
SENATE COMMITTEE ON APPROPRIATIONS

Senator Anthony Portantino, Chair
2021 - 2022 Regular Session

SB 1020 (Laird) - Clean Energy, Jobs, and Affordability Act of 2022

Version: May 4, 2022

Urgency: No

Hearing Date: May 9, 2022

Policy Vote: E., U., & C. 10 - 2

Mandate: Yes

Consultant: Ashley Ames

Bill Summary: This bill would establish interim targets to reach SB 100 clean energy goals and require state agencies to purchase 100 percent zero carbon electricity by 2030 to serve their load. It would also establish a California Affordable Decarbonization Authority (the Authority) as a nonprofit benefit organization as a mechanism to fund various electric utility-related programs and activities.

Fiscal Impact:

- The Department of Water Resources (DWR) estimates costs of up to \$3.3 billion (ratepayer or other funds) for the State Water Project (SWP) to purchase 100 percent zero carbon electricity by 2030. This cost could vary significantly depending on the price of zero-GHG capacity over the next eight years. These costs would be offset at least partially by savings elsewhere.
- DWR estimates potential costs of up to \$110 million over the term of a 20-year contract (various funds) to procure contracts in excess of the department's needs for the purposes of offsetting the energy needs of other state agencies. This cost could vary significantly depending on the price of zero-GHG capacity over the next eight years.
- Redirection of approximately \$32 million annually from the Air Pollution Control Fund (APCF) to the Climate and Equity Trust Fund, which this bill would establish as separate and apart from all public moneys or funds of the state.
- ARB estimates ongoing costs of about \$210,000 annually (Greenhouse Gas Reduction Fund [GGRF]) for a staff position to consult and collaborate with AB 32 Environmental Justice Advisory Committee Members, communities, and other state agencies. ARB also estimates one-time contract costs of \$500,000 (GGRF) to contract with community-based nonprofit organizations or California Native American Tribes.
- The California Public Utilities Commission (CPUC) estimates ongoing costs in the low millions of dollars annually (ratepayer funds) to make changes to the Renewable Portfolio Standard and the Integrated Resource Plan, and to otherwise implement the revised clean energy goals that would be established by this bill.
- Unknown impact on the state as an electrical utility ratepayer. (See staff comments.)

Background:

SB 100 (De León, Chapter 312, Statutes of 2018). SB 100 established 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 created 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 100 also required CARB, CEC, and CPUC to issue a joint report by January 1, 2021, and at least every four years, that describes technologies, forecasts, affordability, and system and local reliability. The report is required to include an evaluation of costs and benefits to customer rate impacts, as well as, barriers to achieving the SB 100 policy. The first Joint Agency report was issued January 2021.

Renewable Portfolio Standard (RPS). California's ambitious RPS program is jointly implemented and administered by the CPUC and the CEC. The RPS program requires the state's energy LSEs, including investor-owned utilities (IOUs), CCAs, ESPs and POU to procure 60 percent of their total electricity retail sales from eligible renewable energy resources by 2030, and a mix of RPS-eligible and zero-carbon resources by December 31, 2045, for a total of 100 percent clean energy. The RPS requires milestones on the path to 2030, including interim goals of 25 percent by 2016, 33 percent by 2020, 44 percent by 2024, and 52 percent by 2027. The state is well on its way to achieving its existing RPS targets. Most POU are on track to meet their 2020 goals and working towards their 2030 goals. The state's three largest electric utilities generally have met current procurement goals and anticipate exceeding future procurement goals, with each having procured over 40 percent eligible renewable energy resources.

Integrated Resources Plan (IRP). As required in SB 350 (De León, Chapter 547, Statutes of 2015), the IRP process requires the CPUC to identify a portfolio of resources for electricity procurement that provides optimal integration of renewable energy in a cost-effective manner, and minimize impacts on ratepayer's bills. The identification of this portfolio is intended to guide load-serving entities (LSEs') IRPs, which help ensure that utilities meet GHG reduction targets for the electricity sector. As part of the IRP planning cycle, the CPUC adopts a reference system plan, which identifies the energy procurements needed to help the LSEs meet specific GHG reduction goals. In the most recent IRP decision (D.22-02-004) adopted in February of this year, the CPUC adopted a 38 million metric ton (MMT) 2030 electric sector GHG planning target for the 2021 Preferred System Plan (PSP) portfolio. The PSP portfolio includes approximately 25,500 megawatts (MW) (nameplate capacity) of new supply-side renewables, and 15,000 MW of new storage and demand response resources, by 2032, in addition to existing resources. The PSP portfolio includes long-lead time resources, including out-of-state renewables and offshore wind—two resource types the CPUC will continue evaluating moving forward. The PSP orders procurement of two storage resources that were identified by the CAISO as alternatives to transmission upgrades in the previous transmission planning process (TPP) cycle.

State Water Project. The State Water Project (SWP), operated by the Department of Water Resources (DWR), is both a major producer and consumer of electricity. As the largest single consumer of electricity in California, the SWP pump load ranges from 6,000,000 megawatt hours (MWh) to 9,500,000 MWh depending on the type of water year (dry, average, wet). The electricity is used to operate the SWP pumping plants, which are needed to deliver the water throughout the state. According their website: DWR has been proactively responding to the evolving power market by reducing reliance on fossil fuel energy resources, assisting in maintaining grid reliability, and controlling energy costs for water customers. 50 percent of the SWP's power is

provided by its own emission-free hydroelectric generation. The SWP has a power portfolio consisting of 65 percent carbon-free resources, increasing to 75 percent by 2030 and 100 percent by 2045. DWR is finding innovative ways, such as adding solar to the system, to make this happen. In relation to the SWP, this bill requires specified actions, including some to help reduce costs, such as consider financing from the state's Infrastructure Bank.

Utility rate and bill affordability. In recent years, California utility bills have typically been lower than most of the country. However, those trends are changing and California utility bills are inching higher. As stated in the CPUC 2021 report regarding utility costs and affordability, "California's policy goals could result in rate and bill increases that would make other policy goals more difficult to achieve and could result in overall energy bills becoming unaffordable for some Californians." The paper notes that wildfire mitigation and electrification are among the near-term needs that place upward pressure on rates and bills. This bill proposes to establish the Authority to help reduce ratepayer costs. As proposed by this bill, the Authority would be a nonprofit benefit corporation with a board of legislative and government appointees. The Authority would be able to receive funds (state budget, federal dollars, other non-ratepayer funding) that could be used to reimburse utilities and their customers from specified expenses. This bill includes a broad list of possible utility-related activities that could be funded, such as wildfire mitigation, transportation electrification, public purpose programs, and others.

Guaranteeing utility bill reductions. Presuming that non-ratepayer funding would be channeled to the Authority, then specified utility-related costs could be offset by the influx of funding. In instances where there is no additional funding, then the existing electric rate recovery process would continue. In a year when the state is experiencing a budget surplus, the notion of funneling state General Fund dollars to the Authority seems realistic. However, in years without budget surpluses, or worse, cuts to the budget, there is not likely to be any offsetting of ratepayers costs. Some may find the mechanism appealing to support their desires for more spending, as opposed to reductions in costs borne by utility customers. As such the overall pie of expenses could grow for utility ratepayers and taxpayers. In this regard, the authors and committee may wish to ensure that the mechanism for the Authority does not result in increases in spending overall that could actually increase pressure on utility bills and rates and the state budget.

Proposed Law: This bill would establish interim targets to reach SB 100 clean energy goals and require state agencies to purchase 100 percent zero carbon electricity by 2030 to serve their load. It would also establish a California Affordable Decarbonization Authority (the Authority) as a nonprofit benefit organization as a mechanism to fund various electric utility-related programs and activities. Specifically, this bill would:

1. Revise state policy to instead provide that eligible renewable energy resources and zero-carbon resources supply 90 percent of all retail sales of electricity to California end-use customers by December 31, 2035, 95 percent of all retail sales of electricity to California end-use customers by December 31, 2040, 100 percent of all retail sales of electricity to California end-use customers by December 31, 2045, and 100 percent of electricity procured to serve all state agencies by December 31, 2030, as specified.

2. Authorize the CPUC and CEC, upon request of the CAISO, to disclose to the CAISO confidential information relating to power purchase agreements with electric generation and energy storage projects for purposes of transmission planning.
3. Require the CPUC and CEC to jointly authorize the establishment of the Authority as a nonprofit public benefit corporation and to take all necessary measures to create the Authority.
 - a. Establish the Climate and Equity Trust Fund as a trust fund, separate and apart from all public moneys or funds of the state, and would continuously appropriate the moneys in the trust fund to the Authority for the benefit of electricity customers and to promote affordable electricity rates, as specified, thereby making an appropriation.
 - b. Authorize disbursements from the trust fund to be made through direct credits on ratepayer bills, direct rebates or incentives to market participants, technology vendors, technology installers, and end-use customers, and reimbursement of eligible costs incurred by an electrical corporation, electric service provider (ESP), community choice aggregator (CCA), or local publicly owned electric utility (POU) in the form of matching funds.
 - c. Require the Authority to submit annual and multiyear spending plans for review and approval to the CPUC and CEC before disbursing trust fund moneys.
4. Modify, with respect to the provision that a portion of the scoping plan workshops be conducted in regions of the state that have the most significant exposure to air pollutants, the above-described included communities as additionally being areas designated as federal extreme nonattainment.

Related Legislation:

SB 1158 (Becker, 2022) would require every retail supplier of electricity to annually report hourly GHG emissions data, including as part of the CEC's Power Source Disclosure Program, among other provisions.

SB 887 (Becker, 2022) would adjust the planning horizon for the annual electricity transmission plan from 10-years to 15-years, and requires approval of at least two transmission projects as part of the CAISO 2022-23 TPP.

SB 1174 (Hertzberg, 2022) would require specified reporting related to electric transmission projects, and also requires the CPUC in coordination with other state agencies to identify and advance all interconnections or transmission approvals necessary, as specified.

SB 1032 (Becker, 2022) would create the Clean Energy Infrastructure Authority as a public instrumentality of the state for the purpose of leading the state's efforts to build critical electrical transmission infrastructure necessary to enable the state to transition to 100 percent clean energy, as specified.

SB 1203 (Becker, 2022) would declare that it is the intent of the Legislature that state agencies aim to achieve zero net emissions of GHGs resulting from their operations no later than January 1, 2035; requires each state agency to develop and publish a plan that describes its current GHG inventory, its planned actions for achieving net zero emissions, and an estimate of the costs associated with the planned actions, as specified.

SB 1274 (McGuire, 2022) would include, as a project eligible for streamlining benefits related to CEQA certification, a clean energy transmission project that upgrades existing transmission infrastructure to bring renewable energy from an offshore wind project located within or adjacent to the County of Humboldt that meets specified requirements.

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 created 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.

Staff Comments:

State Water Project costs. DWR estimates costs of up to \$3.3 billion (ratepayer or other funds) for the SWP to purchase 100 percent zero carbon electricity by 2030. Of that amount, DWR estimates costs of \$2.6 billion to acquire new renewable/zero-carbon supplies, \$100 million to exit existing carbon contracts early, and \$600 million in new Transmission Access Charges. These costs would be in addition to the projected costs to achieve 100 percent renewable/zero-carbon by the current 2045 deadline.

Staff notes that this cost could vary significantly depending on the price of zero-GHG capacity over the next eight years, and that these costs would be offset at least partially by savings elsewhere.

Cost to acquire incidental power for state agencies. DWR estimates costs of up to \$110 million over the term of a 20-year contract to procure contracts in excess of the department's needs for the purposes of offsetting the energy needs of other state agencies. The actual amount would ultimately depend on the ability of state agencies to meet the 100 percent by 2030 requirement. DWR notes that these costs could not be passed on to SWP ratepayers, and the authority to charge state agencies or another source of funding would be needed to cover this cost.

Staff notes that this cost could vary significantly depending on the price of zero-GHG capacity over the next eight years, and that these costs would be offset at least partially by savings elsewhere.

Loss of state revenue for the Air Pollution Control Fund. This bill would redirect ARB's noncompliance penalties to the Climate and Equity Trust Fund. ARB estimates revenue from these penalties averages about \$32 million annually but notes that this amount would vary significantly from year-to-year. Currently, these monies are deposited in the Air Pollution Control Fund (APCF), which provides funding for projects and research to improve California's air quality and supports various ARB activities to meet the agency's statutory and regulatory responsibilities. Staff notes that the APCF has experienced an ongoing structural deficit in recent years and that, in 2021-22, the shortfall was about \$300 million.

Many state costs infeasible to estimate. CEC notes that estimating the cost of implementing the revised clean energy requirement is exceedingly difficult, and that the estimate would vary significantly depending on a number of factors that could change drastically by 2030. A few of the challenges identified by CEC include:

- Estimating CEC's electricity consumption in 2030, which could change drastically based on the commission's building footprint, the number of CEC employees, technological advancements, etc.
- Estimating the cost per kWh of electricity in 2030, which would require an estimate of the rates of electricity in 2030 for each utility territory in which CEC purchases electricity. Additional challenges here include:
 - The CPUC approves electricity rates on an ongoing basis for IOUs, and CEC cannot predict how CPUC will change the approved rates.
 - Different POUs – not under CPUC jurisdiction – will also have different rates, and CEC cannot predict how each POU will change its rates.
 - New utilities may be created or existing utilities may merge with each other within the 8-year timeframe – adding further complexity to the prediction.

Similarly, other state agencies determined that estimating costs associated with this bill would be infeasible, but did note that costs of some amount would be likely.

The state as an electrical utility ratepayer. The State of California is an electrical customer, purchasing roughly one percent of the state's electricity. As such, the state incurs costs when electricity rates increase (or realizes savings when rates go down). This bill's revised clean energy goals could potentially increase electricity rates. However, the bill would also establish the California Affordable Decarbonization Authority to help reduce ratepayer costs. The Authority would be able to receive funds (state budget, federal dollars, other non-ratepayer funding) that could be used to reimburse utilities and their customers from specified expenses. This bill includes a broad list of possible utility-related activities that could be funded, such as wildfire mitigation, transportation electrification, public purpose programs, and others.

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