SENATE COMMITTEE ON ENERGY, UTILITIES AND COMMUNICATIONS

Senator Steven Bradford, Chair 2023 - 2024 Regular

Bill No: AB 2750 **Hearing Date:** 6/18/2024

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Urgency: No Fiscal: Yes

Consultant: Nidia Bautista

SUBJECT: Electricity: procurement: generation from biomass

DIGEST: This bill extends bioenergy procurement requirement from December 1, 2023 to July 1, 2025 and authorizes an electric utility to contract with a biomass energy facility in that is located in an air district that voluntarily opts for a severe or extreme air quality nonattainment status.

ANALYSIS:

Existing law:

- 1) Establishes and vests the California Public Utilities Commission (CPUC) with regulatory authority over public utilities, including electrical corporations. (Article XII of the California Constitution)
- 2) Authorizes the CPUC to fix the rates and charges for every public utility and requires that those rates and charges be just and reasonable. (Public Utilities Code §451)
- 3) Requires electrical corporations, in addition to other requirements to procure generating capacity from bioenergy projects, to collectively procure, by December 1, 2023, their proportionate share of 125 megawatts (MW) of cumulative rated generating capacity from bioenergy projects that commenced operations before June 1, 2013, and that use certain feedstocks. (Public Utilities Code §399.20.3)
- 4) Requires electrical corporations, local publicly owned electric utilities, and community choice aggregators (CCAs) with contracts to procure electricity generated from biomass that expire on or before December 31, 2028, to seek to amend the contracts or to seek approval for new contracts that include expiration dates five years later than the expiration dates in the contracts that were operative in 2022. Specifies that this requirement does not apply to biomass facilities

located in federal severe or extreme nonattainment areas for particulate matter or ozone. (Public Utilities Code §8388)

This bill:

- 1) Extends that procurement deadline to July 1, 2025 from December 1, 2023.
- 2) Requires those entities to seek to amend the contracts or seek approval for new contracts to include expiration dates at least five years later, rather than expiration dates five years later, than the expiration dates in the contracts that were operative in 2022.
- 3) Specifies that this contracting requirement applies to a biomass facility located in an area that voluntarily opts for severe or extreme nonattainment status for particulate matter or ozone but the air district has determined that the continued operation of the facility does not impede the air district's ability to meet its applicable attainment deadline.

Background

Biomass. Biomass power plant is the general term for waste-to-energy power plants that burn organic material, including wood waste. According to the California Energy Commission (CEC) website, in 2020, biomass electric facilities produced 5,628 gigawatt-hours or roughly three percent of the state's in-state electricity generation portfolio. The CEC notes there are just under 90 operating biomass power plants in California, with installed capacity of about 1,259 MW. The number of power plants and generation capacity has largely remained unchanged since 2001, per the CEC *Energy Almanac* data.

2015 Executive Order. Over 100 million trees have died and more continue to die due to many years of drought that have weakened the trees and left millions of acres of forestland highly susceptible to insect attacks. In 2015, then-Governor Brown issued an Emergency Proclamation to protect public safety and property from falling dead and dying trees and wildfire. The proclamation directed the California Department of Forestry and Fire (CalFire), the Natural Resources Agency, the Department of Transportation, and the CEC to identify the state's high hazard zone (HHZ) as a high priority for tree removal to prevent wildfire and falling trees. The proclamation also directed the CPUC to use its authority to extend contracts for bioenergy facilities receiving feedstock from HHZs.

BioRAM 1 Contracts. On March 17, 2016, the CPUC issued Resolution E-4770 requiring each of the electric investor-owned utilities (IOUs) to enter into contracts

to purchase their share of at least 50 MW of collective generating capacity from biomass generation facilities that use progressively higher annual minimum prescribed levels of HHZ material as feedstock. Specifically, the biomass facilities were required to use a minimum of 40 percent feedstock from the HHZ in 2016 and grow to 80 percent in 2018 and all subsequent years. The electric IOUs were required to provide five-year contracts to facilities, with the right to extend the five-year contract term for one year at a time, up to a cumulative total of 10 years so long as HHZ fuel is available at the minimum fuel requirement (80 percent). The CPUC utilized a renewable auction mechanism (RAM) as a streamlined procurement process.

SB 859 (Committee on Budget, Chapter 368, Statutes of 2016). SB 859 included a new requirement for electric IOUs and publicly owned utilities (POUs) to procure their respective share of 125 MW from existing biomass facilities using prescribed amounts of dead and dying trees located in HHZs as feedstock, with the IOU assigned portion at 96 MW. Specifically, the legislation required that at least 80 percent of the feedstock of an eligible biomass facility, on an annual basis, must be a byproduct of sustainable forestry management. SB 859 required that at least 60 percent of the feedstock must come from HHZs. SB 859 required that the procurement costs would be recovered from all customers on a nonbypassable basis.

CPUC Resolution E-4805. In October 2016, the CPUC issued Resolution E-4805 to implement the electric IOU procurement requirements of SB 859. Resolution E-4805 provided that the IOUs could meet their proportionate shares of the 125 MW goal using any combination of: (a) the BioRAM ordered by Resolution E-4770; (b) a subsequent RAM (BioRAM 2) authorized in the Resolution; and (c) bilateral procurement. However, in order to allow procurement under option (b), Resolution E-4805 required the IOUs to create an updated BioRAM 2 standard contract rider. Specifically, BioRAM2 contracts must contain the feedstock requirements established in SB 859, specify that the contract length is five years, required that the contracted facility is an existing bioenergy project that commenced operation prior to June 1, 2013, and update administrative details such as dates, deadlines, and process requirements.

SB 901 (Dodd, Chapter 626, Statutes of 2018). SB 901 required a number of actions to reduce and prevent the risk of wildfires and to address issues associated with electric IOU cost recovery of wildfire damages. SB 901 also included specific provisions related to biomass facilities, including provisions to loosen the requirements on the facilities, such as: revising the HHZ fuel definitions, require BioRAM contracts to include a monthly compliance option with updated reporting and payment. SB 901 also prohibits biomass facilities for the BioRAM to operate in

areas of the state with severe or extreme federal air quality designations, and revise default terms.

CPUC Resolution E-4977. In its efforts to implement the changes noted in SB 901, the CPUC adopted resolution E-4977 in January 2019. The resolution notes, collectively, the BioRAM program requires the IOUs to procure 146 MW of qualifying biomass electricity and that 153 MW is currently under contract – 119 MW under BioRAM 1 contracts and 34 MW under BioRAM2.

State Budget allocated \$10 million for Biomass Transportation Subsidy. Transporting fuel and feedstocks to biomass electric generating facilities is one of the main cost drivers that contributes to biomass much higher costs as compared to other generating resources. To help address transportation fuel costs, the state budget in 2022 allocated \$10 million for a Biomass Transportation Subsidy targeted at post-fire cleanup and new processing capacity.

SB 1109 (Caballero, Chapter 364, Statutes of 2022). SB 1109 extended requirements on electric IOUs and CCAs to procure energy from biomass generating electric facilities by five years. The bill also required electric IOUs with a contract to procure electricity generated from biomass that expires or expired on or before December 31, 2028, to provide an extension, at a minimum of five years, on those contracts if the contract was operative in 2022, so long as the contract extension follows the feedstock requirement (80 percent shall be a byproduct of sustainable forestry management and at least 60 percent shall be from HHZs) and the facility is located in areas of the state with federal air quality designations below severe or extreme.

CPUC Resolution E-5288. The CPUC adopted resolution E-5288 in October 2023 to implement the requirements of SB 1109. The resolution notes that, to be consistent with previous CPUC BioRAM orders, electric IOUs are authorized to procure their allocated MW share. The resolution also determined that the IOUs are to provide 5-to 15-year extensions to all eligible sellers within 60 days of the resolution's publication.

BioRAM Contracts. Pursuant to the Governor's Emergency Order Addressing Tree Mortality, SB 859 and SB 901, the BioRAM program required the large IOUs to procure 146 MW of bioenergy from HHZs to aid in mitigating the threat of wildfires. Since 2016, the IOUs have executed contracts with seven biomass facilities to meet their BioRAM procurement requirements. There are six biomass facilities on contracts for a combined total capacity of 154 MW and an average contract price of 11.3 ¢/kWh, respectively, according to the CPUC's 2022 Renewable Portfolio Standard cost report.

Electric IOU BioRam Procurement Orders Requires the electric IOUs to procure 146 MW of bioenergy from HHZ fuel. (Source: CPUC website)					
	PG&E	SCE	SDG&E		
Emergency Order	20	20	10		
(Res. E-4770)					
SB 859	43	44	9		
(Res. E-4805)					
Total MW	63	64	19		

Pacific Gas and Electric (PG&E); Southern California Edison (SCE); San Diego Gas and Electric (SDG&E)

As shown in the table below, the electric IOUs collectively procure 154 MW of qualifying biomass electricity, above the required cumulative 146 MW.

Electric IOU BioRam Contracts					
(Source: CPUC website)					
Electric IOU	Facility Name	Location	Capacity (MW)		
PG&E	Burney	Shasta County	29		
PG&E	Wheelabrator Shasta	Shasta County	34		
PG&E	Woodland Biomass	Yolo County	25		
SCE	Rio Bravo Rocklin	Placer County	24		
SCE	Pacific Ultrapower Chinese Station	Tuolumne County	18		
SDG&E	Honey Lake Power Company	Lassen County	24		
Total			154		

Comments

Need for this bill. According to the author, "Under current law, IOUs and CCAs are exempted from purchasing generating capacity from eligible bioenergy projects if the air district in which the biomass facility is located is in a federal "severe" or "extreme" nonattainment area for particulate matter or ozone. Although not intended to include air districts that voluntarily reclassified themselves to "severe" and "extreme" nonattainment (where actual measured levels of particulate matter are below these classifications), a voluntary reclassification by the Sacramento Federal Ozone Nonattainment Area (SFNA) had the unintended impact of disqualifying a biomass facility in Lincoln, California from a Bioenergy Renewable Auction Mechanism (BioRAM) Power Purchase Agreement (PPA) extension. AB 2750 ensures that biomass plants in air districts that voluntarily reclassify to severe or extreme nonattainment status still qualify under existing law requiring utilities to

procure generating capacity from biomass providers. These facilities are crucial to meeting California's renewable energy goals and effectively managing forest waste from high fire hazard severity zones."

Costs to ratepayers. Energy procurement in general administered via the Integrated Resources Plan (IRP) where the load serving entities develop their own procurement based on their needs and priorities while meeting the state preferred portfolio to meet the state's energy and greenhouse gas reductions goals. The IRP process, generally, allows all resources to compete to serve load. However, due to concerns about tree mortality and subsequently catastrophic wildfires, the state has mandated procurement of biomass energy to help mitigate these issues. In general, biomass procurement costs are recovered from electric ratepayers via nonbypassable charges on their electric utility bills. According to the CPUC's 2021 Padilla Report, Costs and Cost Savings for the RPS Program, the average price of contracts executed in 2019 that were greater than three MW was 2.8 ¢/kWh compared to 3.5 ¢/kWh in 2020, compared to average contract price of existing BioRAM contracts of nearly 12.0 ¢/kWh. In the CPUC RPS November 2021 report, the CPUC notes a number of challenges with accessing fuel for biomass facilities, including insufficient supply chain capacity, long hauling distances, and high transportation costs, as well as, the need for retrofits of existing facilities. The analysis notes: "Overcoming these barriers would require further, possibly substantial, investment and subsidies."

Rio Bravo Rocklin Biomass facility. The Rio Bravo Rocklin biomass facility in Lincoln, CA is entered into a five-year PPA with SCE beginning September 2017 to produce 24 MWs. The sponsor reports that, in 2019, SCE extended this initial contract through September 2027. When CARB requested the U.S. EPA to reclassify the SFNA to a Severe nonattainment zone in 2023, the CPUC had not yet finished rulemaking for SB 1109; Resolution E-5288, released in October 2023, directed the IOUs to provide extensions accorded by SB 1109 within 60 days of the resolution's publication. By then, the pending reclassification had disqualified Rio Bravo Rocklin from an extension. This bill seeks to provide Rio Bravo Rocklin that extension by reviving the BioRAM program and qualifying bioenergy facilities located in nonattainment zones that voluntarily reclassified themselves to Severe or Extreme but are not truly Severe or Extreme. This bill would not require the electric IOUs to solicit new contracts beyond the amendment of Rio Bravo Rocklin's contract since the current contracts fulfill the individual and shared procurement obligations for IOUs through 2025.

Air pollution concerns. The environmental and environmental justice organizations opposed to this bill take issue with pollution from biomass facilities. They argue that the current fuel and feedstock requirements are already too expansive and allow for commercial logging waste. They express concerns with air pollution in local and

nearby communities from biomass operations, as well as, the costs of procuring biomass compared to other sources of energy.

Prior/Related Legislation

SB 1062 (Dahle, 2024) requires the Department of Conservation to develop the Biomass Technology Transition Program to support the conversion of biomass energy generation facilities using traditional combustion technologies to newer advanced bioenergy technology facilities and proposes related requirements and a future grant program. The bill is pending the Assembly Committee on Utilities and Energy.

SB 1109 (Caballero, Chapter 364, Statutes of 2021) extended requirements on electric IOUs and CCAs to procure energy from biomass generating electric facilities by five years and requires extension of existing contracts by five years. Additionally, the bill exempted publicly owned utilities from the bill's procurement contract extension requirement that meet certain requirements, requires the local air pollution control district or air quality management district to make a determination on the emissions technology needed prior to the start of the contract extension or new contract.

SB 901 (Dodd, Chapter 626, Statutes of 2018) addressed numerous issues concerning wildfire prevention, response and recovery, including provisions related to biomass operations and electricity procurement.

859 (Senate Budget and Fiscal Review, Chapter 368, Statutes of 2016) required retail sellers of electricity to purchase a total of 125 MW of power from biomass facilities that generate electricity from forest materials removed from specific HHZ, as designated by CalFire in the Governor's Proclamation of a State of Emergency issued October 30, 2015.

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

SUPPORT:

Rio Bravo Rocklin, Sponsor Association of California Water Agencies California Farm Bureau Federation California Forestry Association Independent Energy Producers Association Sierra Pacific Industries

OPPOSITION:

Center for Biological Diversity Natural Resources Defense Council

ARGUMENTS IN SUPPORT: In support of this bill, Rio Bravo Rocklin notes:

AB 2750 ensures that biomass facilities located in air districts that voluntarily reclassify their ozone or particulate matter federal EPA classifications to a higher/more restrictive tier are not prohibited from receiving a BioRAM power purchase agreement extension. Additionally, the measure requires the air district to have determined that the continued operation of the facility does not impede the air district's ability to meet its applicable attainment deadline. Rio Bravo Rocklin is a 24 MW biomass-to-electricity power plant. We directly employee 28 community members and indirectly employee many more. AB 2750 ensures that Rio Bravo Rocklin qualifies for a BioRAM Power Purchase Agreement extension and will continue to use 170,000 tons of wood waste every year, most of that coming from High Hazard Zones, to produce 24 MW of renewable electricity. Without a longer term PPA, we are unable to fund a high cost 10-year maintenance cycle and our future is uncertain. AB 2750 will assist with addressing California's extensive accumulation of dead and dying trees and averting open pile burning and woody waste buildup in forests. These trees, killed by drought and disease, pose an extreme fire and safety risk, which biomass facilities play a crucial role in mitigating.

ARGUMENTS IN OPPOSITION: In opposition to this bill, NRDC and Center for Biological Diversity state:

We write to express our opposition to AB 2750 (Gallagher), which would incentivize and prolong dirty forest biomass power in California's climate plans and energy mix. Among its requirements, the bill would extend the deadline for public utilities to procure a share of their generating capacity from bioenergy projects from December 1, 2023, to July 1, 2025. Bioenergy from forest feedstocks is California's dirtiest and most expensive electricity source. Woody biomass energy pollutes the climate and communities and harms forest ecosystems. Logging/thinning forests for biomass does not stop wildfire and is not effective for community fire safety, particularly during extreme fire weather conditions made more prevalent by the climate crisis. Instead of prolonging requirements for utilities to purchase bioenergy, California should instead shift towards truly clean renewables, such as wind and rooftop solar.