
**SENATE COMMITTEE ON ENERGY, UTILITIES AND
COMMUNICATIONS**

**Senator Steven Bradford, Chair
2023 - 2024 Regular**

Bill No:	SB 1311	Hearing Date:	4/16/2024
Author:	Stern		
Version:	2/15/2024	Introduced	
Urgency:	No	Fiscal:	Yes
Consultant:	Nidia Bautista		

SUBJECT: Energy: reliability planning assessment: integrated energy policy report

DIGEST: This bill requires the California Energy Commission (CEC) to include extreme weather events within the existing energy demand forecasts and, as part of an existing assessment with the California Public Utilities Commission (CPUC), include specified reporting on the status of electric infrastructure projects and the contracting of fossil fuel resources as part of a statewide program for electricity supply reliability.

ANALYSIS:

Existing law:

- 1) Requires the CEC and CPUC, on or before December 15, 2022, and quarterly thereafter, to submit to the Legislature a joint Reliability Planning Assessment that, among other things, includes prospective information on existing and expected resources, including updates on the interconnection status for renewable projects and any delays in interconnection, and expected retirements for both system and local resources. Requires the CEC to report in the energy almanac on California energy resources that serve load in California. (Public Resources Code §25233)
- 2) Requires the CEC, on a biennial basis, to adopt an integrated energy policy report (IEPR) containing an overview of major trends and issues facing the state. Requires the report to include an assessment and forecast of system reliability and the need for resource additions, efficiency, and conservation that considers all aspects of energy industries and markets that are essential for the state economy, general welfare, public health and safety, energy diversity, and protection of the environment. Requires the report to include an assessment and forecast of system reliability and the need for resource additions, efficiency, and conservation that considers all aspects of energy industries and markets that are essential for the state economy, general welfare, public health and safety,

energy diversity, and protection of the environment. (Public Resources Code §25302)

- 3) Requires an electrical corporation that owns electrical transmission facilities to annually prepare a report identifying the changes to any in-service dates of any electrical transmission and interconnection facility, upgrade, or enhancement that was previously reported and is reasonably necessary to achieve the procurement requirements of the California Renewal Portfolio Standards Program and to submit that report to the CPUC. (Public Utilities Code §399.13)
- 4) Establishes the Electricity Supply Strategic Reliability Reserve Program (ESSRRP), administered by the Department of Water Resources (DWR), to expand the resources capable of managing or reducing net-peak demand during extreme events. Provides funding to secure conventional generation, efficiency upgrades at existing natural gas plants, demand response, distributed generation, and long-duration storage. (Water Code §§80710-80712)
- 5) Creates the Electricity Supply Strategic Reliability Reserve Fund (ESSRRF), a continuously appropriated fund, for purposes of adding resources to the electrical grid to ensure electrical grid reliability and support the clean energy transition. Authorizes the CEC to approve an investment plan provided by the DWR regarding the terms, cost, and scope of the contracts, entered into for those purposes. (Public Resources Code §25793)

This bill:

- 1) Requires the joint Reliability Planning Assessment to also include:
 - a) The status of electric utility transmission upgrades and electrical grid infrastructure capacity.
 - b) CPUC approvals of applications for certificates of public convenience and necessity (CPCN) and permits to construct utility and independent projects, and applications for permits for projects from the CEC and the queue of projects from the California Independent System Operator (CAISO), include the expected completion dates for both system and local resource.
 - c) Report on the use of fossil fuel by facilities constructed by, purchased by, or under contract with the DWR, as part of the ESSRRP and ESSRRF.
- 2) Requires the CEC to quarterly publish on its internet website and update a tracking energy development dashboard that synthesizes and publishes the

information included in the joint Reliability Planning Assessment and reported on state's energy resources in the energy almanac.

- 3) Requires the CEC to ensure that the demand forecasts in the IEPR and wind and solar energy generation profiles account for increased weather variability, interactive weather effects, and increased likelihood of heat events, including multiday events, due to climate change, and to use the demand forecasts and those energy generation profiles to inform its energy planning.

Background

Extreme weather events. In recent years, California has experienced challenges ensuring adequate electricity supply reliability during extreme heat events when demand peaks and generation has been reduced or constrained. In August 2020, electric generation and transmission capacity was strained to keep up with the increased electricity demand – setting a peak demand record in the Western Interconnection of just over 162,000 megawatts (MW) on August 18, 2020. During this heat wave, many balancing authorities were forced to declare energy emergencies as they were unable to meet their load obligations, including the CAISO and five balancing authorities outside California. Within the CAISO, for the first time in about 20 years, utilities were forced to shed load – via rotating outages – to help balance the electrical grid. The outages ranged from eight minutes to 2.5 hour durations, depending on the utility, while affected customers experienced between eight minutes to 20 minute outages, generally. The following year, in the midst of a heat wave, a wildfire in Oregon compromised an electric transmission line, dramatically reducing a critical source of energy imports for the state. Last year, a 10-day heat wave resulted in the CAISO setting an all-time record for electricity demand of over 52,000 MW on September 6th. The combination of increased demand and variability and constrained electricity supply, resulted in the state for the first-time issuing a wireless emergency alert calling on Californians to conserve energy.

CEC and CPUC joint Reliability Planning Assessment. As part of SB 846 (Dodd, Chapter 239, Statutes of 2022) authorized the extension of the Diablo Canyon Power Plant (DCPP)—which was scheduled to retire by 2025—through 2030. SB 846 also included legislative intent to provide a total of \$1 billion from the General Fund from 2023-24 through 2025-26—\$100 million in 2023-24, \$400 million in 2024-25, and \$500 million in 2025-26—to support the Clean Energy Reliability Investment Plan, which CEC recently updated. Adjustments to these amounts and dates are subject to annual state budget decisions. The legislation required the plan to support investments that address near- and mid-term reliability needs and the state's greenhouse gas (GHG) and clean energy goals. The plan adopted by the

CEC incorporates a combination of planning and enabling structures to support clean energy deployment and augmenting for extreme events for the first year \$100 million funding. Additionally, the legislation requires the CEC and CPUC to quarterly publish a reliability planning assessment to include estimates of supply and demand for the next 10 years under different risk scenarios, information on existing and new resources and delays, and a description of barriers to timely deployment of resources. The agencies have issued their third quarterly report since the passage of SB 846.

Integrated Energy Policy Report (IEPR). The IEPR provides a cohesive approach to identifying and solving the state's pressing energy needs and issues. The report, which is crafted in collaboration with a range of stakeholders, develops and implements energy plans and policies. SB 1389 (Bowen, Chapter 568, Statutes of 2002) required the CEC to conduct assessments and forecasts of all 10 aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The CEC is then required to use these assessments and forecasts to "develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety." The CEC adopts an IEPR every two years and an update every other year.

Transmission Development Forum. The Transmission Development Forum is a joint effort between the CAISO and the CPUC to discuss and track Participating Transmission Owners expansion, network upgrade projects, and schedules. The Transmission Development Forum creates a single forum to track the status of transmission network upgrade projects that affect generators and all other transmission projects approved in the CAISO's transmission planning process. The effort allows for increased transparency for all stakeholders about transmission projects and enhances accountability of transmission owners by having them explain schedule changes, delays, and address stakeholders' questions, particularly for projects in the transmission queue.

Tracking Energy Development (TED) Task Force. The TED Taskforce is complimentary joint effort of the CPUC, CEC, CAISO, and Office of Business and Economic Development (GO-Biz) to track new energy projects under development. According to the CPUC, the objective is to build on the success of ad hoc efforts in 2021 to provide energy resource project development support, as appropriate, and identify barriers and mitigation strategies to accelerate energy project development.

Electricity Supply Strategic Reliability Reserve Program at the DWR (funded at \$2.3 billion). In June 2022, Budget Trailer Bills, AB 205 (Committee on Budget, Chapter 61, Statutes of 2022), AB 178 (Ting, Chapter 45, Statutes of 2022), and

AB 180 (Ting, Chapter 44, Statutes of 2022) collectively established the ESSRRP and set forth new responsibilities and activities by DWR, funded by the newly established ESSRRF, and separate from the State Water Project. DWR established temporary energy resources and created a new deputy director-level division with 25 staff – the Division of Statewide Water and Energy – which oversees the ESSRRP along with the State Power Augmentation Program which was developed in July 2021 in response to executive order direction to quickly deploy 120 MW of new generation. Under the ESSRRP, DWR acts as contingency insurance 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.

DWR ESSRRP contracting for fossil fuel resources. As part of the ESSRRP, DWR has contracted with natural gas turbine generator units, including three natural gas powerplants subject to the State Water Resources Control Board’s once-through-cooling regulations. These natural gas powerplants – AES Alamitos, AES Huntington Beach, and Ormond – are in addition to contracts for imported energy and four temporary natural gas turbine generator units totaling 120 MW at existing power generation sites located in the Cities of Roseville (two units owned by Roseville) and Yuba City (two units owned by Calpine). Current agreements allow the units to remain available for operation until the end of 2023. DWR is also in entered into of contracts for other resources, including a gas plant owned by California State University at Channel Islands and Enchanted Rock Electric LLC for three separate plants operating in local publicly owned utilities service territories within the San Joaquin Valley (City of Lodi, Modesto Irrigation District, and Turlock Irrigation District). DWR has also entered into an agreement with Pacific Gas & Electric as the owner and operator of the DCPD to secure necessary funding for fuel purchases and management to maintain the option of extending the use of the facility (contingent on extended licensing) beyond the current retirement dates.

Comments

Need for this bill. This bill requires additional reporting of the CEC and CPUC as part of the joint Reliability Planning Report, including identifying fossil fuel generating resources contracted by DWR. This bill also largely codifies the CEC’s current and intended near- and longer-term efforts to better incorporate extreme events in its demand forecast, as part of the IEPR. Since the August 2020 heat wave when CAISO was forced to institute rotating electricity outages, the CEC has instituted a number of changes to its demand forecasts to better account for extreme weather events, specifically incorporating 1-in-2-year weather events, 1-

in-5-year weather events, 1-in-10-year weather events, and 1-in-20-year weather events to better account for the impacts of climate change on electricity peak demand. For the 2023 IEPR forecast, the CEC shifted to a methodology that uses climate projections to develop the one-in-X peak demand forecast. The climate change projections account for the increasing frequency and intensity of extreme heat, and an increase in the number of consecutive days with extreme temperatures. As a longer-term project, the CEC is also looking into the electricity output impacts of extreme heat on generation resources, including solar photovoltaic and wind energy. As noted in the 2023 IEPR,

As the impacts of climate change increase in significance, historical weather data are no longer sufficient to predict future weather patterns. Consequently, CEC staff is integrating new climate simulation data into the forecast from the Cal-Adapt Analytics Engine. Weather and climate data are also used to re-characterize normal and extreme peak electricity demand events (events likely to happen once in X years, such as 1-in-10). Future demand models will include additional data and refinements.

Governor's veto message. This bill is nearly identical to SB 664 (Stern, 2023) which was vetoed by the Governor who stated in the veto message:

While I support the author's attempt to daylight the development and use of specific energy infrastructure, this bill is redundant of existing efforts and duplicates requirements in other bills that I recently signed. To achieve our clean energy and climate goals, we must ensure that the relevant agencies' planning and reporting efforts are coordinated and aligned. Unfortunately, this bill does not achieve that objective.

The author and supporters disagree with the Governor's veto message and contend there is value to the additional reporting requirements proposed in this bill, particularly in relation to the need to better track the transmission build-out that will be necessary to achieve the state's clean energy goals.

Prior/Related Legislation

SB 664 (Stern, 2023) would have required the CEC to include extreme weather events within the existing energy demand forecasts and, as part of an existing assessment with the CPUC, include specified reporting on the status of electric infrastructure projects and the contracting of fossil fuel resources as part of a statewide program for electricity supply reliability. The bill was vetoed.

SB 124 (Committee on Budget and Fiscal Review, Chapter 53, Statutes of 2023) required the CEC, CAISO, and DWR to submit a report to the Legislature each

year on the status of the impact of new resource additions and revisions to the state's electric demand forecast, and the impact of these updates and needed for keeping the DCPD online.

SB 319 (McGuire, Chapter 390, Statutes of 2023) required the CEC and the CPUC, in coordination with the CAISO, to better and regularly coordinate planning and permitting of energy transmission infrastructure to ensure the state meets its clean energy goals and to evaluate and report on that planning and related infrastructure development. The bill also required these state energy agencies to jointly develop an electrical transmission infrastructure development guidebook.

SB 420 (Becker, 2023) would have exempted construction of certain low-voltage electrical lines and associated equipment from the need to receive a discretionary permit from the CPUC. The bill was vetoed.

AB 1373 (E. Garcia, Chapter 367, Statutes of 2023) made numerous changes to electricity policy, most notably, authorized the DWR to serve as a central procurement entity to procure energy resources in order to help the state meet its renewable and zero-carbon energy resources and reliability goals. The bill also included numerous related and additional provisions.

SB 529 (Hertzberg, Chapter 357, Statutes of 2022) exempted an extension, expansion, upgrade, or other modification of an existing transmission line or substations from the requirement of a CPCN and directs the CPUC to revise its general orders, by January 1, 2024, to instead use its permit to construct process for these approvals.

SB 887 (Becker, Chapter 358, Statutes of 2022) directed, among other provisions, the CPUC, on or before January 15, 2023, to request CAISO to identify the highest priority anticipated transmission facilities that are needed to deliver renewable energy resources or zero-carbon resources.

SB 846 (Dodd, Chapter 239, Statutes of 2022) included a requirement that the CEC and CPUC submit a joint Agency Reliability Report by December 15, 2022 and quarterly thereafter.

SB 1174 (Herzberg, Chapter 229, Statutes of 2022) required certain CPUC reports and assessments, including reporting relating to the California Renewables Portfolio Standard Program, to consider the role of transmission.

AB 205 (Committee on Budget, Chapter 21, Statutes of 2022) allowed certain energy projects, including electric transmission lines between certain non-fossil fuel energy generation facilities to become certified leadership projects under the

Jobs and Economic Improvement Through Environmental Leadership Act of 2021 through a certification process through the CEC. With this certification, actions or proceedings related to the certification of an environmental impact report need to be resolved within 270 days to the extent feasible.

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

SUPPORT:

Climate Action California
Environmental Defense Fund
The Climate Reality Project: Silicon Valley Chapter

OPPOSITION:

None received

ARGUMENTS IN SUPPORT: In support of this bill, the Environmental Defense Fund states:

SB 1311 recognizes that the state needs to build a tremendous amount of new infrastructure to support our transition to a clean energy economy. Understanding what needs to be built when, and what the progress is on that upgrade is critical. Such transparency helps the decision-making process and more importantly reduces costs to customers by lowering risk. The current process is a “black box,” and this type of reporting will help give more confidence to all stakeholders to understand what potential delays are. This type of tracking will help ensure grid reliability as we electrify more portions of our economy. Ultimately, the reporting envisioned in this bill will help match the coordination to help unlock our clean energy goals more quickly and affordably.

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