and cost recovery for transmission projects, helping address financing and cost recovery challenges associated with large, capital-intensive infrastructure. Together, these efforts are intended to help reduce delays in bringing grid infrastructure online, including projects dependent on long-lead equipment such as transformers.

Comments

Need for this bill. According to the author:

> California's electricity grid faces a supply chain crisis that is driving up costs for families, delaying critical renewable energy projects, and undermining our climate goals. National and global bottlenecks for essential grid equipment, particularly transformers, have caused lead times to stretch from weeks to years and prices to spike as much as 95 percent. These cost increases are passed directly to ratepayers and will continue to compound for decades. AB 2516 establishes the California Grid Manufacturing Initiative to aggregate statewide demand for grid components, coordinate procurement to achieve economies of

scale, and incentivize in-state manufacturing through public-private joint ventures, thereby lowering costs, creating thousands of high-road manufacturing jobs, and positioning California as a national leader in building the grid infrastructure our clean energy future demands.

Bill attempts for the state to help resolve global supply challenges with electric grid components. This bill is intended to help resolve supply backlogs and shortages of critical electrical grid components needed to upgrade and expand the electrical transmission and distribution grid. There has been longstanding attention to the shortages, particularly for large transformers, predating the COVID-19 epidemic. However, the epidemic further affected supply constraints and the increasing demand for electrification and load, as well as the need to replace aging infrastructure and need to rebuild from the impacts of disasters (including hurricanes, fires, earthquakes, etc.) have exacerbated the supply constraints. As noted above, transformers, in particular, have seen an increase in demand. During President Biden Administration the Infrastructure Investment and Jobs Act required the DOE to provide a report to Congress regarding the status and opportunities to address supply issues for large transformers. This requirement followed on a 2017 DOE report exploring a federal reserve for transformers which recommended a non-government reserve driven by industry actions given the complexity of supply chains and procurement. The DOE published the new report in June 2024 to address concerns about large transformer vulnerabilities and strengthen the resilience of the U.S. grid and enabling rapid recovery from extensive transformer failures. In the 2024 report the DOE recommended continued engagement with industry stakeholders, including convenings to explore additional options in addition to additional research and development to explore novel concepts, flexible systems (such as mobile transformers), and other assessment recommendations from the Infrastructure Investment and Jobs Act list, such as focusing on the storage and security of recovery transformers and encouraging domestic manufacturing or expansion of existing transformer facilities.[3]

This bill seeks to have the state to procure needed electrical system components. As currently drafted, this bill would require the Energy Unit at Go-Biz to play a central role in identifying and procuring needed electrical components that might be critical to upgrading the electrical system. The Energy Unit would work with utilities, POUs and investor-owned utilities (IOUs), to identify needed components and require central procurement of critical components. Given some of the challenges for action at the federal level, the proponents of this bill seek state

[3] US Department of Energy, "Report to Congress on Large Power Transformer Resilience," July 2024. U.S. Department of Energy Large Power Transformer Resilience Report to Congress, July 2024

action to help address supply challenges. They look to New York City Housing Authority's efforts to leverage the scale and standardization of its portfolio to create large, predictable demand that attracts manufacturing investment to address public housing needs. While utilities have not opposed this bill, they have relayed appreciation for the efforts to help address supply issues, but they also have concerns about the state involving itself directly in procuring electrical components. Given the individual and customized components, as well as their existing supply relationships, they express concern that direct state involvement in procurement could further hamper supply shortages and affect existing relationships for products. The author's office also acknowledges the potential limits of such involvement. To that effect, *the author and committee may wish to recast the portion of this bill regarding procurement, specifically delete requirements on the state to conduct direct procurement, and instead require the CPUC to work with electrical corporations and the Energy Unit to identify critical components and, if necessary, direct electrical corporations to procure needed supplies should such an effort help reduce supply shortages. The author and committee may wish to authorize POUs to participate in joint procurement with electrical corporations if they elect to do so. In general, the amendments would retain the Energy Unit's and I-Bank's role to support manufacturing of electrical components, but add provisions, including leveraging state and federal incentives, opportunities for low-cost loans and other financing assistance.*

Dual Referral. Should this bill be approved by this committee, it will be re-referred to the Senate Business, Professions and Economic Development Committee.

Prior/Related Legislation

SB 787 (McNerney, 2025) establishes a formal interagency memorandum of understanding framework and a Senior Counselor on Industrial Policy and Clean Energy Development at the CEC to coordinate California's clean energy supply chain development efforts across batteries, offshore wind, and building decarbonization sectors. The bill was vetoed.

AB 1373 (E. Garcia, Chapter 367, Statutes of 2023) authorized California to use the Department of Water Resources to centrally procure long lead-time clean energy resources, such as offshore wind and geothermal energy, to meet 2045 climate goals and ensure grid reliability.

SB 1174 (Hertzberg, Chapter 229, Statutes of 2022) required the CPUC to publish, in its annual RPS reports, a systemwide assessment of transmission project delays and their impact on in-development resources, work carried out through the

interagency Tracking Energy Development Task Force of the CPUC, CEC, CAISO, and GO-Biz.

SB 852 (Pan, Chapter 207, Statutes of 2020) enacted the California Affordable Drug Manufacturing Act, directing the state to enter manufacturing and procurement partnerships that leverage California's purchasing power to address shortages and high prices in a concentrated market.

FISCAL EFFECT: Appropriation: Yes Fiscal Com.: Yes Local: Yes

SUPPORT:

BlueGreen Alliance
Building Decarbonization Coalition Action Fund
California Environmental Voters
California Federation of Labor Unions
California Forward
California Green New Deal Coalition
California Labor for Climate Jobs
Central Valley Community Foundation
Climate Action California
Climate Action Campaign
Coalition of California Utility Employees
Communication Workers of America, District 9
Environmental Protection Information Center
Industrious Labs
International Brotherhood of Electrical Workers, Local 1245
Jobs to Move America
Los Angeles Alliance for a New Economy
Public Citizen
Rising Sun Center for Opportunity
Sierra Club California
Sylvatex, Inc.
UAW Region 6
United Steelworkers District 12

OPPOSITION:

None received

ARGUMENTS IN SUPPORT: The coalition of supporters for the bill, including California Labor for Climate Jobs, the BlueGreen Alliance, and others state:

> Across the state, working people, businesses, and local governments are grappling with rapidly rising electricity costs. At the same time, utilities face growing challenges in procuring essential grid equipment – particularly electrical transformers – needed to maintain reliability, prevent wildfires, and connect new renewable energy resources. AB 2516 addresses these challenges through a coordinated statewide procurement and manufacturing strategy designed to reduce costs, accelerate grid upgrades, and expand high-road manufacturing jobs in California.

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