
SENATE COMMITTEE ON APPROPRIATIONS

Senator Anthony Portantino, Chair
2021 - 2022 Regular Session

SB 617 (Wiener) - Residential solar energy systems: permitting

Version: May 4, 2021

Policy Vote: GOV. & F. 4 - 0, E., U., & C.
12 - 2

Urgency: No

Mandate: Yes

Hearing Date: May 17, 2021

Consultant: Mark McKenzie

Bill Summary: SB 617 would (1) require specified local agencies 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, and (2) authorize 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.

Fiscal Impact:

- The CEC indicates that it would incur administrative costs of \$300,000 in 2021-22, \$600,000 in 2022-23 and \$450,000 annually thereafter, to implement the provisions of the bill (special fund).
- Unknown significant General Fund cost pressures to provide technical assistance and grant funding to local agencies to support implementation of online permitting platforms.
- By requiring specified local officials to report compliance information to CEC, this bill creates a state-mandated local program. To the extent the Commission on State Mandates determines that the provisions of this bill create a new program or impose a higher level of service on local agencies, those local agencies could claim reimbursement for those costs (General Fund).

Background: 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.

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.

In 2014, the Legislature required local governments to streamline their permitting processes for certain solar systems (AB 2188, Muratsuchi). 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, defined as systems that (1) are no larger than 10 kW for PV systems or 30 kWth for thermal systems, (2) meet all building and safety codes as well as local building height requirements, and (3) are installed on a single family or duplex family dwelling.

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. A city or county must publish its application checklist and document requirements on a publicly accessible Internet Web site if the local agency maintains one, and to allow for the electronic signature on all forms, applications and other documents unless the city or county determines that it is unable to accept electronic signatures. Cities and counties must accept permit applications and all associated documents via email, the internet, or fax.

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 OPR, 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. Local officials must permit the system unless they find a specific, adverse impact on the public health or safety that cannot be mitigated.

Current law also requires cities and counties to make all documentation and forms associated with the permitting of advanced energy storage, such as battery systems, available online (AB 546, Chiu, 2017). 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 for permit approvals in California is four days, although NREL also notes that delays can add weeks or months to the process.

The California Energy Commission's New Solar Homes Partnership (NSHP) program provides financial incentives to install solar photovoltaic (PV) systems on new residential buildings. Administered by the Energy Commission, NSHP is funded by \$400 million collected from the state's three largest investor-owned utilities. These funds must be disbursed by December 31, 2021. Of the \$400 million, the Energy Commission estimates that \$72 million will remain unspent after current obligations are paid.

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 platform 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.

Despite the existing requirements regarding solar energy system permitting, the solar industry remains concerned with permitting delays. The Solar Energy Industry Association (SEIA) reports in a 2019 fact sheet on soft costs, “While there are direct costs associated with permitting (currently \$0.13/watt), the indirect costs of permitting can be much higher. Permitting and inspection practices are inconsistent across jurisdictions, so installers must take the time to become familiar with the practices of each jurisdiction they want to work in. Municipal permitting and inspection resources also vary greatly, and in some communities the gap between system installation and an inspector’s permission to operate might take months. These complications lead to higher labor and overhead costs on the part of the installer, and in some cases can lead to the outright cancelation of the project by the customer. Based on data from our members, SEIA estimates that a one-week delay in system installation due to permitting, inspection and interconnection processes increases the client cancelation rate by 10%.”

Proposed Law: This bill would, among other things, do the following:

- Require 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 alternating current nameplate rating and an energy storage system paired with a solar energy system that is no larger than 38.4 kilowatts alternating current nameplate rating, as specified.
- Require 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.
- Prescribe 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. The bill would require 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.
- Require a city, county, or a fire department, district, or authority to report to CEC when it is in compliance with specified requirements, in addition to other information.
- Prohibit 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 the bill.
- Require CEC, upon provision of sufficient funding, to provide technical assistance and grant funding to cities and counties in order to support the above-described requirements.

- Require CEC to develop grant guidelines and other requirements, as specified, by May 1, 2022, and make applications available no later than July 1, 2022.
- Require CEC to set guidelines for cities and counties to report to the commission 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.

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.

Staff Comments: Any local government costs resulting from grant guidelines mandate in this measure are not state-reimbursable because that mandate only involves the definition of a crime or the penalty for conviction of a crime.

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