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

Bill No:	SB 379	**Hearing Date:**	1/10/2022
Author:	Wiener		
Version:	1/3/2022 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 requires local jurisdictions to provide specified reporting to the California Energy Commission (CEC) as compliance with the above requirement.

ANALYSIS:

Existing law:

1) Requires a city or county to approve administratively applications to install solar energy systems through the issuance of a building permit or similar nondiscretionary permit. Requires every city, county, or city and county to develop a streamlined permitting process for the installation of small residential rooftop solar energy systems, as that term is defined. (Government Code §65850.5)

2) Prescribes and limits permit fees that a city or county may charge for a residential and commercial solar energy system. (Government Code §66015)

3) Creates the State Energy Resources Conservation and Development Commission (known as the CEC) in the Natural Resources Agency and prescribes its duties, which include administering programs for the installation of solar energy systems. (Public Resources Code §25200)

This bill:

1) Requires every city, county, or 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 38.4kW alternating current nameplate rating.

2) Requires a city, county, or city and 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 fewer than 150,000 and all cities within a county with a population of fewer than 150,000.

4) Requires a city with a population of 50,000 or fewer that is not otherwise exempt to satisfy these requirements by September 30, 2024, 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, 2023.

5) Requires a city, county, or city and 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.

6) Requires cities and counties to self-certify their compliance with this bill's provisions when applying for specified funds from the CEC.

7) Authorizes the 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.

8) 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.

9) Makes related findings and declarations.

10) Imposes a state-mandated local program by increasing the duties of local officials, but provides that no reimbursement is required by this act because a local agency has the authority to levy service charges, fees, or assessments sufficient to pay for the program or level of service mandated by this act.

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 (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.

AB 546 (Chiu, Chapter 380, Statutes of 2017). In addition to 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.

Lower fees for solar permitting. To address some soft costs, the Legislature capped building permit fees that local agencies can charge for residential and commercial solar energy systems: first by SB 1222 (Leno, 2012) until January 1, 2018, and then until January 1, 2025 by AB 1414 (Friedman, 2017). AB 1414 caps fees at the following limits:

	Base Fee	**Additional Fees**
Residential	$450 for PV systems up to 15 kilowatt (kW) or solar thermal systems up to 10 kilowatt thermal (kWth)	$15 per kW for each kW above 15kW; or $15 per kWth for each kWth above 10kWth
Commercial	$1,000 for PV systems up to 50kW or solar thermal systems up to 30kWth	$7 kW for each additional kW between 51kW and 250 kW, plus $5 per kW for each kW above 250 kW; or $7 per kWth for each kWth between 30kWth and 260kWth, plus $5 per kWth for each kWth above 260kWth

A city or county can charge permit fees exceeding these caps, provided that the city or county makes a written finding and adopted a resolution or ordinance showing substantial evidence of the reasonable cost to issue the permit. The city or county must also include in its finding:

- A determination that it has adopted appropriate ordinances to streamline the application and approval process in line with guidelines issued by the OPR, other state guidelines, and model ordinances.
- A calculation related to the administrative cost of issuing a solar permit that includes consideration of reductions in permitting cost due to adopting the streamlined processes under AB 2188, described below.
- A description of how the higher fee will result in a quick streamlined approval process.

AB 1124 (Friedman, 2020) subsequently clarified the definition of solar energy system for the purposes of establishing solar easements and determining which fees are capped, such that the support structures, such as carports, are also included.

SolarAPP+ and online platforms for residential solar system permitting. SolarAPP+ is an online platform for rapid building 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 of the program. Local jurisdictions must also train staff and adjust documents and systems in order to rollout SolarAPP+ in their jurisdiction. According to the sponsors of this bill, these costs can range from tens of thousands of dollars. In November 2020, the City of Pleasant Hill in California was the first city in the nation to issue a permit for a solar energy system using SolarAPP+. According to the sponsors of this bill, currently, fewer than ten cities in California have adopted, or are in the process of adopting, an online solar permitting platform. Most of these jurisdictions are implementing SolarAPP+ and a couple of those cities have developed similar online permitting programs, including the City of San Jose.

2021-22 Budget appropriates $20 million for grants to local jurisdictions. SB 129 (Committee on Budget, Chapter 69, Statutes of 2021) appropriated $20 million from the General Fund to the CEC to support a grant program for cities, counties, or cities and counties to establish online solar permitting. The CEC is soliciting public comments on the proposed program design and implementation of a solicitation the California Automated Permit Processing (CalAPP) Program to implement this grant program. The CEC has opened a docket and noticed a public workshop for Wednesday, January 12th. The agency expects to release a Grant Funding Opportunity (GFO) allowing applicants to apply for grant funding in the first half of 2022. Funds are available for encumbrance until June 30, 2023, and available for liquidation until June 30, 2027.

SB 379. This bill requires the use of automated permitting platforms and options for residential building permit issuance by a local jurisdiction 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 from complying with the requirements of this bill. (largely Sierra Mountains and Northern California counties).
- Requires a city with population of 50,000 or less to comply no later than September 30, 2024.
- Requires a city, county, or city and county with population of greater than 50,000 to comply by no later than September 30, 2023.

Additionally, SB 379 requires specified reporting to the CEC by local jurisdictions of implementation of the adoption and use of the online permitting platform.

Specifically, this bill

- Requires a city, county, or city and 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.
- Requires cities and counties to self-certify their compliance with this bill's provisions when for funds from the CEC, not including the $20 million grant funding solicitation.
- Authorizes the 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.
- 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.

Concern over application processing delays. In support of SB 379, the sponsors and supporters of the bill would like the Legislature to require local agencies to adopt SolarAPP+, or similar automated systems for permitting solar energy systems and energy storage. Despite the existing requirements regarding solar energy system permitting, the solar industry and advocates for distributed solar generating systems remain concerned with permitting delays. The industry and advocates express concerns that permitting and inspection practices are inconsistent across jurisdictions, requiring installers to take the time to become

familiar with the practices of each jurisdiction. They further express concerns that municipal permitting and inspection resources also vary greatly, and in some cities the gap between system installation and an inspector's permission to operate might take months. The proponents express concerns that such complications can 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. According to data collected by NREL, the median time to permit approval in California is four days, although NREL also notes that delays can add weeks or months to the process. The proponents of SB 379 believe mandating the use of an online solar permitting software will help address many of these concerns.

Too soon? As noted above, the current State Budget has appropriated $20 million to fund grants to help local jurisdictions adopt an automated solar permitting program. The CEC is in the beginning stages of implementing the grant program with the first public workshop expected within a week. Additionally, only a handful of local jurisdictions have adopted Solar APP+ or a comparable automated permitting software. While many of the early-adopting jurisdictions praise the efficiencies afforded by the automated permitting platforms, there has not been enough time for the platform to be widely deployed or implemented. As such, the legislature may wish to consider whether consideration of a mandate to adopt SolarAPP+ would be better informed by results from the implementation of the grant program. The California Building Officials (CALBO) who represent many of the primary staff overseeing the permitting programs across local jurisdictions share this perspective. They urge the committee to consider using the grant funding as a test phase for the new technology and then revisiting consideration of a mandate in two years.

Mandate for some, but not for all. As currently drafted, SB 379 would exempt all counties (and cities within those counties) with populations under 150,000 from complying with the requirements of the bill – essentially most of the North Coast, Northern, and Sierra Mountain regions of the state. Specifically, based on the 2020 U.S. Census population figures, 25 counties of the state's 58 counties would be exempted from the mandate in this bill, including: Alpine, Amador, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Napa, Nevada, Plumas, San Benito, Sierra, Siskiyou, Sutter, Tehama, Trinity, Tuolumne, and Yuba. The challenges faced by the smaller counties are likely the same as those faced by many of the state's smallest cities, including those located in larger counties. The author and sponsors have agreed to include an amendment to exempt all cities with populations 5,000 or less, in order to include those located in counties with populations over 150,000. *The author and committee may wish to amend this bill to explicitly exempt cities with populations of 5,000.*

Residential sized solar installations? This bill currently limits the automated permitting to solar installations of 38.4kW. According to the sponsors, the size limit is reflective of the capabilities of the SolarAPP+ platform and note that the limit is much larger than most residential solar installations. In most cases, solar installations on residential dwellings are 5-15kW. However, the sponsors of this bill express their intent to limit to only residential dwellings, including both single-family and multi-family buildings. They note that multi-family units may necessitate much larger solar installations. In order to ensure the size limit is not applied to dwellings or structures that are not part of the residential building(s), *the author and committee may wish to amend this bill to more explicitly apply the permitting requirements to only residential dwellings, perhaps including an explicit definition.*

Carrot or a stick? This bill would require local jurisdictions to self-certify its compliance with the automated permitting platform mandate whenever they apply for funds from the CEC, other than the $20 million grant program. In discussions with the author and sponsors, they express an interest to help the CEC enforce the requirements of this bill by utilizing other grant and loan funding opportunities administered by the agency, including those unrelated to the automated solar permitting. These may include funding opportunities from the Electric Program Investment Charge (EPIC) or the Clean Transportation Program for alternative or clean transportation fuels, or any other funding opportunities administered by the agency. While the desire for additional sticks, in combination with the $20 million grant funding carrots is understandable, the Legislature may wish to proceed with caution to require self-certification on such a broad bases of programs. *At a minimum, the author and committee may wish to explicitly note the self-certification would only be required of local jurisdictions in line with the corresponding compliance schedule as noted in subdivision (c), and not before any required deadlines.*

Incoming. This bill was heard in the Committee on Governance and Finance on Thursday, January 6. Due to timing constraints of processing two-year bills in the house of origin, pursuant to the legislative calendar, the amendments accepted by the author in the first policy committee may be adopted in this committee. The amendments to provide that local governments shall not be required to permit systems via an online, automated system that are not supported by SolarAPP+ at the time of an application for a permit is submitted. Additional amendments are technical in nature to consistently include the word “platform.”

Need for technical amendments. The author and committee may wish to amend this bill to:

- *Delete subsection (d) which unnecessarily references the CEC grant funding program.*
- *Clarify language in findings and declarations that more accurately reflects the findings of the SB 100 Joint Agency Report referenced.*
- *Correct reference to the compliance schedule in subdivision (c).*

Prior/Related Legislation

SB 617 (Wiener, 2021) proposed similar requirements on local permitting jurisdictions 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 would have authorized the CEC to provide technical assistance and grant funding to cities and counties to comply with the requirements for the online platform. The bill was held under submission in the Senate Committee on Appropriations.

AB 1124 (Friedman, Chapter 235, Statutes of 2021) revised the definition of "solar energy system" to additionally include any structural design feature by eliminating the provision that it be a feature of a building.

SB 129 (Committee on Budget, Chapter 69, Statutes of 2021) authorized $20 million from the General Fund to the CEC to support a grant program for cities, counties, or cities and counties to establish online solar permitting.

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. The bill also expanded the definition of solar energy system to include PV systems integrated into other parts of a building.

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
Council Member Mikke Pierson, Malibu
Council Member Tony Madrigal, Modesto
Council Member Chris Ricci, Modesto
Council Member Rebecca Garcia, Watsonville
ACR Solar
All Valley Solar Inc.
Alternative Energy systems Inc.
Aurora
Aztec Solar
Bay Area Council
California Association of Realtors
California Solar and Storage Association
Elizares Solar Consulting
Energy Toolbase
Esdec, Ironridge, and PanelClaw
First Response Solar
McCalmont Engineering
Mosaic
Planet Plan Sets
Pure Power Solutions
Silicon Valley Youth Climate Action
SolarCraft
Solar Works
Solar Sense PV Inc.
Spectrum Energy Development Inc.
Summit Technology Group
SunEarth
Sunrun
Symmetric Energy
Taylor Energy
TerraVerde Energy
Tesla
The Climate Center
Tigo Energy
Treepublic Solar

OPPOSITION:

California Building Officials (CALBO), unless amended

ARGUMENTS IN SUPPORT: Members of the California Solar and Storage Association express support for SB 379, stating:

> Over the past seven years, many building departments have begun providing automated permitting and virtual inspections, and the number of homes installing solar in the cities and counties with these building departments has skyrocketed (e.g., in San Jose, the number of homes installing solar increased sixfold). Under Senate Bill 379, building departments statewide would follow the lead of these trailblazing building departments, allowing for the growth of solar across California, which will protect the environment, reduce electricity bills, help keep the lights on during extreme weather events, and ready the grid for electrification and 100 percent clean energy.

According to the author:

> SB 379 requires jurisdictions of a certain size to implement an automated online solar permitting system for residential rooftop solar systems. 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 379 will require that an online automated permitting system be utilized. In jurisdictions such as San Jose, the implementation of an automated system resulted in an increase in solar applications of over 600%. This system and the increase in applications that followed not only generated more revenue for San Jose through permitting fees, but also allowed for building officials to focus on other administrative tasks due to the ease and simplicity that an automated online system brings. Although San Jose created their own software, the National Renewable Energy Laboratory (NREL), in coordination with the Department of Energy, solar industry partners, and building safety experts, has created an open source software called SolarAPP+. SolarAPP+ allows for a simplified onboarding and adoption of automated permitting, as it only requires the jurisdiction to have an email account. SB 379 does not require that SolarAPP+ be utilized, but ensures that some form of automated online

permitting be available so that residents can be efficiently approved for solar systems, and so that building departments are no longer inundated and slowed by solar permits.

ARGUMENTS IN OPPOSITION: California Building Officials (CALBO) who represent building officials who are primarily responsible for enforcing building code requirements within jurisdictions across the state, express opposition to the bill mostly out of concern that technology is too nascent to be mandated.

CALBO specifically recommends amendments to this bill that:

- Ensure this bill is limited to only residential solar energy systems;
- Exempt small cities in larger counties who may not have the staff resources to adopt a new software in the next 2-3 years;
- Provide a 2 year test-phase focused on the CEC's grant program before mandating the online permitting software across the state;
- Ensure there is language in this bill to exempts solar installations that that are beyond the capabilities of the SolarAPP+ platform.

-- END --