SENATE COMMITTEE ON ENERGY, UTILITIES AND COMMUNICATIONS

Senator Ben Hueso, Chair 2021 - 2022 Regular

Bill No: AB 2667 **Hearing Date:** 6/27/2022

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Urgency: No Fiscal: Yes

Consultant: Nidia Bautista

SUBJECT: Integrated Distributed Energy Resources Fund

DIGEST: This bill establishes the Integrated Distributed Energy Resources Fund as a special fund in the State Treasury to fund, upon appropriation by the Legislature, incentives to support statewide customer adoption of clean distributed energy resources (DERs).

ANALYSIS:

Existing law:

- 1) Requires the California Public Utilities Commission (CPUC) to require the administration, until January 1, 2026, of a self-generation incentive program to increase the development of distributed generation resources and energy storage technologies. Requires the CPUC, in administering the program, to provide an additional incentive of 20 percent from existing program funds for the installation of eligible distributed generation resources manufactured in California. (Public Utilities Code §379.6)
- 2) Establishes the State Energy Resources Conservation and Development Commission (also known as the California Energy Commission (CEC)) with various responsibilities with respect to developing and implementing the state's energy policies. (Public Resources Codes §§ 25200-25233.5)
- 3) Requires the CPUC, in consultation with the California Independent System Operator (CAISO), to establish resource adequacy (RA) requirements for all load-serving entities (LSEs), specifically electric investor-owned utilities (IOUs), electric service providers (ESP), and community choice aggregators (CCAs). RA requirements ensure the reliability of electrical service in California, while advancing the state's goals for clean energy, reducing air pollution, and reducing emissions of greenhouse gases (GHG). Requires the CPUC to exercise its enforcement powers to ensure that electrical corporations,

ESP, and CCAs comply with the RA requirements. (Public Utilities Code §380)

4) Defines the "Access and functional needs population" as individuals who have developmental or intellectual disabilities, physical disabilities, chronic conditions, injuries, limited English proficiency or who are non-English speaking, older adults, children, people living in institutionalized settings, or those who are low income, homeless, or transportation disadvantaged, including, but not limited to, those who are dependent on public transit or those who are pregnant. (Government Code § 8593.3)

This bill:

- 1) Establishes the Integrated Distributed Energy Resources Fund as a special fund in the State Treasury, the moneys in which would be available to the CEC, upon appropriation by the Legislature.
- 2) Requires the CEC to administer the fund, in consultation with the CPUC and the California Air Resources Board (CARB), to provide incentives to support statewide customer adoption of clean DERs.
- 3) Requires the CEC to establish a system to equitably award incentives for DERs.
- 4) Requires the CEC to establish a process to allow a load-serving entity to apply for incentives on behalf of its generation service customer or a set of its generation service customers as part of that LSE's customer program to meet or reduce its RA requirement obligations.
- 5) Makes several findings and declarations related to Public Utilities Code §218, known as "the over-the-fence rule."

Background

Self-Generation Incentive Program (SGIP). Self-Generation Incentive Program (SGIP) was established by statute, AB 970 (Ducheny, Chapter 329, Statutes of 2000), and provides incentives to support existing, new, and emerging DER. SGIP provides rebates for qualifying distributed energy systems installed on the customer's side of the utility meter and sized no larger than what is needed to meet on-site energy needs. Qualifying technologies include wind turbines, waste heat to power technologies, pressure reduction turbines, internal combustion engines, microturbines, gas turbines, fuel cells, and advanced energy storage systems. SGIP

has evolved since 2001, with eligibility requirements, program administration, and incentive levels all changing over time in response to California's evolving energy landscape. While SGIP has provided incentives for a variety of DERs, more recently, the program has largely focused on energy storage systems. The program has several goals:

- Environment reduce GHGs, integrate renewables and reduce criteria air pollutants;
- Grid support reduce or shift peak demand, reduce grid costs, provide ancillary services;
- Market transformation support technologies that have the potential to thrive in future years without rebates; and
- Maximize ratepayer value and ensure equitable distribution of costs and benefits.

In 2018, the CPUC established an "Equity Budget" for SGIP to ensure that a portion of the SGIP budget will be reserved for projects that are located in disadvantaged and low-income communities and for customers that meet specific eligibility requirements. The objective of the investments are to:

- (1) bring positive economic and workforce development opportunities to the state's most disadvantaged communities;
- (2) help reduce or avoid the need to operate conventional gas facilities in these communities, which are exposed to some of the poorest air quality in the state; and
- (3) ensure that low-income customers, and non-profit or public sector organizations in disadvantaged or low-income communities, have access to energy storage resources.

SGIP funding. Existing law authorizes the CPUC to direct electric IOUs to collect \$166 million annually from ratepayers through 2024 to fund SGIP and requires the CPUC to administer the program until January 1, 2026. As a result, the program is only available to customers located in the service territories of the electric IOUs.

SGIP projects. SGIP allocates 85 percent of the funds to energy storage technologies. Based on the 2019 evaluation (published in August 2021), by the end of 2019, the SGIP had provided incentives to 8,875 energy storage systems representing almost 187 megawatts (MW) of rebated capacity. Most energy storage systems rebated by the SGIP program are installed in residential settings (8,061 of 8,875 or slightly more than 90 percent), followed by a variety of nonresidential facilities, including schools and industrial facilities.

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 program is designed to ensure that LSEs have sufficient forward capacity to meet peak load with a 15 (recently adjusted to 17) percent reserve margin. The current RA program consists of system, local, and flexible requirements for each month of a compliance year. The CPUC issues citations and initiates enforcement actions when LSEs do not fully comply with RA program rules. LSEs have the opportunity to appeal these citations.

RA capacity value for DER. Each generation resource used by LSEs to satisfy the CPUC's RA requirements must be assessed for its qualifying capacity and deliverability.

CPUC conducts qualifying capacity calculation. Qualifying capacity represents a resource's maximum capacity that is eligible to be counted towards meeting the CPUC's RA requirements. The CPUC has adopted qualifying capacity counting conventions, which are computed based on the applicable resource type, established in CPUC Decision D.10-06-036, with updated counting methodologies in subsequent decisions.

California Independent System Operator (CAISO) conducts deliverability assessment. Once the qualifying capacity values are calculated, the CAISO conducts a deliverability assessment to produce the annual Net Qualifying Capacity values of each resource. When the Qualifying Capacity for a resource is greater than the resource's deliverable capacity, the Net Qualifying Capacity is adjusted to the deliverable capacity value. The CAISO conducts deliverability assessments two to three times a year for both new and existing resources.

RA for behind-the-meter DER. DER Demand Response resources and distribution connected battery storage can be counted towards a load-serving entity's RA obligations. However, as of now, the CPUC has not adopted a resource capacity value for other behind-the-meter resources. In recent CPUC decisions (D. 20-06-031 and D. 21-06-029), the CPUC considered proposals to provide capacity value for behind-the-meter resources solar-plus-storage (hybrid) resources and standalone storage. However, the CPUC declined to do so in both decisions, noting

that behind-the-meter resource exports are not guaranteed to deliver when resources are needed most. Unlike in-front-of-the-meter resources, a behind-the-meter-resource does not undergo a deliverability study by the CAISO. According to the CPUC, there is concern about the lack of visibility and availability of behind-the-meter resources for dispatch in CAISO markets. In the recently approved CPUC Decision within the RA proceeding, the CPUC also declined to establish a capacity value for behind-the-meter resources unless threshold issues were resolved. The 2021 CPUC Decision (D. 21-06-029) restates a number of unresolved threshold and deliverability barriers associated with behind-the-meter DER, including: RA requirements, wholesale market participation, cost for energy, load forecasting, and several others.

Governor's Budget proposals include funding for solar and energy storage DERs. The Governor's proposed budget for 2022-23 includes proposals to provide incentives for DER, including nearly \$1 billion for solar plus storage incentives via SGIP and funding via the Strategic Electric Reliability Reserve. As of the writing of this analysis, the Legislature had adopted budget action to approve funding (\$21 billion) for energy related programs and projects, including those for solar and storage incentives, but had deferred details to future trailer bills. The Governor's proposal for solar and storage projects proposes to target seventy percent of the \$970 million for residential low-income, Tribal, and disadvantaged communities. The remaining thirty percent of funds would be available for general market incentives for battery storage system deployment. According to the budget proposal:

The deployment of these systems is intended to help improve electric service reliability and resiliency for low-income residential customers who may experience power outages caused by wildfires or other events; contribute to grid reliability and resiliency during grid stress events and during peak and net-peak hours; reduce electric sector greenhouse gas (GHG) emissions; create new, clean energy jobs; reduce low-income residential customers' electric bills; and create new avenues for Tribes and underrepresented communities to access and benefit from clean energy resources.

The proposal notes that SGIP funding for communities experiencing wildfire threats and proactive power shutoffs is fully subscribed with wait list status for qualifying customers seeking to assess the incentive payments. The budget proposal is intended to address the demand for incentives and capture the benefits to the electric grid.

Comments

Statewide incentive program. This bill proposes to establish the Integrated Distributed Energy Resources Fund, as a special fund in the State Treasury, which upon appropriation by the Legislature, would direct the CEC to provide incentives to support the deployment of DERs. The proposed program is similar to the SGIP program in providing incentives for DERs. However, whereas, the SGIP program is funded from distribution rates collected from customers within state's three large electric IOUs, the proposed program would be funded from the state budget and, therefore, available to residents and businesses across the state, including customers of the state's smaller electric IOUs, publicly-owned utilities, and electric cooperatives.

DER incentives should not be stymied by unresolved RA concerns/issues. As currently drafted, this bill proposes to authorize LSEs to apply for incentives on behalf of generation customers in order to help satisfy part of its RA obligations. The bill lays out details regarding this arrangement. However, as noted above there are many unresolved issues with regards to the behind-the-meter resources' capacity value and deliverability which need to be resolved prior to decisions to authorize these resources to satisfy RA obligations. As such, given the pending issues at the CPUC regarding the treatment of DERs to satisfy RA, the author and committee may wish to delete subdivision (e) so as not to stymie the deployment of the incentive program.

Stacking incentives. This bill would allow for the recipients of the DER incentives to also collect other available incentives. However, noting the SGIP program is provides incentives for DERs, such stacking of incentives may reduce the access to DERs by more recipients. As such, the author and committee may wish to amend subdivision (d) to prohibit incentive stacking.

Who benefits? Unlike the Governor's budget proposal which would target 70 percent of funding to low-income residents, this bill provides general direction to the CEC to equitably award incentives with consideration for various populations. These populations include disadvantaged communities, vulnerable communities, and the access and functional needs population. However, the Legislature may wish to provide clear direction to the CEC in administering the program regarding the proportion of funding that should be attributed to specific populations.

Public works projects. Public works projects are, generally, those funded in part by public dollars. All workers employed on public works projects must be paid the prevailing wage determined by the Director of the Department of Industrial Relations (DIR), according to the type of work and location of the project. In

California, the prevailing wage rate is an hourly rate paid on public works projects that is often set in the terms of a collective bargaining agreement. Prevailing wage creates a level playing field by requiring an across-the-board rate for all bidders on publically subsidized projects. This bill explicitly requires the incentives for DERs over 15kW are public works projects that must provide prevailing wages.

Public Utilities Code § 218. The findings and declarations of this bill include several statements intended to argue the merits and history of Public Utilities Code Section 218, known as the "over-the-fence-rule." Section 218 requires any entity who wishes to sell energy to more than two contiguous parcels or across the street to become a regulated electrical corporation, subject to the full regulatory authority of the CPUC, with a few exceptions. The application of Public Utilities Code Section 218 is an issue actively debated within the CPUC's Microgrid and Resiliency proceeding (R. 19-09-009). A couple of the parties to the proceeding argued unsuccessfully to relax the limitations imposed by Section 218 in order to allow a microgrid provider/owner/operator to serve multiple customers or properties, beyond those detailed in the statute. These parties referenced a 1921 court case decision as part of their argument to authorize the relaxation. However, the CPUC very clearly rejected those arguments in D. 21-01-018 of the proceeding, noting the statute can only be changed through legislative action and stating: "Allowing private entities outside of Commission [CPUC] jurisdiction to build electrical distribution systems and deliver power to customers presents serious risks to public safety and welfare." This bill proposes no changes to Public Utilities Code Section 218, as such the statements in the findings and declarations raise concerns about their appropriateness within this bill. *The author and* committee may wish to delete the findings and declarations referencing Section 218. Instead, the author and committee may wish to add explicit language regarding incentives for DER as proposed in this bill, specifically prohibiting the CEC from providing incentives for DERs that are not in compliance with the requirements of Section 218.

Need for clarifying amendments. The author and committee may wish to amend the bill to narrow the incentive program for DER, including solar and wind and storage, that allows for customer demand management, managed charging of electric vehicles, and clean backup power. The author and committee may wish to amend the bill to add additional amendments to conform the proposed program with the SGIP, where applicable.

Prior/Related Legislation

AB 2143 (Carrillo, 2022) requires prevailing wage are paid for renewable energy installations with a generating capacity of more than 15 kilowatts (kWs) that

receives service pursuant to an electric utility's net energy metering (NEM) tariff. The bill is scheduled to be heard in the Senate Committee on Labor, Public Employment and Retirement on June 29th. dy

AB 1144 (Friedman, Chapter 394, Statutes of 2019) required the CPUC to allocate at least 10 percent (\$16.6 million) of the 2020 funds from SGIP for the installation of energy storage and other DERs at facilities that provide critical infrastructure to communities in High Fire Threat Districts to support community resiliency.

SB 700 (Wiener, Chapter 839, Statutes of 2018) extended the sunset date for SGIP by five years, requires the CPUC to adopt requirements for storage systems to ensure that they reduce GHG emissions, and prohibits generation technologies using non-renewable fuels from obtaining SGIP incentives as of January 1, 2020.

AB 1637 (Low, Chapter 658, Statutes of 2016) doubled the annual funding authorization for SGIP and revised and extended the net energy metering program for fuel cells by five years.

AB 1478 (Committee on Budget, Chapter 664, Statutes of 2014) extended the sunset to collect SGIP funds through 2019 and extended the program's sunset to 2021.

SB 861 (Committee on Budget and Fiscal Review, Chapter 35, Statutes of 2014) established SGIP eligibility restrictions for distributed generation resources and required the CPUC to establish a capacity factor for DER technologies.

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

SUPPORT:

California State Association of Electrical Workers Coalition of California Utility Employees Environmental Defense Fund NRG Energy Prologis

OPPOSITION, unless amended:

California Alliance for Community Energy
California Efficiency + Demand Management Council
California Solar & Storage Association
Capstone Green Energy
Clean Coalition
Enel X

Microgrid Resources Coalition The Climate Center ZNE Alliance

ARGUMENTS IN SUPPORT: According to the author:

As California faces climate-triggered extreme weather events, natural disasters, reliability planning challenges, energy market instabilities due to global geopolitical unrest, the state should expand deployment of clean distributed energy resources (DER) as a critical tool to support statewide and economy-wide decarbonization, resiliency, and equity objectives. AB 2667 would create a new incentive program at the CEC to support innovative new approaches to DER adoption based on DER functional attributes in a more technology neutral manner to support the collective needs of the grid.

ARGUMENTS IN OPPOSITION: The entities in opposition to the bill raise concerns regarding: (1) the findings and declarations concerning Public Utilities Code Section 218, (2) defining all DER projects over 15kW as public works, and (3) concerns regarding the dispatching of resources as proposed in subdivision (e). The Microgrid Resources Coalition, which includes many of the entities opposed to the bill, states "the coalition has serious concerns with the bill and its implications for microgrids and DER deployment within communities across California."