
THIRD READING

Bill No: SB 288
Author: Wiener (D) and Nielsen (R), et al.
Amended: 5/17/19
Vote: 21

SENATE ENERGY, U. & C. COMMITTEE: 11-0, 4/10/19
AYES: Hueso, Moorlach, Chang, Dodd, Hill, McGuire, Rubio, Skinner, Stern,
Stone, Wiener
NO VOTE RECORDED: Bradford, Hertzberg

SENATE APPROPRIATIONS COMMITTEE: 4-2, 5/16/19
AYES: Portantino, Bradford, Hill, Wieckowski
NOES: Bates, Jones

SUBJECT: Electricity: renewable resource self-generation and storage

SOURCE: California Solar & Storage Association

DIGEST: This bill requires specified electric utilities to establish streamlined and standardized processes to review requests to interconnect to the electrical grid from customers seeking to install renewable energy and energy storage systems on the customer-side of the meter.

ANALYSIS:

Existing law:

- 1) Requires electrical corporations and publicly owned utilities (POUs), among others, to develop, and make available to eligible customer-generators, standard contracts or tariffs for net-energy metering (NEM) if the total generation capacity used by eligible customer-generators exceeds five percent of those utilities' aggregate customer peak demand. Requires the California Public Utilities Commission (CPUC) to develop a standard contract or tariff which may include NEM, for eligible customer-generators with a renewable electrical

generation facility that are customers of a large electrical corporation, as defined, to be offered to eligible customer-generators beginning January 1, 2017, or prior to that date if ordered to do so by the CPUC because the customer-generator has reached the five percent limit. (Public Utilities Code §2827.1)

- 2) Authorizes the CPUC, in consultation with the California Energy Commission, to annually collect not more than double the amount authorized for the self-generation incentive program (SGIP) in the 2008 calendar year, through December 31, 2024. Requires the CPUC to require the administration of the program for distributed energy resources (DERs) originally established by AB 970 (Ducheny, Chapter 329, Statutes of 2000) until January 1, 2026. Limits the incentives of the SGIP to DERs that the CPUC, in consultation with the California Air Resources Board, determine will achieve reductions in emissions of greenhouse gases (GHG). (Public Utilities Code §379.6)
- 3) Authorizes the CPUC to establish an expedited distribution grid interconnection dispute resolution process with the goal of resolving disputes over interconnection applications that are within the jurisdiction of the CPUC in no more than 60 days from the time the dispute is formally brought to the CPUC. If the CPUC establishes an expedited distribution grid interconnection dispute resolution process, the CPUC may provide exceptions to the 60-day time period when more than 60 days are needed, to fairly and safely address a dispute. (Public Utilities Code §769.5)

This bill:

- 1) Makes several findings and declarations concerning the potential benefits of distributed energy resources and the need to reduce impediments to interconnecting these resources to the electrical grid.
- 2) Requires the governing boards of specified POUs and the CPUC for the electrical corporations to establish a streamlined and standardized process for review by those utilities of requests to interconnect to the electrical grid from customers seeking to install renewable energy and energy storage systems on the customer-side of the meter. Requires the review process to minimize uncertainty, the time and cost of the review, as specified.

Background

Connecting to the electrical distribution grid. Investor-owned utilities (IOUs) and POUs own the utility lines that serve local areas, also known as the distribution

grid. The interconnection is the physical connection between a distributed energy resource (DER) and the grid. Disputes can arise when the utility who owns, manages, and maintains the grid won't connect DERs projects. A typical dispute occurs when the utility requires system improvements for safety purposes and the DERs may object to some or all of the costs of the improvements.

Electric Rule 21 Interconnection Tariff. CPUC Electric Tariff Rule 21 is a tariff that describes the interconnection, operating and metering requirements for generation facilities to be connected to a utility's distribution system. The tariff provides customers wishing to install generating or storage facilities (types of DERs) on their premises with access to the electric grid while protecting the safety and reliability of the distribution and transmission systems at the local and system levels. As with most tariffs, each IOU is responsible for administration of Rule 21 in its service territory and maintains its own version of the rule. Applicants wishing to interconnect to the grid can select two evaluation processes, depending on eligibility requirements: Fast Track or Detailed Study. The Fast Track process is for projects under three megawatts, non-exporting generation facilities, and NEM facilities. For all other projects, a detailed study is required that requires more evaluation and assessment. The intent of the evaluations for both processes are to:

- Ensure the electric distribution system is capable of managing export generation from DERs.
- Ensure the DERs will not have adverse impacts on the existing electric distribution system that would jeopardize safe and reliable electric service
- Determine whether upgrades are needed to accommodate the DERs on the electric distribution system at a specific location.

Solar-paired storage projects follow the same general interconnection processes. As part of the application, the applicant selects an operational mode for their storage system. The specific review process is dependent on the project size and operational mode of the project. Rule 21 also establishes a dispute resolution process that first provides a structure for bilateral negotiations between representatives of a generation facility and the IOU, and then directs unresolved disputes to the CPUC's Alternative Dispute Resolution process, which is administered by the CPUC's Administrative Law Judge Division. AB 2861 (Ting, Chapter 672, Statutes of 2016) established an expedited distribution grid interconnection dispute resolution process with the goal of resolving disputes over interconnection applications that are within the jurisdiction of the CPUC in no more than 60 days from the time the dispute is formally brought to the CPUC.

Additionally the CPUC has addressed interconnection issues through Order Instituting Rulemaking to Consider Streamlining Interconnection of Distributed Energy Resources and Improvements to Rule 21 (R. 17-07-007). The CPUC is currently in an active proceeding in the new successor to the NEM Tariff, which is also expected to address potential improvements to streamline the interconnection process, as necessary.

Is a bill necessary? According to the sponsor, the California Solar & Storage Association, there have been some challenges with the ability of DERs owners to connect to the distribution grid. The sponsor provided some examples including two industrial/commercial class projects that experienced repeated delays in their efforts to connect within Pacific Gas & Electric's distribution grid. These projects required upgrades to the distribution grid that the sponsor of this bill believe were unnecessarily delayed for weeks and months. The sponsors also noted an agricultural customer's experience to connect a project that the utility said would require a \$1.3 million upgrade to the substation to interconnect a 230 kilowatts (kW) solar system. While the utility estimated the upgrades would take 14 to 20 months, the sponsor alleges that the utility then redesigned the upgrade after 20 months, adding another year the timeline. After repeated calls and meetings, according to the sponsor of this bill, the utility has allowed a partial use of the solar system at 45 kW of generation. Aside from these two examples, the sponsor of this bill notes other concerns with interconnection efforts across the state.

Generally, the concerns noted are about the time it takes for temporary disconnection for a contractor to do electrical work (citing a San Diego Gas & Electric case where a customer waited three and a half months) and a general lack of communication from the IOUs. In terms of complaints with POUs, the sponsor also noted delayed and inconvenient interconnection. Specifically, the sponsors noted challenges with some POUs who require wet-signatures and multiple copies, requiring hard copies of documents, requiring fees are paid by check, and differences in load justification policies among the POUs. The sponsor of this bill also provided the following examples and claims of issues interconnecting DERs to POUs:

- the City of Colton lacks an effective online portal.
- Imperial Irrigation District has “excessive rigidity with design requirements and is at times unresponsive”.
- Banning Electric Utility lacks a process for interconnection of battery storage and are slow to review plans.
- Glendale requires an energy storage meter not required by other utilities.
- City of Redding requires three wet-signed original interconnection agreements mailed to their office.

- Silicon Valley Power requires wet-signed or faxed documents, but not email.

POUs. This bill requires each electric IOU and specified POU to establish a streamlined process to review customer requests to interconnect their DER to the electrical grid. This bill exempts the smaller POU, those with an annual electrical demand less than 700 gigawatt hours over three years, beginning in 2016 through 2019. As a result, the requirements of this bill are likely to be limited to the same POU who are required to submit an Integrated Resources Plan:

- Burbank Water and Power
- City & County of San Francisco
- City of Anaheim
- City of Palo Alto
- City of Pasadena
- City of Riverside
- City of Vernon
- Glendale Water and Power
- Imperial Irrigation District
- Los Angeles Department of Water and Power
- Modesto Irrigation District
- Redding Electric Utility
- Roseville Electric
- Silicon Valley Power
- Sacramento Municipal Utility District
- Turlock Irrigation District

Related/Prior Legislation

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

AB 2861 (Ting, Chapter 672, Statutes of 2016) authorized the CPUC to establish an expedited distribution grid interconnection dispute resolution process to resolve disputes within 60 days, unless it determines more time is needed. Specified the elements to be included in the dispute resolution process and requires the CPUC to establish a technical panel, a review panel, and a public process for each dispute.

AB 1637 (Low, Chapter 658, Statutes of 2016) doubled the annual funding authorization for SGIP and revised and extended the NEM 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 distributed energy resource technologies.

AB 327 (Perea, Chapter 611, Statutes of 2013), among its many provisions, requires the CPUC to develop a new standard contract or tariff for new NEM customers of the large IOUs by July 1, 2015, that must be used beginning January 1, 2017, or earlier if the NEM cap has been reached. The CPUC will be required to ensure that the new standard contract or tariff for rates, terms of service, and billing rules is based on the electrical system costs and benefits received by nonparticipating customers and prevents a cost shift to non-NEM customers.

AB 970 (Ducheny, Chapter 329, Statutes of 2000) enacted the California Energy Security and Reliability Act of 2000 to expedite siting of certain power plants and implement new energy conservation and demand management programs. The bill required the CPUC to establish incentives for distributed generation resources.

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

According to the Senate Appropriations Committee, there are minor fiscal impacts.

SUPPORT: (Verified 5/16/19 – prior version of bill)

California Solar & Storage Association (source)
350: Bay Area Action, Chico, Inyo, Sacramento, Silicon Valley, South Bay Los Angeles, SoCal, Ventura County Climate Hub
Advanced Energy Economy
Almond Alliance of California
Almont Orchards Inc.
Aztec Solar
Bar ALE, Inc.
Borrego Solar Systems
Brightline Defense Project

Building Owners and Managers of California
California Alliance for Community Energy
California Building Industry Association
California Business Properties Association
California Democratic Party's Environmental Caucus
California Energy Storage Alliance
California Environmental Justice Alliance
California Housing Partnership Corp.
California League of Conservation Voters
Carriere Family Farms
Center for Climate Protection
Center for Sustainable Energy
Ceres
Coalition for Adequate School Housing
Coalition to Protect San Luis Obispo County
Crain Orchards, Inc.
Designing Accessible Communities
El Dorado County Farm Trails
Empire Farming Company
ENGIE Energy Services
Environment California
Fossil Free California
Green Technical Education and Employment
GRID Alternatives
Gyppo Ale Mill
Indivisible: CA-43, California Green Team, Marin, Napa, Peninsula CA-14,
Resistance, Elk Grove CA-07 Committee, San Francisco, Sausalito, South Bay –
LA, West Marin
Jim Faulbaum Construction
Keyawa Orchards, Inc.
Lagorio Brothers, Inc.
Loch & Union Distilling
Martin Orchards, Inc.
Merced City School District
Micro Paradox
Mothers Out Front
Napa Climate Now
NBN Properties LLC
Orlando Family, LLC
Paiva Farm Management, Inc.

Peninsula Clean Energy
Peoples' Environmental Network, Tuolumne County
POLIT Farms
Premier Mushrooms Inc.
Prima Frutta Packing Inc.
Progressive Democrats of the Santa Monica Mountains
Rising Sun Center for Opportunity
Rooted in Resistance
Silicon Valley Leadership Group
Solar and Fire Education S.A.F.E.
Solar Energy Industries Association
Solar Richmond
Solar Rights Alliance
Solar United Neighbors
SunPower
Sunrun Inc.
Sustaenable
Taylor Brothers Farms, Inc.
TechNet
Tesla
The Greenlining Institute
The Hignell Companies
The Resistance – Northridge, Indivisible
Violich Farms
Vivint Solar
Vote Solar
White Rock Vineyards

OPPOSITION: (Verified 5/22/19 – prior version of bill)

Imperial Irrigation District
Independent Energy Producers
Pacific Gas and Electric Company
Sacramento Municipal Utility District
The Utility Reform Network

ARGUMENTS IN SUPPORT: The author has noted the benefits of a streamlined interconnection process as proposed by this bill, stating that SB 288 will ensure that all California residents and businesses can easily procure clean, cheap electricity from onsite distributed energy resources or “DERs,” including solar power and energy storage. This bill also addresses a main barrier to greater

deployment of DERs: delayed interconnection to the grid that can take months or even years. By ensuring timely interconnection, SB 288 will “guarantee that all California consumers can exercise their right to purchase the cleanest, cheapest power available.”

ARGUMENTS IN OPPOSITION: The entities opposed to this bill raise several issues, most of which deal with language that is no longer in the bill. However, as it relates to the language remaining in the bill, the entities opposed have expressed concerns that they do not understand where and what problems exist that this bill seeks to address, and several utilities cite the improvements and investments made over the years to address interconnection issues.

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