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UNFINISHED BUSINESS

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Bill No: SB 100  
Author: De León (D), et al.  
Amended: 8/20/18  
Vote: 21

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SENATE ENERGY, U. & C. COMMITTEE: 8-2, 5/9/17  
AYES: Hueso, Bradford, Hertzberg, Hill, McGuire, Skinner, Stern, Wiener  
NOES: Morrell, Vidak  
NO VOTE RECORDED: Cannella

SENATE APPROPRIATIONS COMMITTEE: 5-2, 5/25/17  
AYES: Lara, Beall, Bradford, Hill, Wiener  
NOES: Bates, Nielsen

SENATE FLOOR: 25-13, 5/31/17  
AYES: Allen, Atkins, Beall, Bradford, De León, Dodd, Galgiani, Glazer,  
Hernandez, Hertzberg, Hill, Hueso, Jackson, Lara, Leyva, McGuire, Mendoza,  
Mitchell, Monning, Newman, Pan, Skinner, Stern, Wieckowski, Wiener  
NOES: Anderson, Bates, Berryhill, Cannella, Fuller, Gaines, Moorlach, Morrell,  
Nguyen, Nielsen, Stone, Vidak, Wilk  
NO VOTE RECORDED: Portantino, Roth

ASSEMBLY FLOOR: 44-33, 8/28/18 - See last page for vote

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

**SOURCE:** Author

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**DIGEST:** This bill 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.

*Assembly Amendments* (1) clarify the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers; (2) adjust the compliance goals for each of the identified RPS compliance periods; (3) recast the language concerning existing hydroelectric facilities that are owned by publicly owned utilities (POUs); and (4) make additional requirements on the California Public Utilities Commission (CPUC), California Energy Commission (CEC), and California Air Resources Board (ARB), other state agencies concerning safety, reliability, unreasonable impacts to customer rates and bills, as well as, require a joint report to the Legislature, as specified.

**ANALYSIS:**

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)

This bill:

- 1) Accelerates the RPS obligations for retail sellers – investor-owned utilities (IOUs), community choice aggregators (CCAs), energy service providers (ESPs) – and 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 subject to the restrictions of the Commerce Clause of the United States Constitution.
- b) Requires the CPUC, CEC, ARB, and other state agencies to incorporate this policy into all relevant planning.
- c) Requires the CPUC, the CEC, and ARB 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;
  - iv) Ensure equivalent RPS and integrated resource plan rules and requirements for all retail sellers and POU's;
  - 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; and
  - vi) Requires the CPUC, CEC, and ARB 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 percent 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 percent of its retail sales from large hydroelectric generation (reduced from existing threshold of 50 percent) under specified circumstances.

## Background

*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.

*SB 100.* 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. The IOUs have already procured sufficient renewables to meet the 2020 obligations, and are additionally well procured for the current 2024 obligation of 40 percent. Interestingly, due to the projected growth of CCAs, the CPUC has predicted that up to 85 percent of the IOU load could be served by non-IOU providers by the mid-2020s, largely relieving the IOUs from any additional RPS procurement needs. Consequently, the additional RPS obligations proposed by this bill will likely largely fall on current and future CCAs.

*The remaining 40 percent.* 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 this 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 the Assembly Committee on Natural Resources clarified this broader planning goal of the 100 percent policy.

Along with the increase in RPS-eligible resources, this bill further establishes a new policy which plans for all electricity by 2045 to be from a mix of both RPS-eligible and zero-carbon resources. This second part of this bill establishes additional direction for the retail sellers and POUs – beyond the 60 percent RPS

required by 2030 – to meet the remaining 40 percent of their electricity needs from any combination of renewable and zero-carbon resources.

### **Related/Prior Legislation**

SB 350 (De León, Chapter 547, Statutes of 2015) established the goal of receiving 50 of California’s electricity from eligible renewable energy resources.

SBX1 2 (Simitian, Chapter 1, Statutes of 2011-12 First Extraordinary Session) required retail sellers of electricity and POUs to procure at least 33 percent of their electricity from renewable resources by 2020.

**FISCAL EFFECT:** Appropriation: No Fiscal Com.: Yes Local: Yes

According to the Assembly Appropriations Committee:

- Increased total annual CPUC costs of approximately \$4.7 million (Public Utilities Reimbursement Account) for all the activities associated with opening and modifying proceedings in the areas of RPS and integrated resource planning associated with accelerating the targets.
- Increased annual CEC costs of approximately \$1.2 million for the transmission planning analysis required to evaluate the increased penetration of renewable generation, verify activities for each subsequent RPS compliance period, update enforcement regulations and guidebooks (GF).
- Increased annual ARB costs of approximately \$200,000 (Air Pollution Control Fund) to perform its expanded role in enforcing renewable energy compliance for publicly-owned utilities.
- Increased DWR costs of up to \$15 million (GF or special fund) per year until 2045 to meet the 100 percent renewable or zero-carbon standard.

**SUPPORT:** (Verified 8/28/18)

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

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  
California Black Health Network  
California Business Alliance For A Clean Economy  
California Catholic Conference, Inc.  
California Church Impact  
California Coastal Protection Network  
California Coastkeeper Alliance  
California Community Choice Association  
California Compost Coalition  
California Conference of Directors of Environmental Health  
California Efficiency + Demand Management Council  
California Energy Storage Alliance  
California Environmental Justice Alliance  
California Interfaith Power & Light  
California League of Conservation Voters

California Low Carbon Fuel And Energy Coalition  
California Municipal Utilities Association  
California Public Health Association - North  
California Releaf  
California Religious Action Center of Reform Judaism  
California Solar Energy Industries Association  
California Thoracic Society  
California Voices For Progress  
California Wind Energy Association  
Californians Against Waste  
Californians For Energy Choice  
CalPIRG  
Carbon Cycle Institute  
Center For Climate Change & Health  
Center For Climate Protection  
Center For Community Action And Environmental Justice  
Center For Sustainable Energy  
Center On Race, Poverty & The Environment  
Central Coast Alliance United For A Sustainable Economy  
Ceres, Inc.  
Chargepoint, Inc  
City of Cupertino  
City of Pasadena  
City of Riverside  
City of Santa Monica  
City of Sunnyvale  
Clean Power Campaign  
Clean Water Action  
Cleantech San Diego  
Clif Bar & Company  
Climate Action Campaign  
Communications Workers of America, 9th District  
Communities For A Better Environment  
Congregation of Sisters of St. Agnes  
Controlled Thermal Resources  
Dean Democratic Club of Silicon Valley  
Democratic Club of Sunnyvale  
Dignity Health  
Domini Impact Investments LLC  
E2 (Environmental Entrepreneurs)

Earthjustice  
EDF Renewable Energy  
Efficiency Data & Development  
Engie Services U.S. Inc.  
Environment & Enterprise Strategies  
Environment California  
Environmental Defense Center  
Environmental Defense Fund  
Environmental Health Coalition  
Fetzer Vineyards  
First Solar, Inc.  
Fix The Grid Coalition  
Fossil Free California  
Fresno Madera Medical Society  
Friends Committee On Legislation of California  
Friends Fiduciary Corporation  
Friends of The Earth - Us  
Gap, Inc.  
Green Century Capital Management  
Green Party of California  
Greencharge  
Health Care Without Harm  
Health Group  
Human Impact Partners  
Imperial Irrigation District  
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  
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  
Vail Resorts  
Veris Asset Management  
VF Corporation  
Vmware, Inc.  
Vote Solar  
Walden Asset Management  
Westlands Solar Park  
Wholly H2O  
Workday  
Numerous individuals

**OPPOSITION:** (Verified 8/28/18)

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  
Simi Valley Chamber of Commerce  
Southern California Edison  
Torrance Chamber of Commerce  
Western Agricultural Processors Association  
Western Growers Association  
Western States Petroleum Association

**ARGUMENTS IN SUPPORT:** According to the author, “California already has the most ambitious climate targets in the world and the most aggressive renewable energy targets of any economy of its size. In 2015, The Legislature passed SB 350, The Clean Energy and Pollution Reduction Act (De León et al), which set a 50 percent clean energy standard by 2030. California’s experience over the last decade offers hard evidence that we can dramatically expand clean energy while also growing our economy and putting people to work. This measure will ensure that California remains the world’s clean energy superpower and that we lead the nation in addressing the threat of climate change.”

**ARGUMENTS IN OPPOSITION:** Many of those opposed to this bill cite the desire to prevent increased costs to ratepayers from the procurement goals of this bill. Additionally, some of the opposition raise concerns that the changing electricity landscape merits a need to pause on new procurement requirements. In opposition to this bill, California Manufacturing Technology Association expresses concerns this bill is too soon since the passage of SB 350 which updated the RPS requirements to 50 percent.

ASSEMBLY FLOOR: 44-33, 8/28/18

AYES: Baker, Berman, Bloom, Bonta, Burke, Calderon, Carrillo, Chau, Chiu, Chu, Cooley, Eggman, Friedman, Gabriel, Cristina Garcia, Eduardo Garcia, Gloria, Gonzalez Fletcher, Grayson, Holden, Irwin, Jones-Sawyer, Kalra, Kamlager-Dove, Levine, Limón, Low, McCarty, Medina, Mullin, Muratsuchi, Nazarian, O'Donnell, Quirk, Reyes, Rivas, Rodriguez, Santiago, Mark Stone, Thurmond, Ting, Weber, Wood, Rendon

NOES: Acosta, Travis Allen, Bigelow, Brough, Caballero, Chávez, Chen, Choi, Cooper, Cunningham, Dahle, Daly, Flora, Fong, Frazier, Gallagher, Gipson, Gray, Harper, Kiley, Lackey, Maienschein, Mathis, Mayes, Melendez,

Oberholte, Patterson, Quirk-Silva, Rubio, Salas, Steinorth, Voepel, Waldron  
NO VOTE RECORDED: Aguiar-Curry, Arambula, Cervantes

Prepared by: Nidia Bautista / E., U., & C. / (916) 651-4107  
8/28/18 22:37:48

\*\*\*\* END \*\*\*\*