Date of Hearing: April 25, 2018

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY
Chris Holden, Chair
AB 2077 (Limón) – As Amended April 18, 2018

SUBJECT: Electricity: local government renewable energy self-generation program

SUMMARY: Requires the California Public Utilities Commission (CPUC) to approve any rates and other terms mutually agreed upon between Southern California Edison (Edison) and the County of Santa Barbara, or a local government in that county [collectively referred to as Santa Barbara]. Specifically, **this bill**:

1) Requires, if Santa Barbara commits to a policy of supplying all of its electrical demand from eligible renewable resources under the Renewables Portfolio Standard Program (RPS), Edison to negotiate in good faith with Santa Barbara for mutually agreeable rates and other terms that enable Santa Barbara to bring RPS resources online sufficient to meet its 100 percent RPS commitment.

2) Requires the CPUC to approve any rates and terms agreed upon by Edison and Santa Barbara if it determines that the rates and other terms are just and reasonable.

EXISTING LAW:

1) Requires retail sellers and publicly owned utilities (POUs) to increase purchases of renewable energy such that at least 50 percent of retail sales are procured from eligible renewable energy resources by December 31, 2030. This is known as the Renewables Portfolio Standard (RPS). (Public Utilities Code § 399.11 et seq.)

2) Defines a "renewable electrical generation facility" as one that, among other requirements, uses biomass, solar thermal, photovoltaic, wind, geothermal, fuel cells using renewable fuels, small hydroelectric generation of 30 megawatts or less, digester gas, municipal solid waste conversion, landfill gas, ocean wave, ocean thermal, or tidal current, and any additions or enhancements to the facility using that technology. (Public Resources Code § 25741)

3) Requires the CPUC to develop a standard contract or tariff based on the costs and benefits of the renewable generation facility that provides the sustainable growth of customer sited renewable generation and ensures that the total benefits of the standard contract or tariff to all customers and the electrical system are approximately equal to the costs. This tariff is commonly referred to as NEM 2.0. (Public Utilities Code § 2827.1)

4) Establishes the RES-BCT program, which provides that a city, county, city and county, special district, school district, political subdivision, or other local public agency may elect to designate another account or accounts controlled by the governmental entity to receive bill credits for electricity generated by a renewable generating facility located within the boundaries of the governmental entity. (Public Utilities Code § 2830)

5) Requires participating investor owned utilities (IOUs) to file applications with the CPUC to establish a voluntary Green Tariff Shared Renewables Program in their service area. (Public Utilities Code § 2831)

6) Permits cities and/or counties to implement a community choice aggregation (CCA) program under which the municipality purchases electricity for constituents within their political boundaries. A municipality may also join any other existing CCA by adoption of a resolution, without regard to geography. Two or more municipalities may also form a joint powers agency (JPA) to act as the CCA with the adoption of an ordinance by each participating municipality. (Public Utilities Code §§ 331.1, 366.2)

FISCAL EFFECT: This bill is keyed fiscal and will be referred to the Appropriations Committee for its review of the fiscal effect of this bill. It is important to note however that the Appropriations Committee limits its analysis to the impact on overall state agency impacts and cannot assess the impacts of policy on the costs of electricity or gas service to ratepayers.

BACKGROUND:

Municipalities in Santa Barbara County report that they have several major load centers that could be managed in a manner that would alleviate grid constraints as opposed to contributing to them. These include the wastewater treatment plant, water treatment plant, desalination plant and city hall. However, they find that there is little or no undeveloped real estate available within the area to build renewable energy projects and that the available tariffs do not provide effective incentives to manage electrical load and renewable energy production on a city or county-wide basis.

The City and County of Santa Barbara also have climate action plans in place that reflect a target of 100% of the load of all customers in the county be met with renewables by 2030. However, the goal is on paper, not in delivered energy on an hourly basis. Consequently they are interested in building offsite solar photovoltaic facilities to serve the load of local government facilities under different billing arrangements than currently offered.

COMMENTS:

1) Author's Statement. The author reports that in 2017 the City of Santa Barbara voted to transition entirely to clean and renewable energy, establishing 100% sustainable energy goals by 2030. Although moving to renewable energy is a challenging endeavor compared to non-renewable sources, the City of Santa Barbara has made a commitment to moving away from fossil fuels. AB 2077 will make sure the city gets closer to achieving that 100% renewable energy goal.

2) It Isn't Easy, or Cheap, Being Green. Several options are available to IOU customers that desire to procure electricity beyond the renewable and carbon free procurement available from an IOU. Tariffs and interconnection agreements are available to every IOU customer to facilitate the installation of renewable and other technologies on the customer's side of the meter. The most common customer choices include solar, fuel cells, wind turbines, battery storage, and combined heat and power. Most of these technologies are on the customer's side of the meter and directly offset customer load when the technology is generating electricity and when the customer is using it. For

some tariffs, the customer is able to earn some form of bill credit, on paper, when the technology is generating electricity, not using it in real time, and exporting it to the grid. This is the fundamental structure of NEM 2.0 which is available to all IOU customers and the RES-BCT which is available to local government customers.

However, as the technology markets have developed and become competitive, and as the belly of the duck curve has continued to grow, the CPUC has made several policy changes that are less generous to customers. Those changes are primarily reflected in the change of peak periods from mid-day to the later afternoon and evening which will affect the credit on customer's bills for mid-day solar. The CPUC has also modified what was once referred to as full retail net energy metering (NEM 1.0) which provided customers with a bill credit for transmission and distribution costs in addition to generation. The new NEM 2.0 tariff requires customers to be on time-of-use rates and pay other fees for interconnection and non-bypassable charges.

3) Local Government Goals…Who Should Pay? An increasing number of local governments are adopting renewable energy goals much like those of Santa Barbara. They intend to meet 100% of their electricity demands, at least on paper, from renewable resources.

   The ability for a customer to actually be 100% renewable is somewhat of an urban myth. It is not possible for a customer to be 100% renewable with only solar, except on paper. Through net metering arrangements a customer installs enough solar generation to meet their total kilowatt hour demand for electricity. Many customers feel that because the total kilowatt hours generated matches the total kilowatt hours of electricity used, when accounted for in their monthly bill, that they are "green." On a real-time consumption basis, this is not accurate.

   For a customer to be 100% renewable, they would likely have to use fuel cells powered by renewable gas and/or a whole lot of storage (batteries) with solar. The batteries would have to have sufficient capacity to store enough excess solar generation midday to meet demand when the sun isn't shining.

   In this instance Santa Barbara wants to be green but also doesn't want to increase utility costs. It appears that currently available programs and tariffs will not result in a reduction of utility costs for Santa Barbara. The rates and interconnection agreements do exist to allow Santa Barbara, and other customers, the ability to interconnect renewable generation and storage but monthly electric bills would appear increase.

   It is extraordinary for the CPUC to be directed to approve a rate structure for one customer. However, should this bill move forward, *the committee may wish to consider amending this bill to require that the CPUC's approval of any special rate structure that Edison submits, be permitted only if the agreement does not affect reliability, safety, result in cost-shifting to other customers, or an increase in greenhouse gas emissions.*

4) Related Legislation. AB 2278 (Berman) modifies the rate structure of the Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) tariff available to government customers of IOUs. Status: Pending hearing in Assembly Appropriations Committee.

REGISTERED SUPPORT / OPPOSITION:

Support

American Association for Laboratory Accreditation
City of Santa Monica

Opposition

None on file.

Analysis Prepared by: Kellie Smith / U. & E. /