

Date of Hearing: July 3, 2018

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Chris Holden, Chair

SB 100 (De León) – As Amended June 27, 2018

**SENATE VOTE:** 25-13

**SUBJECT:** California Renewables Portfolio Standard Program: emissions of greenhouse gases

**SUMMARY:** Establishes the 100 Percent Clean Energy Act of 2017 which increases the Renewables Portfolio Standard (RPS) requirement from 50 percent by 2030 to 60 percent, and creates the policy of planning to meet all of the state's retail electricity supply with a mix of RPS-eligible and zero-carbon resources by December 31, 2045 for a total of 100 percent clean energy. Specifically, **this bill:**

- 1) Accelerates the RPS obligations for retail sellers – investor-owned utilities, community choice aggregators, energy service providers – and publicly-owned utilities (POUs) as follows:
  - a. 40 percent to 44 percent by 2024;
  - b. 45 percent to 52 percent by 2027; and
  - c. 50 percent to 60 percent by 2030.
- 2) Establishes state policy that RPS-eligible and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers no later than December 31, 2045.
  - a. States that achieving this policy shall not increase carbon emissions elsewhere in the western grid and shall not allow resource shuffling.
  - b. Requires the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), the California Air Resources Board (CARB), and other state agencies to incorporate this policy into all relevant planning.
  - c. Requires the CPUC, the CEC, and CARB to ensure that in furthering this policy the agencies:
    - i. Maintain and protect the safety, reliability, and balancing of the electric system;
    - ii. Prevent unreasonable impacts to customer rates and bills;
    - iii. Adopt policies or actions to ensure equity in greenhouse gas (GHG) emissions reductions between the electricity sector and other sectors, to the extent feasible and lawfully authorized; and
    - iv. Ensure equivalent RPS and integrated resource plan rules and requirements for all retail sellers and POUs.

- v. Clarifies that nothing in this policy shall affect a retail seller's ability to comply with the federal Public Utility Regulatory Policies Act of 1978.
- vi. Requires the CPUC, CEC, and CARB to:
  - 1. Utilize existing programs to achieve this policy; and
  - 2. Prepare, in consultation with all California balancing authorities, a joint report to the legislature by January 1, 2021, and every four years thereafter, that includes of review of the 100% clean energy policy including forecasts, costs, resources, barriers and impacts on reliability related to achieving the goal and alternative scenarios to achieve the goal.
- 3) Reduces a POU's obligation to procure renewable resources for the subsequent year, if the POU receives more than 40% of its retail sales from large hydroelectric generation (reduced from existing threshold of 50%) under specified circumstances.

**EXISTING LAW:**

- 1) Requires retail sellers and 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)

**FISCAL EFFECT:** According to the Assembly Appropriations Committee, this bill will increase the annual costs to the state by approximately \$21 million, principally affecting the CPUC, the CEC, CARB, and the Department of Water Resources (DWR).

**COMMENTS:**

- 1) Purpose. According to the author, this bill sets a new 100 percent clean renewable target for California's electrical grid by 2045 and directs our climate and energy agencies to use this new target to ensure our state's energy grid is 100 percent clean before the middle of the century.
- 2) It's Back! This measure passed this committee July 12, 2017 by a vote of 10-4 and on July 13<sup>th</sup> was approved by the Natural Resources Committee 7-0. The bill before committee was re-referred to the committee for further consideration as a result of amendments on the Assembly Floor in September 2017. The bill was amended again on June 27<sup>th</sup>.

- 3) Background, Execution, and Committee Actions. The California RPS program began with a mandate to all retail sellers to provide 20 percent RPS-eligible generation by the end of 2017. Since the initial RPS statute – SB 1078 (Sher), Chapter 516, Statutes of 2002 – the obligations and timelines for RPS compliance have evolved. The most recent major changes to the RPS were made by SB 350 (De León), Chapter 547, Statutes of 2015, which set a new obligation of 50 percent of retail sales from RPS-eligible generation by 2030. This bill seeks to accelerate the state’s RPS obligations further, setting a 60 percent by 2030 requirement.

This bill may be considered as two parts: one part increases the RPS obligations (60 percent by 2030) while the other part addresses the remaining electricity procurement (40 percent) after the RPS. For the first part, most retail sellers are well on their way to meeting their current RPS compliance obligations of 33 percent by 2020. Additionally, amendments taken in the Natural Resources Committee helped ease the gradations in RPS obligations that lead up to the proposed 60 percent RPS target.

But for the second part, this bill establishes a new policy which plans for all electricity by December 31, 2045 to be from a mix of both RPS-eligible and zero-carbon resources, the “100 percent policy.” This second part of the bill resulted in a pattern familiar to those involved in RPS negotiations, with parties arguing for intricate procurement details when the broader strategy has barely been hinted at in electricity planning. Since utility procurement has historically involved power purchase agreements and the financing and construction of assets with a long life (30-40 years), it is wise for retail sellers and POUs to begin to consider – and plan for – whether new assets could be stranded assets in the future if they are powered by fossil fuels. Amendments taken in Natural Resources Committee clarified this broader planning goal of the 100 percent policy.

- 4) Floor Amendments. Amendments to the bill on September 8<sup>th</sup> triggered a re-referral to this Committee pursuant to Rule 77.2. The amendments eliminated policy committee actions which required that the State Water Project (SWP) procure electricity from zero-carbon sources by 2045. The California Department of Water Resources manages the SWP which generates and procures 2.2 to 3.6 percent of the state’s electricity per year to manage water deliveries via pumping plants, dams, reservoirs, canals, and aqueducts.

On September 11<sup>th</sup> the author further amended the bill to address this issue by extending the zero-carbon requirement to “electricity procured to serve all state agencies” which would envelope the SWP.

Additional floor amendments require the CPUC, the CEC, and CARB to take specific actions, which are consistent with the agency’s existing missions, including maintaining grid reliability and safety, preventing unreasonable costs to customer bills, adopting policies in other sectors to ensure equity in GHG emissions reductions, and ensuring equivalent rules and requirements for all retail sellers and POUs.

- 5) June 27<sup>th</sup> Amendments. Author’s amendments last week have three new provisions:
- a. Require CARB, before January, 1, 2021, to remove regulatory disincentives that prevent retail sellers and POUs from converting buildings and ports from natural gas to electricity. The author reports his intent is to ensure that CARB extends the

basis for GHG allowances provided to IOUs and POUs to include credits for fuel-switching of end uses at ports and in buildings (e.g. gas water heating to electric).

The statute amended established the “Charge Ahead California Initiative” related to transportation. Modification of this section to address allocation of allowances for fuel-switching is not clear nor does it appear consistent with the Charge Ahead Initiative. The provision references regulatory mechanisms to convert buildings and ports from natural gas to electricity end uses which appears to go beyond the provision of allowances. *The committee may wish to consider amendments to move the fuel-switching allowances for ports and buildings to a separate section and more explicitly state the author’s intent.*

- b. Modify an existing reporting requirement of the CEC, CPUC, and CARB to consult with the ISO and other balancing authorities and report to the Legislature by 2019 and every two years thereafter. The amendments now extend the first report to 2021 and every four years thereafter and proscribe further details.
  - c. If a POU receives more than 50% of its retail sales from hydroelectric generation, under current law, a soft target for RPS procurement is permitted in consultation with the CEC. Under this bill, the soft target would be permitted if the POU receives more than 40% of its retails sales from hydroelectric generation.
- 6) Technical Amendment. *The committee may wish to consider changing the title of the bill to reflect the current year – 100 Percent Clean Energy Act of 2018 rather than 2017.*

## REGISTERED SUPPORT / OPPOSITION:

### Support

1000 Grandmothers, Bay Area  
 350 Bay Area  
 350 Conejo / San Fernando Valley  
 350 Riverside  
 350 Sacramento  
 350 Silicon Valley  
 350 South Bay Los Angeles  
 350.org  
 482 Individuals  
 Aclaria Partners  
 Adobe  
 Advanced Energy Economy  
 Alliance Of Nurses For Healthy  
 Environments  
 Alton Energy  
 American Academy Of Pediatrics,  
 California  
 American College Of Physicians -

California Services Chapter  
 American Lung Association In California  
 American Sustainable Business Council  
 American Wind Energy Association  
 California Caucus  
 Annie's Homegrown  
 Aquahydrex  
 Asian Pacific Environmental Network  
 Aspire Cleantech Communications  
 Audobon California  
 Autodesk, Inc.  
 Azul  
 Beam Inc.  
 Ben & Jerry's  
 Berkshire Hathaway Energy  
 Borrego Solar  
 Boston Common Asset Management  
 Burton Snowboard  
 Business For Clean Energy  
 California Alliance For A Clean Economy

California Biomass Energy Alliance	Clean Power Campaign
California Black Health Network	Clean Water Action
California Business Alliance For A Clean Economy	Cleantech San Diego
California Catholic Conference Inc.	Clif Bar & Company
California Catholic Conference Inc.	Climate Action Campaign
California Catholic Conference, Inc.	Communications Workers Of America, 9th District
California Church Impact	Communities For A Better Environment
California Coastal Protection Network	Congregation Of Sisters Of St. Agnes
California Coastkeeper Alliance	Controlled Thermal Resources
California Community Choice Association	Dean Democratic Club Of Silicon Valley
California Compost Coalition	Democratic Club Of Sunnyvale
California Conference Of Directors Of Environmental Health	Dignity Health
California Efficiency + Demand Management Council	Domini Impact Investments LLC
California Energy Storage Alliance	E2 (environmental Entrepreneurs)
California Environmental Justice Alliance	Earthjustice
California Interfaith Power & Light	EDF Renewable Energy
California League Of Conservation Voters	Efficiency Data & Development
California Low Carbon Fuel And Energy Coalition	Engie Services U.S. Inc.
California Public Health Association - North	Environment & Enterprise Strategies
California Releaf	Environment California
California Religious Action Center Of Reform Judaism	Environmental Defense Center
California Solar Energy Industries Association	Environmental Defense Fund
California Thoracic Society	Environmental Health Coalition
California Voices For Progress	Fetzer Vineyards
California Wind Energy Association	First Solar, Inc.
Californians Against Waste	Fix The Grid Coalition
Californians For Energy Choice	Fossil Free California
CalPIRG	Fresno Madera Medical Society
Carbon Cycle Institute	Friends Committee On Legislation Of California
Center For Climate Change & Health	Friends Fiduciary Corporation
Center For Climate Protection	Friends Of The Earth - Us
Center For Community Action And Environmental Justice	Gap, Inc.
Center For Sustainable Energy	Green Century Capital Management
Center On Race, Poverty & The Environment	Green Party Of California
Central Coast Alliance United For A Sustainable Economy	Greencharge
Ceres, Inc.	Health Care Without Harm
Chargepoint, Inc	Health Group
City Of Cupertino	Human Impact Partners
City Of Santa Monica	Imperial Irrigation District
City Of Sunnyvale	Independent Energy Producers Association
	Indivisible South Bay
	Kendall Sustainable Infrastructure
	Large-scale Solar Association
	League Of Women Voters Of California
	Levi Strauss & Co
	Long Beach 350
	Los Angeles Business Council

Los Angeles Clean Incubator  
Lutheran Office Of Public Policy -  
California  
Macroclimate, LLC  
Marin County Board Of Supervisors  
Mars, Incorporated  
Mayor Of Benicia, Elizabeth Patterson  
Mayor Of Berkeley, Jesse Arreguin  
Mayor Of Chula Vista, Mary Casillas Salas  
Mayor Of Daly City, Glenn R. Sylvester  
Mayor Of Encinitas, Catherine Blakespear  
Mayor Of Newark, Alan L. Nagy  
Mayor Of Richmond, Tom Butt  
Mayor Of San Jose, Sam Liccardo  
Mayor Of San Luis, Obispo Heidi Harmon  
Mayor Of Santa Barbara, Helene Schneider  
Mayor Of Watsonville, Oscar Rios  
Mendocino Friends Meeting  
Menlo Spark  
Merced Mariposa Asthma Coalition  
Mogavero Architects  
Mothers Out Front California  
National Council Of Jewish Women  
Natural Resources Defense Council  
Nature's Path Foods  
Nestle USA Inc.  
Nettleton Strategies  
New Belgium Brewing  
New York City Comptroller  
Nextgen California  
Nike Inc.  
Office Of Ratepayer Advocates  
Open Energy Efficiency  
Opterra Energy Services  
Outdoor Industry Association (OIA)  
Pax World Management  
Pesticide Action Network  
Physicians For Social Responsibility, Los  
Angeles  
Pico California  
Prevention Institute  
Progressive Christians Uniting  
Progressive Investment Management  
Proterra  
Providence St. Joseph Health  
Public Health Institute  
Quaker Earthcare Witness  
Regional Asthma Management And  
Prevention

Religious Action Center Of Reform Judaism  
Salesforce.com  
San Francisco Asthma Task Force  
San Francisco Bay Area Chapter Physicians  
For Social Responsibility  
San Gabriel Valley Economic Partnership  
San Jose Friends Meeting  
Sandiego350  
Santa Clara County Democratic Club  
Service Employees International Union  
Seventh Generation  
Seventh Generation Advisors  
Seventh Generation Interfaith Inc.  
Sierra Business Council  
Sierra Club California  
Sierra Club Foundation  
Sierra Nevada Brewing Company  
Silicon Valley Leadership Group  
SMUD  
SoCal 350 Climate Action  
Solar Energy Industry Association  
Squaw Valley  
States Logistics Services  
Strategic Concepts In Organizing And  
Policy Education  
Sunrun  
Sustainability Group At Loring, Wolcott  
And Coolidge  
Sustainable Silicon Valley  
Symantec  
Technet-technology Network  
Temple Beth El, Aptos, Ca  
Tesla  
The Anschutz Corporation  
The Christopher Reynolds Foundation  
The Cool Planet Working Group Of First  
Presbyterian Palo Alto  
The Greenlining Institute  
The North Face  
The Sisters Of Saint Francis, Rochester,  
Minnesota  
The Sisters Of St. Dominic (Caldwell, NJ)  
The Trust For Public Land  
The Utility Reform Network  
Timberland  
Trillium Asset Management  
U.S. Green Building Council  
Unilever  
Union Of Concerned Scientists

University Professional & Technical  
Employees-CWA Local 9119  
Westlands Solar Park  
Wholly H2O  
Workday  
Vail Resorts  
Veris Asset Management  
VF Corporation  
Vmware, Inc.  
Vote Solar  
Walden Asset Management

**Support if Amended**

California Municipal Utilities Association  
City Of Pasadena  
City Of Riverside

**Opposition**

Agricultural Council Of California  
Agricultural Energy Consumers Association  
Association Of California Egg Farmers  
Building Owners And Managers Association  
of California  
California Agricultural Aircraft Association  
California Apartment Association  
California Association Of Wheat Growers  
California Bean Shippers Association  
California Blueberry Association  
California Business Properties Association  
California Chamber Of Commerce  
California Citrus Mutual  
California Construction and Industrial Materials  
Association

California Cotton Ginners and Growers  
Association  
California Farm Bureau Federation  
California Fresh Fruit Association  
California Grain And Feed Association  
California Independent Oil Marketers &  
Technology Association  
California League Of Food Producers  
California Manufacturing Technology Association  
California Pear Grower Association  
California Retailers Association  
California Seed Association  
California Warehouse Association  
Dairy Institute Of California  
Far West Equipment Dealers Association  
Industrial Environmental Association  
International Council Of Shopping Centers  
Milk Producers Council  
NAIOP Of California, The Commercial  
Real Estate Development Association  
National Federation Of Independent Business  
Orange County Business Council  
Pacific Egg & Poultry Association  
Pacific Gas And Electric Company  
San Diego Gas And Electric Company  
Simi Valley Chamber Of Commerce  
Southern California Edison  
Torrance Chamber Of Commerce  
Western Agricultural Processors Association  
Western Growers Association  
Western States Petroleum Association

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

*Revised 07/02/18 at 4:06 p.m.*