

Date of Hearing: April 5, 2017

ASSEMBLY COMMITTEE ON LOCAL GOVERNMENT

Cecilia Aguiar-Curry, Chair

AB 546 (Chiu) – As Introduced February 14, 2017

SUBJECT: Land use: local ordinances: energy systems.

SUMMARY: Requires cities and counties to accept electronic submissions of permit applications for advanced energy storage installations, and requires the creation of a California Energy Storage Permitting Guidebook. Specifically, **this bill:**

- 1) Requires, on or before September 30, 2018, every city, county, or city and county with a population of 200,000 or more residents, and on or before January 31, 2019, every city, county, or city and county with a population of less than 200,000 residents, to make all documentation and forms associated with the permitting of advanced energy storage available on a publicly accessible Internet Web site (website), if the city, county, or city and county has a website.
- 2) Requires every city, county, or city and county to allow for electronic submission of a permit application and associated documentation for advanced energy storage installations, and to authorize the electronic signature on all forms, applications, and other documentation in lieu of a wet signature by an applicant.
- 3) Prohibits any fee charged for the permitting or inspection of an advanced energy storage installation from being calculated based on the value of the installation or any other factor not directly associated with the cost to issue the permit and inspect the advanced energy storage installation.
- 4) Requires, on or before January 1, 2020, the Governor's Office of Planning and Research (OPR) to create a California Energy Storage Permitting Guidebook (Energy Storage Guidebook) modeled substantially on the California Solar Permitting Guidebook (Solar Guidebook), in consultation with local building officials, the State Fire Marshall, the storage industry, labor representatives from the utility and construction industries, licensed electrical contractors, electrical corporations, publicly owned utilities, the Public Utilities Commission (PUC), and other stakeholders, and through review of any existing streamlined permitting practices used by cities, counties, or city and counties.
- 5) Prohibits OPR, in developing the Energy Storage Guidebook, from including provisions that are in conflict with or are inconsistent with provisions of the California Building Standards Code, the California Electrical Code, or any other model code adopted by the California Building Standards Commission pursuant to the California Building Standards Law, as specified.
- 6) Provides the following definitions:
 - a) "Advanced energy storage" means an energy storage system, as defined in current law governing energy storage procurement targets for load-serving entities and publicly-

owned utilities, as well as an energy storage system that is designed to provide backup energy services in the event of a grid outage, that is limited to both of the following:

- i) Electrochemical energy storage in nonventing packages; and,
 - ii) Customer sited installations;
- b) “Customer sited” means the system is interconnected to the electrical grid through an existing retail customer interconnection; and,
- c) “Electronic submittal” means the utilization of one or more of the following: Email, the Internet, or facsimile.
- 7) Makes the following findings:
- a) It is the policy of the state to promote and encourage the installation of advanced energy storage and to limit obstacles to its use; and,
 - b) It is further the intent of the Legislature that the applicable state agencies, including OPR, extend and expand the existing initiative being conducted by the PUC to further note best practices in the safe permitting of advanced energy storage. That effort should ultimately produce an Energy Storage Guidebook, taking advantage of the efforts and lessons learned in creating the streamlined permitting processes and modeling in part after the Solar Guidebook.
- 8) Provides that no reimbursement is required by this bill, pursuant to Section 6 of Article XIII B of the California Constitution, 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 bill.

EXISTING LAW:

- 1) Provides for the adoption and administration of zoning laws, ordinances, rules, and regulations by counties and cities.
- 2) Requires every city or county to adopt an ordinance that creates an expedited permitting process for small, residential rooftop solar energy systems and for electric vehicle charging stations.
- 3) Requires the PUC to determine appropriate targets, if any, for load serving entities to procure energy storage systems, requires load serving entities to meet any targets adopted by the PUC by 2015 and 2020, and requires publicly-owned utilities to set their own targets for the procurement of energy storage and meet those targets by 2016 and 2020.
- 4) Defines, for the purposes of energy storage system targets, "energy storage system" to mean a commercially available technology that is capable of absorbing energy, storing it for a period of time, and thereafter dispatching the energy.

- 5) Allows an energy storage system to have any of the following characteristics:
 - a) Be either centralized or distributed; and,
 - b) Be either owned by a load-serving entity or local publicly-owned electric utility, a customer of a load-serving entity or local publicly-owned electric utility, or a third party, or jointly owned by two or more of the above.
- 6) Requires an energy storage system to be cost effective and either reduce emissions of greenhouse gases, reduce demand for peak electrical generation, defer or substitute for an investment in generation, transmission, or distribution assets, or improve the reliable operation of the electrical transmission or distribution grid.
- 7) Requires an energy storage system to do one or more of the following:
 - a) Use mechanical, chemical, or thermal processes to store energy that was generated at one time for use at a later time;
 - b) Store thermal energy for direct use for heating or cooling at a later time in a manner that avoids the need to use electricity at that later time;
 - c) Use mechanical, chemical, or thermal processes to store energy generated from renewable resources for use at a later time; or,
 - d) Use mechanical, chemical, or thermal processes to store energy generated from mechanical processes that would otherwise be wasted for delivery at a later time.

FISCAL EFFECT: This bill is keyed fiscal and contains a state-mandated local program.

COMMENTS:

- 1) **Bill Summary.** This bill requires cities and counties to make all documentation and forms associated with permitting of advanced energy storage available on the city or county website, if it has one. Cities with 200,000 or more residents would have to comply by September 30, 2018, while cities with less than 200,000 residents have until January 31, 2019, to comply. This bill also requires cities and counties to allow for electronic submission of permit applications and associated documentation for advanced energy storage installations, including electronic signatures. This bill prohibits any fee charged for permitting or inspection of an advanced energy storage installation from being calculated based on the value of the installation or any other factor not directly associated with the cost to issue the permit and inspect the installation.

This bill also requires OPR to create an Energy Storage Guidebook by January 1, 2020. This guidebook must be modeled substantially on the existing Solar Guidebook and developed in consultation with local building officials, the State Fire Marshall, the storage industry, labor representatives from the utility and construction industries, licensed electrical contractors, electrical corporations, publicly owned utilities, the PUC, and other stakeholders. Review of any existing streamlined permitting practices used by cities or counties must also be included in the process of developing the Energy Storage Guidebook.

This bill is sponsored by the California Energy Storage Alliance.

- 2) **Author's Statement.** According to the author, "As the state becomes increasingly reliant on renewable energy resources, energy storage will become a large part of managing intermittent electricity supply. To that end, California has adopted policies within the last few years that promote and fund energy storage. However, anecdotal observations from the energy storage industry confirm that permitting can be a barrier to timely and cost effective installation of energy storage systems. Permitting can vary between jurisdictions and a confusing patchwork of requirements makes installing energy storage more expensive and slows the expansion of this technology.

"A guidebook for energy storage permitting that draws information from existing best practices can reduce permitting time frames without sacrificing important safety protections. Electronic submission of documents increases the efficiency and cost effectiveness of the permit process. These changes improve the deployment of energy storage in California communities and expand the many benefits provided by this technology."

- 3) **Background.** At the end of 2010, the California Legislature enacted AB 2514, directing the PUC to set energy storage procurement targets for California investor-owned utilities (IOUs) and other load serving entities. In October 2013, the PUC issued Decision 13-10-040 requiring the three California IOUs to procure an aggregate of 1,325 MW of energy storage by the end of 2020, with installations by the end of 2024. AB 2514 also required publicly-owned utilities to set their own targets for the procurement of energy storage and meet those targets by 2016 and 2020.

One of the distinctive characteristics of the electric power sector is that the amount of electricity that can be generated is relatively fixed over short periods of time, although demand for electricity fluctuates throughout the day. Developing technology to store electricity so it can be available to meet demand whenever needed represents a major breakthrough in electricity distribution. Helping to try and meet this goal, electricity storage devices can manage the amount of power required to supply customers at times when need is greatest, which is during peak load. These devices can also help make renewable energy, the output of which cannot be controlled by grid operators, smooth and easy to dispatch. Storage devices can provide frequency regulation to maintain the balance between the network's load and power generated. Thus, energy storage holds substantial promise for transforming the electric power industry. There are several types of energy storage. This bill is limited to battery storage only.

- 4) **Related Legislation.** AB 1030 (Ting) requires the PUC to establish a program to incentivize residential and commercial customers to adopt energy storage systems. AB 1030 is pending in the Assembly Utilities and Energy Committee.

SB 700 (Wiener) requires the PUC to establish the Energy Storage Initiative to provide rebates to customers of electrical corporations for the installation of energy storage systems meeting certain requirements. SB 700 is pending in the Senate Rules Committee.

- 5) **Previous Legislation.** AB 2713 (Chiu) of 2016 was nearly identical to this bill. AB 2713 passed the Assembly Local Government Committee on April 13, 2016, on a 9-0 vote but was held in the Assembly Appropriations Committee.

AB 2868 (Gatto), Chapter 681, Statutes of 2016, requires investor-owned utilities to file applications with the PUC for programs and investments to accelerate widespread deployment of distributed energy storage systems.

AB 1236 (Chiu and Low), Chapter 598, Statutes of 2015, required counties and cities, including charter cities, to create an expedited permitting and inspection process for electric vehicle charging stations.

AB 2188 (Muratsuchi), Chapter 521, Statutes of 2014, required every city or county to adopt an ordinance that creates an expedited permitting process for small, residential rooftop solar energy systems, altered the definition of what is a reasonable restriction on a solar energy system, and made additional changes to the Solar Rights Act of 1978.

AB 2514 (Skinner), Chapter 469, Statutes of 2010, required the PUC to determine appropriate targets, if any, for load serving entities to procure energy storage systems, required load serving entities to meet any targets adopted by the PUC by 2015 and 2020, and required publicly-owned utilities to set their own targets for the procurement of energy storage and meet those targets by 2016 and 2020.

- 6) **Arguments in Support.** The California Energy Storage Alliance, sponsor of this bill, writes, "AB 546 supports the state's cities and counties by directing the development of a handbook of permitting best practices which will inform cities and counties in their permitting processes. Additional stipulations in the bill, such as reasonable application fees will support the smoother, safer and timely deployments of energy storage. As the number of energy storage projects deploying in California is rapidly increasing, and energy storage is key to achieving many clean energy and grid goals and improvements it is thus imperative to develop tools to support permitting needs for the deployment of these projects.

"Energy storage solutions are a growing part of California's grid and provide customers with key choices in how to manage their energy. Storage supports clean energy and greenhouse gas emissions reduction goals by capturing and discharging energy from renewables. Electricity customers use storage to manage and optimize their energy use and reduce costs. Storage also supports grid needs such as ramping and voltage support, and reduces the need to rely on high emissions power sources. California's existing procurement requirement for energy storage has attracted significant investment and progress in new projects, driving new in-state job creation and the need for greater statewide collaboration."

- 7) **Arguments in Opposition.** None on file.
- 8) **Double-Referral.** This bill is double-referred to the Utilities and Energy Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

California Energy Storage Alliance [SPONSOR]
Green Charge Networks
Silicon Valley Leadership Group
Stem

Opposition

None on file

Analysis Prepared by: Angela Mapp / L. GOV. / (916) 319-3958