Note: <u>SB 100</u>, signed in September 2018, increased the overall requirement from 50% to 60% by 2030. The legislation also changed some of the rules related to the use of large hydro by Publicly Owned Municipal Utilities, and adopted an additional goal of 100% of all retail sales by 2045 come from renewable energy resources and zero-carbon resources.

California's Renewables Portfolio Standard (RPS) was originally established by legislation enacted in 2002. Subsequent amendments to the law have resulted in a requirement for California's electric utilities to have 50% of their retail sales derived from eligible renewable energy resources in 2030 and all subsequent years. The law established interim targets for the utilities as shown below. Publicly Owned Municipal Utilities (POUs) are not regulated by the CPUC but are affected by the law nonetheless, and their governing boards are charged with establishing procurement requirements based on the interim goals below:

- 20% of retail sales by December 31, 2013
- 25% of retail sales by December 31, 2016
- 33% of retail sales by December 31, 2020
- 44% of retail sales by December 31, 2024
- 52% of retail sales by December 31, 2027
- 60% of retail sales by December 31, 2030

AB 327 (2013) allows the CPUC to establish procurement requirements in excess of the percentages stated above.

Regulatory Roles

The Energy Commission's roles are to:

- Certify eligible renewable resources procured by retail sellers (investor-owned utilities, electricity service providers, and community choice aggregators) that meet statutory requirements
- Design and implement a tracking and verification system to ensure that renewable energy output is counted only once for the purpose of the RPS and for verifying retail product claims in California or other states
- Adopt <u>regulations</u> specifying procedures for enforcement of the RPS for POUs
- Certify and verify eligible renewable energy resources procured by POUs and to monitor their compliance with the RPS
- Refer the compliance failure of a POU to the Air Resources Board, which may impose penalties.

The Energy Commission also maintains the <u>Renewables Portfolio Standard Eligibility</u> <u>Guidebook</u>, which describes the eligibility requirements and process for certifying

renewable resources as eligible for California's RPS and describes the Energy Commission's implementation of a tracking system to verify compliance with the RPS.

The CPUC is charged with:

- Determining procurement targets and enforcing compliance
- Reviewing investor owned utilities' contracts for RPS-eligible energy for rate recovery
- Calculating and administering a cost limitation on renewable procurement for investor-owned utilities
- Establishing the standard terms and conditions to be used by all IOUs in contracting for eligible renewable energy resources.
- <u>Implementing</u> compliance rules with RPS procurement quantity requirements
- Reviewing and approving each IOU's procurement plan and its process for selecting
 the least cost bidders of renewable energy that best fit that utility's resource needs.
 IOUs use these processes to select winning bidders from their solicitations to
 procure renewable electricity.

Eligible Technologies

Technologies eligible for the RPS include photovoltaics; solar thermal electric; wind; certain biomass resources; geothermal electric; certain hydroelectric facilities*; ocean wave, thermal and tidal energy; fuel cells using renewable fuels; landfill gas; and municipal solid waste conversion, not the direct combustion of municipal solid waste.

Investor-owned utilities may enter into a combination of long-term and short-term contracts with renewable energy project developers for electricity and associated renewable energy credits to be used for compliance with the RPS. Beginning January 1, 2021, at least 65% of the procurements used by an investor-owned utility must come from contracts of 10 years or more in duration.

Renewable Energy Credits

To meet California's RPS reporting requirements and the renewable energy tracking needs of 14 states and two Canadian provinces in the Western Electricity Coordinating Council (WECC), the Energy Commission and the Western Governors' Association have jointly developed the Western Renewable Energy Generation Information System (WREGIS), which began operation in June 2007. WREGIS tracks renewable energy generation and creates WREGIS certificates for every renewable energy credit (REC) generated, which are used to demonstrate compliance with state RPS policies. One REC represents one megawatt-hour (MWh) of electricity generated from a renewable resource.

The California Public Utilities Commission issued a <u>decision</u> on January 13, 2011, to authorize the use of tradable renewable energy credits (TRECS) for RPS compliance. From the 2010 compliance year through December 31, 2013, the use of TRECS was capped at 25% of a utility's RPS requirement, and the price of a TREC was capped at \$50. SBX1-2 of 2011 appears to have put new restrictions on the use of TRECs which the CPUC will implement. According to the law, the use of TREC transactions signed after June 10, 2010 will be capped at 25% for the compliance period ending December 31, 2013, and will shrink to 10% of the requirement by 2017.

Publicly Owned Municipal Utilities

Publicly Owned Municipal Utilities must achieve the renewable energy procurement targets stated above. However, utilities in a city or county that receives more than 67% of its electricity from hydroelectric generation that it owns and is located within the state only need to meet the procurement requirements based on the amount of its generation that does not come from hydroelectric. Further, utilities with a distribution system demand of less than 150 MW, and that receive more than 40% of its electricity from hydrolectic generation, and that meet other criteria specified in CA Public Utilities Code § 399.30, are not required to procure additional renewable energy resources in excess of levels specified in the law.

Noncompliance

Under existing law, the CPUC has been authorized to impose penalties on utilities that fail to meet their procurement requirements under the RPS. Those potential penalties have never been clearly quantified as in some other states that have an Alternative Compliance Payment. SB 350, however, tasks the CPUC with adopting a schedule of penalties for noncompliance. The legislation further states that the cost of any penalties paid by a utility will not be collected in the rates it charges its customers.

Existing law establishes a series of conditions by which the CPUC may waive enforcement of the procurement requirements for an investor-owned utility, including inadequate transmission capacity, delays from permitting and interconnection, and insufficient supply of eligible renewable energy projects. SB 350 adds two additional conditions by which the CPUC may waive enforcement: unanticipated curtailment of renewable energy resources, and unanticipated increase in retail sales due to transportation electrification.