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**SENATE COMMITTEE ON ENERGY, UTILITIES AND  
COMMUNICATIONS**  
**Senator Ben Hueso, Chair**  
**2021 - 2022 Regular**

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**Bill No:** SB 617 **Hearing Date:** 4/26/2021  
**Author:** Wiener  
**Version:** 4/19/2021 Amended  
**Urgency:** No **Fiscal:** Yes  
**Consultant:** Nidia Bautista

**SUBJECT:** Residential solar energy systems: permitting

**DIGEST:** This bill requires cities, counties, and city and county, as specified, to implement an online, automated permitting platform that verifies code compliance and issues permits in real time to a licensed contractor for a solar energy system, as specified. This bill also authorizes the California Energy Commission (CEC) to provide technical assistance and grant funding to cities and counties to comply with the requirements for the online platform.

**ANALYSIS:**

Existing law:

- 1) Establishes the California Public Utilities Commission (CPUC) has regulatory authority over public utilities, including electrical corporations, as defined. (Article XII of the California Constitution).
- 2) Decisions of the CPUC adopted the California Solar Initiative, which is administered by electrical corporations and subject to the CPUC's supervision. (CPUC D. 06-01-024)
- 3) Requires the CPUC and the State Energy Resources Conservation and Development Commission (California Energy Commission (CEC)) to undertake certain steps in implementing the California Solar Initiative (CSI). Specifies that the financial components of the CSI include, among other programs, programs for the installation of solar energy systems on new construction, which collectively are known as the New Solar Homes Partnership Program. Requires the program, which is administered by the CEC, to be funded by charges in the amount of \$400,000,000 collected from customers of the state's three largest electrical corporations – Pacific Gas & Electric (PG&E), Southern California Edison (SCE) and San Diego Gas and Electric Company (SDG&E). If specified moneys are exhausted, existing law authorizes the CPUC to require each of those electrical corporations to continue

the program pursuant to guidelines established by the CEC for the program until the \$400,000,000 monetary limit is reached. If the CPUC requires the continuation of the program, existing law requires any funding made available to be encumbered no later than June 1, 2018, and disbursed no later than December 31, 2021. Existing law makes the provisions of the program inoperative on June 1, 2018. (Public Utilities §2851)

This bill:

- 1) Requires every city and county to implement an online, automated permitting platform that verifies code compliance and instantaneously issues permits for a solar energy system that is no larger than 38.4 kilowatts (kW) alternating current nameplate rating and an energy storage system paired with a solar energy system that is no larger than 38.4 kW alternating current nameplate rating, as specified.
- 2) Requires a city or county to amend a certain ordinance to authorize a residential solar energy system and an energy storage system to use the online, automated permitting platform.
- 3) Prescribes a compliance schedule for satisfying these requirements, which would exempt a county with a population of less than 150,000 and all cities within a county with a population of less than 150,000.
- 4) Requires a city with a population of 50,000 or less that is not otherwise exempt to satisfy these requirements by September 30, 2023, while cities and counties with populations greater than 50,000 that are not otherwise exempt would be required to satisfy the requirements by September 30, 2022.
- 5) Requires a city, county, or a fire department, district, or authority to report to the CEC when it is in compliance with specified requirements, in addition to other information. By increasing the duties of local officials, this bill would impose a state-mandated local program.
- 6) Prohibits the provision of specified funding sources to cities and counties not in compliance with certain provisions relating to solar energy systems and fees charged for their installation or if they are not in compliance with provisions of this bill.
- 7) Authorizes the CEC to provide technical assistance and grant funding to cities and counties in order to support the above-described requirements.

- 8) Requires the CEC to develop grant guidelines and other requirements, as specified, by May 1, 2022, and make applications available no later than June 1, 2022. This bill would require the CPUC to require PG&E, SCE, and SDG&E to repurpose \$20,000,000 supporting the New Solar Homes Partnership Program, as specified, to providing technical assistance and grant funding and to pay the CEC's program costs, as specified.
- 9) Requires the CEC to set guidelines for cities and counties to report to the CEC on the number of permits issued for solar energy systems and an energy storage system paired with a solar energy system and the relevant characteristics of those systems.
- 10) Provides that with regard to certain mandates no reimbursement is required by this act for creating a new crime or infraction. However, this bill provides that if the Commission on State Mandates determines that this act contains other costs mandated by the state, reimbursement to local agencies for those costs shall be made pursuant to statute.

## Background

*Solar energy systems.* The cost of installing solar energy systems—devices or structural design features that collect, store, and distribute solar energy for heating, cooling, and electricity generation—has dropped dramatically over the past decade, from \$7.53/watt for a residential photovoltaic (PV) system in 2010 to \$2.71/watt in 2020, according to National Renewable Energy Laboratory (NREL) benchmarks for these systems. Initial cost reductions were largely due to cheaper solar panels. However, in recent years, this trend has continued because of reductions in “soft costs,” such as sales taxes, supply chain costs, installer and developer profit, indirect corporate costs, transaction and financing costs, customer acquisition, permitting, and other non-hardware costs. Although soft costs have been declining, they have not dropped as much as hard costs, so are increasing as a share of the system's total cost. According to NREL, soft costs comprised about 64 percent of the total system price for residential solar PV systems in 2020.

*Solar energy system permitting.* Although exact procedures vary by location, the procedure for approving a solar energy system permit is similar to the procedure for approving a building permit. Typically, the solar installation company or customer submits an electrical diagram and roof layout plan to the city or county building department. If the plan is approved, the installer or customer pays a permit fee and starts the installation project.

*AB 2188 (Muratsuchi, Chapter 521, Statutes of 2014).* In 2014, the Legislature required local governments to streamline their permitting processes for certain solar systems. AB 2188 requires every city and county, including charter cities, to adopt an ordinance that creates an expedited, streamlined permitting process for small residential rooftop solar energy systems. For purposes of AB 2188, solar systems are those that are sized no larger than 10 kW for PV systems and 30 kW for thermal systems, and that are installed on a single family or duplex family dwelling, and meet other conditions. AB 2188 requires each city and county to develop a checklist of all requirements that allow rooftop solar energy systems to be eligible for expedited review, and requires them to approve all complete applications that meet the requirements of the checklist.

AB 2188 also limits local governments to administrative—nondiscretionary—review of solar energy system permits. Local governments cannot review permits based on standards other than health or safety, so they cannot require design review. The permitting process must generally conform to procedures identified in the “Solar Guidebook” developed by the Office of Planning and Research, with modifications allowed only due to unique climactic, geological, seismological, or topographical conditions. Under AB 2188, only one inspection may be required for small residential rooftop solar energy systems that qualify for expedited review.

*AB 546 (Chiu, Chapter 380, Statutes of 2017).* In addition to the AB 2188, state law, pursuant AB 546, required cities and counties to make all documentation and forms associated with the permitting of advanced energy storage, such as battery systems, available online. The city or county must also allow for electronic submittal and signatures of a permit application, much as is required for solar energy system permitting.

According to data collected by NREL, the median time to approval in California is four days, although NREL also notes that delays can add weeks or months to the process.

*About New Solar Homes Partnership (NSHP) program.* Launched in January 2007, the program is the CEC’s component of the CSI and is limited to new home construction in investor-owned utility (IOU) service territories. The program provides financial incentives for homeowners, builders, and developers to include solar energy systems on new, energy-efficient homes. The NSHP program goal under the CSI is to incentivize the installation of 360 MW solar capacity within 10 years with a \$400 million funding cap. Roughly \$282 million was funded from Public Goods Charge (also collected from ratepayers), the CPUC authorized an additional \$111 million, if needed, to be collected from ratepayers of the state’s three largest electric IOUs to meet the goals of the program. Based on payments

and active reservations to date, NSHP is on track to meet this program goal. Final determination of program accomplishment will be determined after all reservations have been processed which have a current statutory deadline of December 2021.

*SolarAPP.* SolarAPP is an online platform for rapid permitting of solar energy systems and associated battery storage that can check an application for code compliance and instantly issue an approval or denial. The NREL developed the SolarAPP software in collaboration with the other entities, including: International Code Council, which develops the code behind the California Residential and Building Codes; the National Fire Protection Association, which develops the code behind the California Electrical Code; UL, which develops some of the standards for the equipment that make up a solar energy system (e.g., solar modules); and the International Association of Electrical Inspectors. SolarAPP integrates with certain popular planning programs, but can also be operated as a standalone application. This software is provided for free to local jurisdictions; applicants pay an administrative fee to defray the costs. In November 2020, the City of Pleasant Hill was the first city in the nation to issue a permit for a solar energy system using SolarAPP.

*SB 617.* This bill includes two main provisions:

*(1) Relevant to Committee on Governance & Finance:* this bill requires the use of automated permitting platforms and options for residential building permit issuance by a local agency for the installation of rooftop solar on residential structures. This bill prescribes a compliance schedule for each city or county to satisfy the requirement.

Specifically, this bill:

- Exempts a county with a population of less than 150,000, and all cities within such a county (largely Sierra Mountains and Northern California counties).
- Requires a city with population of 50,000 or less to comply no later than September 30, 2023.
- Requires a city, county, or city and county with population of greater than 50,000 to comply by no later than September 30, 2022.

*(2) Relevant to this committee:* this bill authorizes the CEC to develop a grant program by May 2022 to provide technical assistance and grant funding to cities and counties to support the above-described requirements. The program would require PG&E, SCE, and SDG&E to repurpose \$20 million collected from ratepayers to support the NSHP Program to pay the CEC's program administrative costs and grant funding awarded. This bill requires local governments to report

annually to the CEC on the number of permits issued for solar energy systems and energy storage systems paired with solar energy systems. This bill would also prohibit a city, county, and city or county that is not in compliance with AB 2188, AB 1414, and the requirements of this bill for the automated solar permitting system from receiving funds from a state-sponsored or state-administered solar or energy storage grant or loan program.

*Repurposing electric ratepayer funds?* Although an exact amount of NSHP balance is not, yet, available, current estimates by the CEC are that roughly \$70 million may remain in the electric IOU accounts for NSHP by the encumbrance date of the program, December 31, 2021. Per the CPUC decision authorizing the collection of \$111 million from the ratepayers of the state's three largest electric IOUs, any NSHP funds collected by the IOUs, but not encumbered by June 1, 2018 or spent by December 31, 2021 shall be returned to ratepayers. (page 31 of Decision 16-06-006). This bill intends to "repurpose" \$20 million of the funds for the technical assistance and grant funding that the CEC may provide to local governments. However, these funds are not sitting in a state treasury account. As such, it is unclear whether the Legislature can "repurpose" the funds without some additional legal maneuvering, perhaps including a refund to ratepayers and a new direction to the CPUC to require a collection of \$20 million. Legal maneuverings aside, the application of these funds which were collected from electric ratepayers from three of the state's electric utilities would also require that those funds be applied to ratepayers in the given service territories from which they were collected. As a result, those funds should not apply to entities outside those service boundaries, including cities served by electric publicly owned utilities, such as Sacramento, Los Angeles, Riverside, etc. However, as currently crafted in this bill, the CEC would provide technical assistance and grant funding to presumably any city or county in the state, regardless of the electric utility service territory. Given the intent of the author and sponsors, it would seem more appropriate, and perhaps, more expedient, to have funds appropriated from the state General Fund via an appropriation by the Legislature. Funds from the General Fund would be available to all cities and counties in the state and not require additional legal complications as could be the case with the use of electric ratepayer funds residing in accounts held by electric utilities. *Therefore, the author and committee may wish to amend this bill to delete provisions related to NSHP funds and instead require the CEC to establish the technical assistance and grant funding upon appropriation by the Legislature.*

*Timelines.* As currently drafted, this bill would require the CEC to develop grant guidelines by May 1, 2022 and make applications available no later than June 1, 2022. It would be wise to move the application availability to beyond July 1, 2022, in order to ensure the CEC has been appropriated the funding from the

Legislature for the budget cycle. *The author and committee may wish to move the date from June 1 to July 1, 2022 for the grant application availability.*

Additionally, a representative from the California League of Cities (League), in conversation with committee staff, has expressed concerns about the compliance schedule proposed by this bill. Should this bill move forward the author may wish to engage the League regarding a feasible timeframe for the many cities encompassed by the compliance schedule proposed in this bill.

*Mandate.* The California Constitution requires the state to reimburse local governments for the costs of new or expanded state mandated local programs. Because SB 617 adds to the duties of local planning officials and expands the definition of a crime, Legislative Counsel says that this bill imposes a new state mandate. SB 617 disclaims the state's responsibility for providing reimbursement because the costs are due to expanding a crime, but says that if the Commission on State Mandates determines that there are other mandated costs, reimbursement must be made pursuant to existing statutory requirements.

*Need for technical amendments.* *The author and committee may wish to amend this bill to correct references to subdivision (e) in this bill, which as of the most recent amendments should now be subdivision (d).*

### **Prior/Related Legislation**

AB 2188 (Muratsuchi, Chapter 521, Statutes of 2014) required, on or before September 30, 2015, every city and county to adopt an ordinance, in consultation with fire and utility officials, as specified, to streamline and expedite the permitting process for small, residential, rooftop, solar energy systems.

AB 546 (Chiu, Chapter 380, Statutes of 2017) required cities and counties to post online the materials required for permitting of energy storage systems.

AB 1414 (Friedman, Chapter 849, Statutes of 2017), until January 1, 2025, lowered the cap on local government permit fees for rooftop solar energy systems and extends the cap to cover solar thermal systems.

SB 1222 (Leno, Chapter 614, Statutes of 2012) capped local government building permit fees for residential and commercial rooftop solar energy systems.

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

### **SUPPORT:**

Environment California, Co-Sponsor

SPUR, Co-Sponsor  
Mayor Pro Tem Gabriel Quinto, El Cerrito  
Mayor Dianne Martinez, Emeryville  
Mayor Michael Vargas, Perris  
Mayor Kevin Wilk, Walnut Creek  
Mayor Tom Butt, Richmond  
Supervisor Ahsha Safai, San Francisco  
Councilmember Dan Kalb, Oakland  
Councilmember Alison Hicks, Mountain View  
Councilmember James Coleman, South San Francisco  
Director Steve Palmisano of Public Works, Watsonville  
350 Humboldt  
ACR Solar  
Advanced Energy Economy  
All Valley Solar, Inc.  
Alternative Energy Systems Inc.  
Aurora  
Aztec Solar  
Bay Area Council  
California Solar & Storage Association  
Center for Sustainable Energy  
Elders Climate Action, NorCal Chapter  
Elders Climate Action, SoCal Chapter  
Elizares Solar Consulting  
Energy Toolbase  
Environmental Defense Fund  
First Response Solar  
GRID Alternatives  
Habitat for Humanity Greater San Francisco  
Housing Action Coalition  
Local Government Commission  
Local Solar for All  
McCalmont Engineering  
Mosaic  
Natural Resources Defense Council  
Natural Resources Defense Council Action Fund  
Omnidian, Inc.  
Planet Plan Sets  
Pure Power Solutions  
Sierra Club California  
Silicon Valley Youth Climate Action



Solar and Fire Education  
Solar Energy Industries Association  
Solar Rights Alliance  
Solar Sense PV, Inc.  
Solar United Neighbors  
Solar Works  
SolarCraft  
Spectrum Energy Development Inc.  
Summit Technology Group  
SunEarth  
Sunrun  
SunPower Corporation  
Symmetric Energy  
Taylor Energy  
TerraVerde Energy  
Tesla  
The Climate Center  
Tigo Energy  
Town of Windsor  
Treepublic Solar  
Vote Solar  
An Individual

**OPPOSITION:**

California Building Officials  
International Brotherhood of Electrical Workers Local Union 6  
International Brotherhood of Electrical Workers Local Union 18  
International Brotherhood of Electrical Workers Local Union 234  
International Brotherhood of Electrical Workers Local Union 302  
International Brotherhood of Electrical Workers Local Union 440  
International Brotherhood of Electrical Workers Local Union 441  
International Brotherhood of Electrical Workers Local Union 465  
International Brotherhood of Electrical Workers Local Union 569  
International Brotherhood of Electrical Workers Local Union 1245  
National Electrical Contractors Association

**ARGUMENTS IN SUPPORT:** According to the author:

SB 617 requires jurisdictions of a certain size to implement an automated online solar permitting system, as well as offering remote building inspections for residential rooftop solar systems. Further, SB 617 establishes a program at the

California Energy Commission to offer assistance to local jurisdictions in their implementation of an online permitting system and remote inspections.

Although the costs of solar hardware have decreased by 80% in the past 15 years, the ‘soft’ costs associated with permitting are still a massive barrier.

Beyond the cost, the unnecessary delays associated with solar permitting result in 10% of applicants rescinding their application prior to approval. This is a major hindrance to California’s clean energy goals, as current models suggest that the state will need to triple solar and wind capacity in order to meet 100% renewable energy by 2045. In order to address this delay and the costs associated with permitting, SB 617 will require that an online automated permitting system be utilized.

**ARGUMENTS IN OPPOSITION:** In opposition to this bill, the California Building Officials (CALBO) who represent members who enforce building standard requirements, express concerns about the need for a new mandate and lack of flexibility by this bill. CALBO further states they were active participants with AB 2188 development. However, they have “... observed local government has continued to struggle with the implementation of the bill [AB 2188]. According to Berkeley Lab’s July 2019 report on this law, only 71% of California’s local entities have complied. This is a concern to CALBO, as we recognize and urge our local jurisdictions to adhere to the regulation and believes enforcement of existing regulations is preferable over the new requirements outlined in SB 617.”

-- END --