SENATE COMMITTEE ON ENERGY, UTILITIES AND COMMUNICATIONS

Senator Steven Bradford, Chair 2023 - 2024 Regular

Bill No: AB 1061 **Hearing Date:** 7/10/2023

Author: Rendon

Version: 6/28/2023 Amended

Urgency: No **Fiscal:** No

Consultant: Nidia Bautista

SUBJECT: Electricity Supply Strategic Reliability Reserve Program

DIGEST: This bill expressly requires facilities constructed by the Department of Water Resources (DWR) or under a contract with the DWR for purposes of the Electric Supply Strategic Reliability Reserve Program (ESSRRP) to comply with regulations regarding mandatory reporting of greenhouse gas (GHGs) emissions and compliance with the cap-and-trade program to reduce GHGs.

ANALYSIS:

Existing law:

- 1) Requires the State Energy Resources Conservation and Development Commission (also known as the California Energy Commission (CEC)) to implement and administer the Distributed Electricity Backup Assets Program to incentivize the construction of distributed energy assets that would serve as on-call emergency supply or load reduction for the electrical grid during extreme events. (Public Resources Code §25791)
- 2) Requires DWR to implement projects, purchases, and contracts to carry out the purposes of those programs. Authorizes the DWR to construct, own and operate, or contract for specified types of electrical generation and energy storage facilities to secure resources for summer reliability. (Water Code §80710)
- 3) Establishes the California Global Warming Solutions Act of 2006 which provides the California Air Resources Board (CARB) as the state agency responsible for monitoring and regulating sources emitting GHGs. Requires the CARB to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions. Requires the CARB to adopt GHG emissions limits

and emissions reduction measures by regulation, including the use of market-based compliance mechanisms. (Health and Safety Code §§38530 and 38570)

This bill expressly requires facilities constructed by the DWR or under a contract with the DWR for purposes of the Electric Supply Strategic Reliability Reserve Program to comply with regulations adopted by the CARB. Specifically, the regulations for:

- (1) mandatory reporting of GHG emissions; and
- (2) compliance with the cap-and-trade program to reduce GHGs.

Background

DWR called on to provide energy reliability. In August 2020, a massive heat wave across the western United States led the California Independent System Operator (CAISO), the operator for much of the state's electrical grid, to implement rotating outages across the state in order to stave off more devastating blackouts. In 2021, the Bootleg Fire in Oregon threatened electricity transmission lines and significantly reduced power imported into California. Governor Newsom issued executive orders during both events to shore up electric reliability. The July 2021 Executive Order directed DWR to secure and deploy temporary and emergency power generation to supplement existing grid resources. In May 2022, analysis by the state's primary energy agencies and CAISO, found that additional generating resources were needed to address extreme weather events, massive fires, supply chain constraints, and other factors which led to legislative actions that called on DWR to secure energy resources to address extreme events.

Electric Supply Strategic Reliability Reserve Program (ESSRRP). In June 2022, Budget Trailer Bills, AB 205, AB 178, and AB 180, were signed into law. The three pieces of legislation collectively established the ESSRRP and set forth new responsibilities and activities by DWR funded by the newly established Electricity Supply Reliability Reserve Fund (ESSRF). DWR promptly established temporary energy resources, created a new Deputy Director-level division with 25 staff. The Division of Statewide Water and Energy which oversees the ESSRRP and the State Power Augmentation Program which was developed in July 2021 in response to executive order direction to quickly deploy 120 megawatts (MW) of new generation in 2021. Under the ESSRRP, DWR acts as a power provider of last resort to help maintain electricity reliability. As part of the program, DWR contracts directly with power facilities and also enters into agreements with the state's large electric investor-owned utilities (IOUs) to reimburse for the value of imported firm energy resources to support summer reliability.

Current procurement and GHGs emissions of existing DWR contracts. As of the most recent progress report, January 31, 2023, DWR secured 1,646 MW from imported energy for Summer 2022 with a maximum budget of \$150 million (the upcoming report, now delayed, will provide invoicing details). In the case of these resources, the scheduling coordinators (who schedule into the CAISO market) are responsible for the GHG allowance costs for the cap-and-trade program – namely the large electric IOUs. Although, some individual sellers were responsible for paying the GHG allowance costs.

DWR has also secured contracts to procure, install, and license four temporary natural gas turbine generator units totaling 120 MW, at existing power generation sites located in Roseville (two units owned by Roseville) and Yuba City (two units owned by Calpine). The units were operational on September 22, 2021 and during the September 2022 heat wave, as such they are expected to receive ESSRF payments. Current agreements allow the units to remain available for operation until the end of 2023. Per DWR's January 2023 ESSRF progress report, the Calpine units emitted 954 and 1,072 carbon dioxide (CO₂) tons during their use in 2022, and the Roseville units emitted 208 and 257 CO₂ tons during their use in 2022.

In addition to these energy resources, DWR is also in varying stages of contract discussions and execution for other resources, including a plant owned by California State University Channel Islands and Enchanted Rock Electric LLC for three separate contracts for plants in local publicly owned utilities in the San Joaquin Valley (Lodi, Modesto Irrigation District, and Turlock Irrigation District). DWR is also in discussions regarding three once-through-cooling natural gas plants that if the State Water Resources Control Board extends the compliance dates for these facilities (as proposed by the Statewide Advisory Committee on Cooling Water Intake Structures) could be available on standby for extreme events. DWR has also entered into an agreement with Pacific Gas & Electric as the owner and operator of the Diablo Canyon Nuclear Power Plant to secure necessary funding for fuel purchases and management to maintain the option of extending the use of the facility (hinged on extended licensing) beyond the current retirement dates.

Comments

Need for this bill. This bill would explicitly state that the contracts and facilities DWR secures for the ESSRRP must comply with the CARB Mandatory Reporting Requirements for GHGs and the CARB cap-and-trade program. In the case of the

mandatory reporting, the threshold is 10,000 metric tons of carbon dioxide equivalent (CO₂e) emissions, and for the cap-and-trade program it is 25,000 metric tons of CO₂e. As the ESSRRP contracts and facilities are intended to be available as a last resort, generally during extreme summer heat events, it is unlikely that these facilities will surpass the threshold to require either the mandatory reporting or cap-and-trade compliance. However, as some of these facilities may be colocated with existing facilities, as in the case of Roseville Energy Park, based on conversations with DWR, the City of Roseville has folded these emissions into its aggregated emissions for the all the units on the premise. Although it is not clear whether all the facilities and contracts, including those that may be executed in the future, would fall below the thresholds to trigger reporting or participation in the cap-and-trade program, explicitly requiring this compliance does not seem to be harmful and could provide assurance that these facilities are not exempted from the requirements applied to other power facilities in the state and imported resources.

Need for amendments. Due to the passage of recent budget trailer bills, the author and committee may wish to amend this bill to prevent any chaptering issues with SB 123 (Committee on Budget, 2023) and SB 124 (Committee on Budget, 2023).

Prior/Related Legislation

AB 178 (Ting, Chapter 45, Statutes of 2022) appropriated \$700 million dollars for strategic energy reliability by DWR.

AB 180 (Ting, Chapter 44, Statutes of 2022) appropriated \$1.5 billion to DWR for strategic energy reliability reserve.

AB 205 (Committee on Budget, Chapter 61, Statutes of 2022) included various provisions related to energy, including establishing the ESSRRP which continuously appropriates moneys into the accounts to the CEC for the implementation of the Distributed Electricity Backup Assets Program and the Demand Side Grid Support Program.

AB 209 (Committee on Budget, Chapter 251, Statutes of 2022) made various statutory changes to implement the energy related provisions of the 2022 Budget Act. Specifies that eligible recipients of the Demand Side Grid Support Program shall include all energy customers, except those already enrolled in a demand response or energy load reduction programs, as specified. The bill authorizes CEC, in consultation with the CPUC, to adopt additional participation requirements or limitations.

AB 32 (Nuñez/Pavley, Chapter 488, Statutes of 2006) required, under the Global Warming Solutions Act of 2006, CARB to approve a statewide GHG emissions limit equivalent to the statewide GHG emissions level in 1990 to be achieved by 2020 and to ensure that statewide GHG emissions are reduced to at least 40 percent below the 1990 level by 2030. The bill also requires CARB to consider a market mechanism for achieving the GHG reductions and requires mandatory reporting of GHGs by entities that emit GHGs.

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

SUPPORT:

None received

OPPOSITION:

None received

ARGUMENTS IN SUPPORT: According to the author:

California has made significant strides to meet power demand and prevent outages during extreme weather events, such as heatwaves. Among other actions, the Department of Water Resources (DWR) has been charged with procuring and maintaining resources to ensure power supply reliability during these times. Currently, statute does explicitly state that these actions must be subject to carbon accounting standards. AB 1061 requires that any resources procured or maintained by DWR, as part of what is known as the Electricity Supply Strategic Reliability Reserve Program, be subject to cap-and-trade and have their greenhouse gas emissions reported to the Air Resources Board. This will balance the need to procure these backup power sources with holding them to the same emissions standards as other resources.