
THIRD READING

Bill No: SB 913
Author: Becker (D), et al.
Amended: 5/14/26
Vote: 21

SENATE ENERGY, U. & C. COMMITTEE: 15-0, 4/7/26
AYES: Allen, Ochoa Bogh, Archuleta, Arreguín, Becker, Caballero, Gonzalez,
Hurtado, McNERNEY, Reyes, Richardson, Rubio, Stern, Strickland, Wahab
NO VOTE RECORDED: Dahle, Grove

SENATE APPROPRIATIONS COMMITTEE: 5-0, 5/14/26
AYES: Cervantes, Cabaldon, Grayson, Richardson, Wahab
NO VOTE RECORDED: Seyarto, Dahle

SUBJECT: Resource adequacy: aggregated distributed capacity resources

SOURCE: Environment California
The Climate Center

DIGEST: This bill proposes several policy changes to authorize and expand the use of aggregated distributed energy resources (DERs) to satisfy resource adequacy (RA) requirements.

ANALYSIS:

Existing law:

- 1) Establishes and vests the California Public Utilities Commission (CPUC) with regulatory authority over public utilities, including electrical corporations.
(Article XII of the California Constitution)
- 2) Requires the California Independent System Operator (CAISO), as a nonprofit, public benefit corporation, to conduct its operations consistent with applicable

state and federal laws and consistent with the interests of the people of the state. (Public Utilities Code §345.5)

- 3) Requires the CAISO to ensure the efficient use and reliable operation of the transmission grid, as provided. (Public Utilities Code §345)
- 4) Requires the CPUC, in consultation with the CAISO, to establish RA requirements for all load-serving entities (LSEs) and requires the CPUC in establishing those requirements to ensure the reliability of electrical service in California. Requires the RA program to facilitate the development of new generating, non-generating, hybrid capacity and retention of existing generating, non-generating, and hybrid capacity that is economical and needed for reliability. Requires that the RA program achieve specified objectives, including that it establish new or maintain existing demand response products and tariffs, as specified. Defines LSE, for that purpose, as an electrical corporation, electric service provider (ESP), or community choice aggregator (CCA). (Public Utilities Code §380)
- 5) Defines “distributed resources” to mean distributed renewable generation resources, energy efficiency, energy storage, electric vehicles, and demand response technologies. (Public Utilities Code §769)
- 6) Creates the Demand Side Grid Support (DSGS) Program and requires the State Energy Resources Conservation and Development Commission (California Energy Commission (CEC)) to implement and administer the program to incentivize dispatchable customer load reduction and backup generation operation as on-call emergency supply and load reduction for the state’s electrical grid during extreme events. (Public Resources Code §25792)

This bill:

- 1) Makes several findings and declarations concerning the role of DERs to provide capacity value to satisfy RA requirements.
- 2) Requires the CPUC, in coordination with the CEC and the CAISO, on or before June 30, 2027, to enhance existing market-integrated pathways for aggregated distributed capacity resources, as defined, to qualify as RA capacity.

- 3) Requires the CPUC to allow electrical corporations, ESPs, and CCAs to include aggregated distributed capacity resources in RA filings and CPUC-ordered procurement.
- 4) Requires the CPUC, on or before June 30, 2027, to develop recommendations for changes to the CAISO's proxy demand resource and the DER aggregation participation models to be consistent with the CPUC's requirements for aggregated distributed capacity resources pursuant to these provisions, and to request that the CAISO implement these changes in a new or existing initiative.

Background

Resource adequacy (RA). Following the California energy crisis of 2000-01, the California Legislature enacted legislation to prevent future incidents of widespread blackouts and rolling brownouts due to lack of electric generating capacity. Among the reforms adopted in response to the crisis was the adoption of Public Utilities Code §380 as an effort to better ensure reliability of electric supply. The statute directs the CPUC, in consultation with the CAISO, to establish RA requirements for all LSEs, including electric investor-owned utilities (IOUs), ESPs, and now includes CCAs, which did not exist at the time of the crisis.

The current RA program consists of system, local, and flexible requirements for each month of a compliance year. There are two types of filings: Annual filings (filed on or around October 31st) and Monthly filings (filed 45 calendar days prior to the compliance month). For the monthly filings, LSEs must demonstrate they have procured 100% of their monthly System and Flexible RA obligation. For the Annual filings, in October of each year, LSEs must demonstrate that they have procured 90% of their system RA obligations for the five summer months (May-September) of the following year, as well as 100% of their local requirements, and 90% of their flexible requirements for each month of the coming compliance year. The CPUC has adopted changes to RA program in recent years, including increasing the planning reserve margin from 15% to 17% by 2024 for all LSEs and in the case of electric IOUs upwards of 20-22% effective planning reserve margin. The CPUC has required a multi-year local capacity RA requirement and adopted local capacity requirements for the upcoming three years. The CAISO conducts a *Local Capacity Technical Analysis* to identify the minimum local resource capacity required in each local area to meet energy needs used a 1-in-10 weather year and N-1-1(emergency) contingency. The CPUC also assesses penalties on the LSEs who fail to satisfy their RA obligations, including limiting the expansion of CCAs if they are deficient in their RA requirements.

Slice-of-Day Framework. The CPUC is also amid a significant change to the RA program by implementing a slice-of-day framework that assesses the hourly use of resources. The CPUC has been developing the new structure for a few years and in 2025 implemented the first year of the slice-of-day framework. The CPUC adopted a 17% planning reserve margin for the slice-of-day framework, consistent with previous planning reserve margins, to procure enough RA to meet load obligations in each hour rather than monthly. Under the slice-of-day framework, LSEs receive a 24-hour obligation for each of the 12 months of the year. The new RA framework requires that resources, including energy storage resources, demonstrate their ability to provide capacity during specific, critical hours rather than just a daily peak.

RA Compensation. Resources used to meet an LSE's RA requirement are compensated for the ability to call on the resource when needed, known as a "must-offer obligation." A resource that commits to providing RA undertakes the "must-offer obligation" to bid or self-schedule its capacity into the CAISO wholesale market, ensuring capacity is available for system reliability. When generators contract with LSEs to provide RA, they must make their capacity available or face penalties. The actual dispatch of resources to meet load in real-time is performed on an economic basis, with the lowest cost resources committed first. As such, RA resources must be offered into the wholesale market, but they may not be dispatched to serve load if there are less expensive resource bids available (including non-RA resources). The RA program provides an additional source of revenue beyond just actual energy sales. To qualify to sell RA, a resource type must first be assigned a qualifying capacity (QC) from the CPUC, which represents a resource's maximum capacity eligible to be counted towards meeting its RA. The resource must then register with the CAISO and be tested to determine if it is "deliverable" to load when the transmission system is stressed by high demand. Following the deliverability assessment, each resource is assigned a net qualifying capacity ("NQC") value, which defines the amount of RA that it can sell. For intermittent resources like wind and solar, the NQC value is typically well below the nameplate capacity of the facility. Demand response and energy storage resources are eligible to provide RA value, while energy efficiency is generally subtracted from the load forecast. In the case of behind-the-meter energy storage resources, they do not receive value for their exports to the grid.

Comments

Need for this bill. According to the author:

Californians are struggling with rising electricity bills, and we need to use our grid more intelligently and cost-effectively. Instead of always building expensive new infrastructure to meet just a few peak hours of demand, we should be making better use of the resources we already have in our homes. Millions of Californians already have tools like smart thermostats, home batteries, and electric vehicles that can help support the grid. SB 913 ensures we can use those resources to lower costs, reduce pollution, and improve reliability.

Supporters frustrated by the value of DERs and aggregated resources within the RA market. The supporters of this bill express frustrations that behind-the-meter DERs and aggregated resources are not able to compete fairly within the RA market. They contend that a myriad of existing rules at the CPUC and CAISO diminish the value of these resources to participate more fully in the wholesale market compared to other energy resources. They believe this bill is necessary to level the playing field and ensure these resources can provide their full benefit to the electrical system and as such help reduce costs for all customers. They point to the success of the CEC's DSGS program which has enrolled 1000 megawatts of DERs to participate in the program. The DSGS Program provides incentives to reduce customer net load during extreme events with upfront capacity commitments and for per-unit reductions in net load. The DSGS Program has been funded through the State Budget, however, the opportunity for future funds is less certain. The supporters contend that the continued growth of battery energy storage systems and electric vehicles, for example, presents an opportunity to aggregate these loads and help reduce consumption during peak periods, thereby reducing the strain on the electric grid. They view these resources as untapped potential, noting that of the 2.5 million electric vehicles in California today, only around 25,000 are on managed charging programs, and that smart thermostats and smart electric panels add to the ability to reduce consumption when wholesale market prices skyrocket.

Various efforts to re-examine the value of energy storage and DERs, including aggregations, for RA. As noted above, both the CPUC and CAISO have important roles in developing the RA program and the values of the various energy resources used in the program. As DERs volume has grown and types have expanded, including solar, energy storage, electric vehicles, and others load-modifying resources (including the aggregation of thermostats) there is growing demand by stakeholders to better optimize their participation in the wholesale market by modifying load and to receive capacity value for their exported energy. The CAISO tariffs allow aggregations of DERs to participate in its markets. However,

the issue of the full capacity value for behind-the-meter DERs and aggregation has continued to be pressed by stakeholders at the CPUC and CAISO for many years.

The CPUC has an open proceeding (R. 25-09-004, *Scoping Memo dated February 12, 2026*) which considers additional enhancements to demand response programs, including revisiting valuation methodologies, CAISO market integration topics, and RA valuation. Additionally, the CAISO also has a current working group, Demand and Distributed Energy Market Integration Working Group, that is actively discussing enhancements to, or development of, participation models and market rules facilitating the representation of demand and distributed energy, either independently or managed aggregation, in the CAISO wholesale markets. CAISO demand and distributed energy market integration initiative was launched in February 2025 and issued a Discussion Paper on November 26, 2025, which is now helping to shape priorities for these issues, including the value of behind-the-meter energy storage exports, value of aggregated DERs, and other related issues raised in this bill.

Bill seeks specific outcomes. This bill proposes to prescribe the what, how, and by when the CPUC and CAISO must adopt enhancements to existing rules in order to achieve the supporters' goals to attain greater capacity value for these resources within the RA program. The proposed requirements include value for energy exports from energy battery storage, aggregation of these resources, multiple devices and multiple enrollments behind the same customer meter, using device telemetry, and customer enrollments that require utility login or other barriers. However, recent amendments limit these to non-NEM resources. These requirements are better addressed within the CPUC and CAISO proceedings and initiatives, particularly as they may need to address how they may affect other program participation and compensation. However, the supporters of this bill find waiting for changes may result in little progress absent a bill to push the discussions and effort towards their desired outcomes. In some cases, the technical feasibility of the prescribed requirements may be premature, and infeasible. For example, the CAISO in a March 2026 *Straw Proposal* noted that they are not proposing to move from service account-level registration to customer device-level registration at this time. They note that no other ISO/RTO currently maintains device-level registration and such an approach would introduce challenges with data-sharing arrangements with utilities and changes to demand response registrations.

Related/Prior Legislation

SB 1138 (Padilla) of 2026, requires the CPUC to allow LSEs to satisfy 25% of their RA requirements by trading energy capacity with other LSEs. The bill is pending in the Senate.

AB 740 (Harabedian) of 2025, would have required the CEC, in the next update to the biennial integrated energy policy report after January 1, 2027, and subject to available funding, to adopt a virtual power plant deployment plan. The bill was vetoed.

AB 44 (Schultz) of 2025, would have required the CEC, on or before December 1, 2026, and in consultation with LSEs and resource aggregators, to define and publicize methodologies for load modification protocols by which a LSE may reduce or modify its electrical demand forecast upon aggregated system operation of behind-the-meter load modifying technologies and programmatic measures deemed to reliably reduce or modify the LSE's electrical demand. The bill was vetoed.

SB 541 (Becker) of 2025, would have required the CEC, in consultation with specified entities, to analyze the cost-effectiveness of specific load flexibility programs and other types of load-shifting interventions and identify both the approximate amount of load shifting and the cost-effectiveness of each type of load-shifting intervention in the next update to the biennial integrated energy policy report after January 1, 2027, as provided. The bill was vetoed.

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: Yes

According to the Senate Appropriations Committee:

- Unknown ongoing costs, potentially in the millions of dollars annually (ratepayer funds), for the California Public Utilities Commission (CPUC) to establish new Qualifying Capacity methodologies, update formal proceedings, establish device-level measurement protocols and technical standards, enforce participation rules and verification mechanisms, coordinate with the California Independent Systems Operator (CAISO) to align participation models, modernize data infrastructure, and otherwise implement the provisions of this bill.
- The California Energy Commission (CEC) anticipates any costs would be minor and absorbable.

SUPPORT: (Verified 5/14/26)

Environment California (Co-Sponsor)
The Climate Center (Co-Sponsor)
350 Bay Area Action
350 Humboldt
Active San Gabriel Valley
Advanced Energy United
Ava Community Energy
California Alliance for Community Energy
California Efficiency + Demand Management Council
California Public Interest Research Group
California Solar & Storage Association
Center for Biological Diversity
Center for Community Energy
Center for Environmental Health
Ceres
City of Mountain View
Clean Coalition
CleanEarth4Kids.org
Climate Action California
Climate Action Campaign
Climate Health Now Action Fund
Community Environmental Council
Deploy Action
Derapi
Environmental Defense Fund
Environmental Protection Information Center
Environmental Working Group
ev.energy
Friends Committee on Legislation of California
Generac Power Systems
Immaculate Heart Community Environmental Commission
Leap
Local Clean Energy Alliance
Local Government Sustainable Energy Coalition
NextGen California
Pesticide Action and Agroecology Network
Qcells

Reclaim Our Power: Utility Justice Campaign
Renew Homes
Santa Cruz Climate Action Network
Sierra Club California
Silicon Valley Youth Climate Action
Solar Energy Industries Association
Solar United Neighbors Action
Tesla, Inc.
The Energy Coalition
Uniting the Central Coast for Action
U.S. Green Building Council California
Voltus, Inc.
Vote Solar

OPPOSITION: (Verified 5/14/26)

Coalition of California Utility Employees
Independent Energy Producers Association
Two Individuals

ARGUMENTS IN SUPPORT: According to the California Solar and Storage Association:

DERs are currently eligible to provide Resource Adequacy, but several rules prohibit them from providing their full capacity. In particular, DERs currently do not receive any credit for energy that is exported past the customer's utility meter onto the distribution system, significantly capping the potential for these resources to provide peak capacity when California's grid needs it the most. Consequently, this rule and several others have limited DERs' ability to provide Resource Adequacy as an additional resource that is available to utilities. ... This bill would put DERs on equal footing with large resources and allow them to compete and be called upon when they are a cost-effective resource. This will help put downward pressure on rates as it lowers the cost that load-serving entities pay for Resource Adequacy, and it will be a source of clean peak capacity.

ARGUMENTS IN OPPOSITION: According to the Coalition of California Utility Employees:

...there is no guarantee that that the DERs would actually provide resource adequacy. Allowing DERs to count for full resource adequacy credit is problematic if the DERs are not operated or controlled by the IOUs. There is no way to control third-party operation of them and imposing a penalty if the capacity is not delivered is not enough. History shows that penalties are just a part of doing business. This bill would count a DER as capacity even though it might not be available to a load serving entity to benefit the grid because it's being used to benefit the private interest of the customer.

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