
**SENATE COMMITTEE ON ENERGY, UTILITIES AND
COMMUNICATIONS**
Senator Ben Hueso, Chair
2019 - 2020 Regular

Bill No: SB 386 **Hearing Date:** 4/24/2019
Author: Caballero
Version: 4/10/2019 As Amended
Urgency: No **Fiscal:** No
Consultant: Nidia Bautista

SUBJECT: California Renewables Portfolio Standard Program: irrigation districts

DIGEST: This bill would limit the Renewable Portfolio Standard (RPS) obligations for Turlock, Modesto and Merced Irrigation Districts to the electricity demands that are unsatisfied by specified dam projects.

ANALYSIS:

Existing law:

- 1) Establishes the California RPS Program which requires investor-owned utilities (IOUs), publicly owned utilities (POUs), community choice aggregators (CCAs), and energy service providers (ESPs) to increase purchases of renewable energy such that they each procure a minimum quantity of electricity products from eligible renewable energy resources, as defined, so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieves 25 percent of retail sales by December 31, 2016, 33 percent by December 31, 2020, 44 percent by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. (Public Utilities Code §§399.11, 399.13, 399.15, 399.30)
- 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 (MW) 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) Defines eligible renewable energy resources include small hydroelectric generation facilities of 30 MW or less, conduit hydroelectric facilities, and the incremental increase in electrical generation resulting from efficiency improvements of existing small hydroelectric facilities. (Public Utilities Code §§399.12, 399.12.5)

- 4) Authorizes the governing board of a POU to adopt a cost limitation optional compliance to satisfy their RPS requirements. Requires the limitation to be set at a level that prevents disproportionate rate impacts. (Public Utilities Code §399.30 (d) (B))
- 5) 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 under specified circumstances. (Public Utilities Code §399.30 (k))
- 6) Authorizes the formation of irrigation districts by a majority of holders of title property susceptible for irrigation by a common source, including residential and agriculture uses. (Water Code §20500 seq. et)

This bill:

- 1) Authorizes a local POU that is an irrigation district to elect to credit its share of the total electricity generated by the Don Pedro Hydroelectric Project or the Merced River Hydroelectric Project, commensurate with its ownership share of those facilities, as meeting its RPS procurement requirements.
- 2) Requires that an election by an irrigation district to apply its proportionate share of the electricity generated by either of the two hydroelectric projects to meet its RPS procurement requirements would be for all of its proportionate share of the generation, including any portion of the electricity that is an eligible renewable energy resource because it results from efficiency improvements at either of the two hydroelectric projects.
- 3) Prohibits any portion of that electricity to be unbundled from any renewable energy credit associated with the electricity.
- 4) Requires an irrigation district making the election to ensure that there is no double counting for electricity that is an eligible renewable energy resource resulting from efficiency improvements at either of the two hydroelectric projects.

Background

Turlock Irrigation District (TID) and Modesto Irrigation District (MID). TID and MID were formed in 1887, the two districts are the oldest irrigation districts in California. They were created in accordance with the laws of the state to provide water for agricultural purposes in their respective irrigation service areas. Soon

after their formation, the districts acquired a water diversion site on the Tuolumne River. Today, the districts serve approximately 200,000 customers in a 1,000 square mile area and provide for irrigation water supply for approximately 200,000 acres of trees, vines, row and forage crops.

Don Pedro Hydroelectric (DPH) Project. The DPH Project is located across the Tuolumne River in the Stanislaus National Forest of Tuolumne County just west of Yosemite National Park, is licensed by the Federal Energy Regulatory Commission (FERC), and jointly owned by TID and MID. Total generation capacity for the project is 203 MW, with 139 MW going to TID and 64 MW to MID. The sharing agreement is based on the acreage served within each district, TID's share and interest in the DPH Project amounts to 68.6 percent while MID's share is 31.54 percent. The FERC license expired in April 2016 and the DPH Project is currently operating on a year-to-year renewal basis until a long-term license is granted by FERC. In 1923, an original Don Pedro Reservoir and its associated powerhouse were brought online to provide water and retail electric service. The Don Pedro Reservoir and hydroelectric power project was expanded under a partnership with the City and County of San Francisco, the planning of which began in the 1940's and culminated when the districts received the federal license in 1966. The City and County of San Francisco contributed to the creation of the Don Pedro Reservoir in exchange for relief from upstream flood control responsibility on the Tuolumne River and gained greater flexibility in its upstream operations as part of its Hetch Hetchy Project.

Merced Irrigation District. Merced Irrigation District has owned and operated hydroelectric generating facilities on the Merced River since 1927. In 1995, Merced Irrigation District exercised its authority to sell power to retail electric customers. Since 1996, Merced Irrigation District has connected over 8,500 customers to Merced Irrigation District's electric system. Total irrigable lands in the Merced Irrigation District amount to 138,000 acres. In addition to providing irrigation water, Merced Irrigation District also uses its existing irrigation distribution system for local flood control by routing local foothills runoff and stream flood waters away from populated areas

Merced River Hydroelectric (MRH) Project. MRH Project is located on the Merced River in Mariposa County and consists of two reservoirs (Lake McClure and McSwain Reservoirs), two powerhouses (New Exchequer and McSwain powerhouses) and various recreation facilities. The installed capacity of the MRH Project is 103.5 MW, with New Exchequer Dam generating the majority of the generation at 94.5 MW and McSwain at nine MW.

RPS and large hydroelectric generation. California’s RPS program, and other energy programs predating RPS, have distinguished between smaller hydroelectric facilities and larger facilities, those that are over 30 MW. These distinctions have largely reflected the state policy to not encourage more damming of rivers out of concern for the natural habitats rivers provide and the state’s desire to encourage development of new renewable projects. The recent passage of SB 100 (De León, Chapter 312, Statutes of 2018) accelerates the RPS requirements by requiring all load-serving entities (LSEs) to meet a 60 percent RPS requirement by 2030 and requiring a planning goal of 100 percent zero-carbon resources by 2045. As such, the expectation is that existing large hydroelectric facilities would count towards the 100 percent goal but do not count towards the RPS.

Below is the most recent power content label information for the affected irrigation districts:

| 2017 Power Content Labels | | | | |
|--------------------------------------|----------------------------|-----------------------------|-----------------------------|--------------------------|
| ENERGY RESOURCES | Merced ID Power Mix | Modesto ID Power Mix | Turlock ID Power Mix | 2017 CA Power Mix |
| Eligible Renewable | 43% | 20% | 28% | 29% |
| <i>Biomass & Biowaste</i> | 0% | 0% | 0% | 2% |
| <i>Geothermal</i> | 0% | 0% | 2% | 4% |
| <i>Eligible hydroelectric</i> | 41% | 1% | 2% | 3% |
| <i>Solar</i> | 0% | 2% | 7% | 10% |
| <i>Wind</i> | 2% | 17% | 17% | 10% |
| Coal | 0% | 16% | 4% | 4% |
| Large Hydroelectric | 3% | 16% | 29% | 15% |
| Natural Gas | 0% | 23% | 25% | 34% |
| Nuclear | 0% | 0% | 0% | 9% |
| Other | 0% | 0% | 0% | <1% |
| Unspecified sources of power* | 54% | 25% | 14% | 9% |

Based on information provided by the irrigation districts, the coal contracts for TID and MID expired in 2017. As such, the expectation is that the new power content label will have zero coal procurement.

Comments. TID and MID state that the current RPS framework negatively affects disadvantaged communities who already receive electricity from a carbon free

renewable source. TID suggests that at current energy rates, TID will need to invest \$300 million more over the next 20 years to meet its RPS requirements. This investment has a negative impact to the bottom line for its electricity ratepayers, by forcing massive capital investment in unnecessary projects, while simultaneously devaluing its own renewable energy resource as non-RPS credit worthy. This double dip diverts ratepayer money from staying in the local economy, and instead sends cash out of the region to solar energy producers in the form of corporate subsidies.

The RPS provides POUs, including the irrigation districts affected by this bill, additional options to comply with RPS, including allowing those with a large hydroelectric facility representing more than 40 percent of the utility's portfolio to satisfy their RPS and a cost limitation optional compliance if their ratepayers are disproportionately affected by the RPS. In fact, the most recent RPS compliance period, Merced Irrigation District has elected to exercise the cost limitation optional compliance. This optional compliance was also exercised by five other POUs. As such, it is unclear why a bill is needed to provide these irrigation districts additional relief from RPS. Based on conversations with the author's office, Merced Irrigation District has not engaged on this bill and has already exercise the cost limitation compliance. *Therefore, the author and committee may wish to amend this bill to remove the reference to the Merced River Hydroelectric Project.* Additionally, TID has stated it does not anticipate any near-term shortfall in meeting its RPS obligations without the large hydroelectric facility. *As such, should the committee move this bill forward, the author and committee may wish to amend this bill to limit TID and MID's ability to sell their RPS supply and require a report by the California Energy Commission to assess the forgone RPS MW provided by this bill.*

Prior/Related Legislation

SB 100 (De León, Chapter 312, Statutes of 2018) established the 100 Percent Clean Energy Act of 2017 which increases the 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.

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

SB 591 (Cannella, Chapter 520, Statutes of 2013) limits the Merced Irrigation District's RPS obligation to the electricity demands that are unsatisfied by the New Exchequer Dam.

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

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

SUPPORT:

California Municipal Utilities Association
Modesto Irrigation District
Turlock Irrigation District

OPPOSITION:

California Hydropower Reform Coalition
California Wind Energy Association
Environment California
Environmental Defense Fund
Independent Energy Producers
Natural Resources Defense Council
Sierra Club California
The Utility Reform Network
Union of Concerned Scientists

ARGUMENTS IN SUPPORT: According to the author:

“Communities in the Central Valley are some of the most economically distressed in the entire state and pay some of the highest energy bills because of hot summers and cold winters. California’s Renewables Portfolio Standard (RPS) puts rural communities who receive their energy from publicly owned irrigation districts at a further economic disadvantage by the mere fact that large hydropower is not considered a qualified renewable source in the RPS even though hydro is in fact renewable. SB 386 will declare existing hydro energy from irrigation districts as a renewable source, like it should have been in the first place and will keep millions of dollars of economic activity in the Central Valley, at a crucial time for the economy of that region. Ratepayer money will return to the community as economic activity, instead of leaving the district to subsidize an already saturated solar energy market.”

ARGUMENTS IN OPPOSITION: Those opposed to this bill note that SB 100 was just signed into law and was carefully negotiated to account for the issues raised by this bill. Several of the parties express concerns that the bill would

undermine the state's efforts to advance renewable energy and, likely, encourage other load-serving entities to receive the same treatment for their RPS obligations. Lastly, several of the entities opposed to this bill note the available optional compliance mechanisms already afforded to POUs if their ratepayers would be significantly impacted with excessive rates attributed to the RPS.

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