
**SENATE COMMITTEE ON ENERGY, UTILITIES AND
COMMUNICATIONS**

Senator Ben Hueso, Chair

2019 - 2020 Regular

Bill No:	AB 1584	Hearing Date:	7/2/2019
Author:	Quirk		
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Urgency:	No	Fiscal:	Yes
Consultant:	Nidia Bautista		

SUBJECT: Electricity: cost allocation

DIGEST: This bill would require the California Public Utilities Commission (CPUC) to develop and use methodologies for allocating electrical system integration resource procurement needs to each load-serving entity (LSE) based on the contribution of that entity's load and resource portfolio to the electrical system conditions that created the need for the procurement.

ANALYSIS:

Existing law:

- 1) Requires the CPUC, in consultation with the California Independent System Operator (CAISO), to establish resource adequacy requirements for electrical corporations, electric service providers (ESPs), and community choice aggregators (CCAs), known collectively as LSEs, to ensure the reliability of electric service in the state while advancing, to the extent possible, the state's goals for clean energy, reducing air pollution, and reducing emissions of greenhouse gases (GHG). (Public Utilities Code §380)
- 2) Requires the CPUC to identify a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy in a cost-effective manner. The portfolio shall rely upon zero carbon-emitting resources to the maximum extent reasonable and be designed to achieve any statewide GHG emissions limits. Directs each electrical corporations to include in their procurement plans a strategy for procuring best fit and least cost generation which satisfies the CPUC's portfolio. Permits CCAs to submit their plan for satisfying their portion of the renewable integration needs identified in the CPUC's portfolio or achievement of the state's energy policy. Ensures that all costs resulting from nonperformance shall be borne by electrical corporation or CCA that failed to perform. (Public Utilities Code §454.51)

- 3) Requires the CPUC to adopt a process for each LSE to file an Integrated Resource Plan (IRP) to ensure each entity meets the following: (a) GHG emissions reduction targets for the electricity sector, (b) the Renewables Portfolio Standard (RPS), and (c) other goals and obligations. Requires each LSE to submit an IRP to the CPUC. (Public Utilities Code §454.52)
- 4) Directs the California Energy Commission (CEC) and the CPUC, where feasible, to authorize procurement of resources to provide grid reliability services that minimize reliance on system power and fossil fuel resources and, where feasible, cost effective, and consistent with other state policy objectives, increase the use of large- and small-scale energy storage. (Public Utilities Code §400).
- 5) Requires the California Air Resources Board (ARB) to ensure that statewide GHG emissions are reduced to at least 40 percent below the 1990 statewide GHG emissions level no later than December 31, 2030. (Health and Safety Code §38566).
- 6) Requires electric utilities to procure 60 percent of their retail sales of electricity from renewable energy by 2030. This is known as the RPS. (Public Utilities Code §399.11 et seq.).

This bill:

- 1) Requires the CPUC to develop and use methodologies for allocating electrical system integration resource procurement needs to each LSE based on the contribution of that entity's load and resource portfolio to the electrical system conditions that created the need for the procurement.
- 2) Requires the CPUC to develop and use methodologies for determining any costs resulting from a failure of a LSE to satisfy its allocation of those procurement needs.

Background

Load-serving Entities: IOUs, ESPs and CCAs. Several types of entities provide electricity service in California. Historically, the main distinction between electricity providers has been whether they are a municipal utility, rural cooperative, or an investor-owned utility (IOU). Who provides service to your home or businesses largely depends on the location of the home or business. For example, if you live in Los Angeles City, the municipal utility, the Los Angeles Department of Water and Power, provides electricity service, but if you live in East

Los Angeles, just a block away from the city limits, the community is served by an IOU. In more recent years, there has been a growth in additional electricity providers within the service territory of the IOU. These entities are referred to in statute as LSEs and also provide electric service within the service territory of the IOU, although the IOU continues to provide distribution, transmission, and billing services to all customers in their service territory. These LSEs include:

- IOUs: privately owned electrical corporations, such as Southern California Edison (SCE), that provide monopoly electric utility services in distinct, defined geographic territories. In addition to providing the distribution and transmission, and billing services, IOUs have historically provided the energy supply. IOUs are rate-regulated by the CPUC to ensure they provide service at a just and reasonable rate. IOUs also have an obligation to serve to all customers, any customers not served by ESPs or CCAs must, generally, be served by the IOU.
- ESPs: also known as direct access (DA) providers, provide electricity to end-use customers who choose the services of the ESP instead of the incumbent IOU or a CCA. An ESP uses the transmission and distribution infrastructure of the IOU to deliver electricity to the customer. ESP customers are generally large commercial customers (such as a university or large corporation) who wish to manage their own energy procurement decisions. ESP customers retain the option to return to the service of the incumbent IOU or to a CCA, if a CCA offers services in their area.
- CCAs: entities, such as MCE and Sonoma Clean Power, where local governments (either cities or counties) elect to buy or generate electricity on behalf of local residents while using the incumbent IOU's transmission and distribution infrastructure. An individual customer within the territory of a CCA is generally automatically opted-in to receive electric service from the CCA when the customer's local government elects to join the CCA. However, the customer retains the option to return to the service of the incumbent IOU. Customers, especially commercial customers, can opt to be served by an ESP, where ESP services are allowed.

Growth of LSEs. The combined procurement between CCA and DA service is anticipated to represent the majority (potentially 85 percent) of the customer load served in the IOU service territory in the coming decade or so.

Growth of CCAs. While IOUs have existed for nearly a century, CCAs are a more recent entity. In 2002, statute first allowed the formation of CCAs. It was not until nearly a decade later that the first CCA—Marin Clean Energy—came into existence. Today, there are 19 CCAs operating in the state with a dozen more communities exploring the formation of a CCA.

CCA growth is likely to cover substantial portions of the service territories of the state's three largest IOUs.

Growth of ESPs. Last year, the Legislature passed and the governor signed SB 237 (Hertzberg, Chapter 600, Statutes of 2018) which increased the limit of the DA program by 4,000 gigawatt hours for non-residential customers. The bill also directs the CPUC to provide recommendations to the Legislature by June 2020 on the adoption and implementation of a second DA program reopening. The opening of the DA cap creates some additional competition, as well as, uncertainty for the incumbent utility and the CCAs serving energy load that might migrate to an ESP.

SB 350 IRP. SB 350 (De León, Chapter 547, Statutes of 2015) established new targets to increase retail sales of renewable electricity to 50 percent by 2030. Subsequently SB 100 (De León, Chapter 312, Statutes of 2018) accelerated the goal to 60 percent by 2030. SB 350 also required each LSE—meaning an IOU, ESP, or CCA—to file a biennial IRP for approval or certification by the CPUC. The CPUC would then combine all LSEs' IRPs to ensure the state was on its path to meet the SB 350 goals, including GHG reductions and procurement of at least 50 percent of renewable resources by the year 2030.

CPUC IRP Decision. The CPUC has finalized the first two-year IRP cycle. The findings from the first IRP two-year cycle provides a sense of how LSEs are participating in the process and what potential adjustments may be needed to ensure the state remains on track to achieve its energy procurement-related goals. While recognizing that the first IRP cycle was a learning opportunity for LSEs and the CPUC, the exercise did surface a number of issues, including that the individual resource choices by the LSEs collectively did not result in a diverse and balanced portfolio of resources needed to ensure sufficiently reliable or environmentally beneficial statewide electricity resource portfolio. Additionally, it was often difficult for the CPUC to distinguish between an LSE's plan for a resource that is aspirational and one that has an executed contract. The CPUC also declined to certify 19 IRPs and required those LSE's to re-file with the information missing from their plan – generally information about criteria pollution.

CPUC IRP procurement track. In furthering the IRP process, the CPUC has initiated the "procurement track" of the IRP proceeding. In the ruling, the CPUC has identified two broad categories: backstop or backup procurement mechanism and those resources that may require collective action to bring to fruition (such as large facilities or new type of resources). The CPUC proposal states "the need to address near- and medium-term renewable integration and reliability resources as a type most in need of the CPUC's immediate attention." The CPUC has outlined a

timeline to provide for public comments with the goal of initiating these procurement activities by late 2019 or early 2020. Additionally, CPUC intends to address long-term reliability needs with a proposed decision in late 2020 or early 2021. With regards to the near- medium-term reliability issues, the CPUC is proposing to address concerns for a tightened bilateral market due to retirement of gas power plants in response to the once-through-cooling regulations and declining values of solar energy to count towards the LSE's resource adequacy requirements in August and September. The CPUC is proposing to require all LSEs to procure a proportional share of a total of 2,000 megawatts (MW) new peak capacity statewide to come on line by August 1, 2021 and require SCE to solicit for 500 MW of capacity from existing resources that are without a contract past 2021 to be procured as part of a medium-term contract (two-five years). The cost of the contract would be allocated using the cost-allocation mechanism (CAM).

CAM. The CAM is a regulatory process for allocating capacity costs of utility procurement across all benefitting customers. Conceived in a 2004 decision, adopted in a 2006 decision, affected by changes in law, and continuing to be adapted to new issues and circumstances even in 2014. The CAM is a fixture of the CPUC's Long-Term Procurement policy and is based on the principle that the costs and benefits of new generation should be shared by all benefitting customers in an IOU's service territory. In the IRP procurement proposal, the CPUC is proposing to have those costs allocated to all LSEs with resource adequacy (RA) requirements, not just those in SCE service territory.

Flexible resource adequacy. An interim flexible capacity requirement was implemented in 2015 to address ramping needs associated with integration of variable energy resources. The interim product is the largest three-hour net load ramp of the month plus 3.5 percent of peak load. Resources are counted as flexible RA capacity if they can be economically dispatched to ramp up or sustain output for three hours. Each year, the CAISO conducts a *Flexible Capacity Needs Assessment* to determine the quantity of economically dispatched capacity needed by CAISO to manage grid reliability during the largest three-hour continuous ramp in each month. The study is submitted to the CPUC. Flexible requirements are allocated once annually and then revised in April, alongside the local RA requirements. While intended to be in place for only three years, according to the CPUC, the efforts to develop a durable flexible product have proven challenging with parties failing to reach consensus on the key elements of what should constitute the flexible product.

Comments

Need for integration of renewables. Ensuring that each LSE is collectively meeting their customer and system needs is of significant importance to the state. Procurement portfolios indicate that LSE's future procurement is not leveraging the potential benefits of renewable diversity in location and fuel source. RPS goals are based on kilowatt hours – the utilities and other LSEs are required to procure a percentage of kilowatt hours delivered which is stated as retail sales, although the program has always required procurement to be based on “least-cost/best-fit.” The challenges of planning for best fit has significantly contributed to the duck curve - which reflects the high amount of solar resources in the middle of the day coupled with a decline of solar in the afternoon as the sun goes down, and high demand for electricity in the evening. The CAISO's projections of a 15,000 to 20,000 MW three hour increase in generation demand during sunset. Also important, to factor in that there were several days in 2018 when solar's maximum production was less than 20 percent of its installed capacity.

AB 1584. This bill attempts to address the need to ensure each LSE is procuring a balanced portfolio of resources by requiring the CPUC to allocate costs of generation based on each LSE's diverse portfolio and to what extent each LSE's portfolio contributed to that need, instead of allocating costs across each LSE, regardless of their individual contributions to the integration shortfall. According to the CPUC, this authority is already available to the CPUC. However, the sponsors of this bill cite the unwillingness of the CPUC to utilize such a mechanism when requiring new procurement. The sponsor wishes to have the CPUC adjust the cost allocation to be based on the shortfall of each LSE to meet its customers energy supply needs, utilizing a causation-based allocation methodology currently employed by the CAISO to allocate flexible resource adequacy capacity requirements. Such a proposal is intended to provide the proper incentives for each LSE to procure a diverse set of resources, rather than rely only on intermittent renewable resources which may exacerbate an imbalance in the electricity market. Opponents of this proposal raise concerns that such an approach is likely to limit the ability of LSEs to procure the resources of their choice. Assuming the costs allocated with these resources are significant, it may result in reduced financial ability for the LSE to procure other resources. Nonetheless, several of the opponents agree the CPUC's existing authority allows for such an approach. However, they would prefer to have this addressed within the existing IRP process or resource adequacy proceedings. They may be correct, the CPUC action would be a preferred approach. However, the CPUC's unwillingness to allocate costs in such a manner, including in the proposed IRP procurement track ruling may merit legislation to require them to consider this allocation approach.

Need for amendments. The Large-scale Solar Industry raises several concerns, including that the language in this bill “curtailment mitigation capability” is undefined and introduces a new term. *As such, the author and committee may wish to strike that term from this bill so as to not unnecessarily confuse the issue.*

Prior/Related Legislation

SB 155 (Bradford, 2019) makes specified requirements concerning the plans for energy procurement by entities within the jurisdiction of the CPUC. The bill is scheduled to be heard by the Assembly Committee on Natural Resources.

SB 1136 (Hertzberg, Chapter 851, Statutes of 2018) revised existing statute that requires the CPUC, in consultation with the CAISO, to establish RA requirements for the state’s electric LSEs.

SB 338 (Skinner, Chapter 92, Statutes of 2017) required the consideration of meeting net-load peak energy and reliability needs with specified resources as part of the IRP.

SB 100 (De León, Chapter 312, Statutes of 2018) established the 100 Percent Clean Energy Act of 2017 which increases the RPS requirement from 50 percent by 2030 to 60 percent, and creates the policy of planning to meet all of the state's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045, for a total of 100 percent clean energy.

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

SUPPORT:

California Wind Energy Association (Sponsor)
California Biomass Energy Alliance
Southern California Edison
The Utility Reform Network

OPPOSITION:

350 Bay Area Action
California Alliance for Community Energy
Indivisible California Green Team
Large-scale Solar Association
Local Clean Energy Alliance
Muni-Fed Energy
Récolte Energy

San Diego 350
San Jose Community Energy Advocates
Solana Energy Alliance
Solar Energy Industries Association
Sustaenable
Sustainable Marin
Sustainable Novato
The Climate Reality Project
25 Individuals

ARGUMENTS IN SUPPORT: According to the author:

The electricity market has become increasingly fragmented, with more than 40 CPUC-jurisdictional load-serving entities (LSEs) in operation, including investor-owned utilities (IOUs), community choice aggregators (CCAs), and electric service providers (ESPs). By 2021, all LSEs must have 65% of their renewable resources under long-term contract. Portfolios that are not carefully balanced will impose indirect costs on the shared electrical system.

To the extent that the CPUC does not or is not able to require all LSE portfolios to conform to a system-wide optimal portfolio, California could end up with an overall resource portfolio that drives up system operation costs, which will ultimately be charged to all customers. In addition, to the extent that system balancing resources are gas-fired, they will increase California's GHG emissions.

ARGUMENTS IN OPPOSITION: Those in opposition to this bill raise several concerns about the extent that this bill may hamstring community choice programs and limit decision-making by local governments to address the particular needs of their own customers and communities. Those opposed also suggest this bill may be premature, in light of the active IRP procurement track. The Large-scale Solar Association also raises concerns that the bill will hinder the state's efforts to achieve its greenhouse gas reductions goals, particularly by impacting CCA's energy procurement.

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