SENATE COMMITTEE ON ENERGY, UTILITIES AND COMMUNICATIONS Senator Ben Hueso, Chair 2021 - 2022 Regular

Bill No:	SB 1174		Hearing Date:	3/28/2022
Author:	Hertzberg			
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Urgency:	No		Fiscal:	Yes
Consultant:	Nidia Bautista			

SUBJECT: Electricity: resource adequacy requirements: eligible renewable energy or energy storage resources: transmission and interconnection

DIGEST: This bill requires the California Public Utilities Commission (CPUC) to waive penalties for noncompliance with the resource adequacy (RA) requirements, a program that ensures energy capacity, if certain conditions are met. The bill also requires 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.

ANALYSIS:

Existing law:

- 1) Establishes the CPUC with regulatory authority over public utilities, including electrical corporations. (Article XII of the California Constitution)
- 2) Requires the CPUC, in consultation with the California Independent System Operator (CAISO), to establish RA requirements for electrical corporations, electric service providers (ESP), and community choice aggregators (CCAs) to ensure the reliability of electrical service in California, while advancing the state's goals for clean energy, reducing air pollution, and reducing emissions of greenhouse gases (GHG). Requires the CPUC to exercise its enforcement powers to ensure that electrical corporations, ESP, and CCAs comply with the RA requirements. (Public Utilities Code §380)
- 3) Establishes the Federal Energy Regulatory Commission (FERC) has exclusive jurisdiction over the transmission of electricity in interstate commerce, over the sale of electricity at wholesale in interstate commerce, and over all facilities for the transmission or sale of electricity in interstate commerce. (Federal Power Act §§§201, 205, 206 (16 USC 824, 824d, 824e))

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- 4) Requires the CPUC, via the California Renewables Portfolio Standard (RPS) Program, to establish a renewables portfolio standard requiring all retail sellers, including electrical corporations, ESPs, and CCAs, to procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours 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. Requires an electrical corporation that owns electrical transmission facilities to annually prepare, as part of a specified FERC process, a report identifying any electrical transmission facility, upgrade, or enhancement that is reasonably necessary to achieve the procurement requirements of the California RPS Program and to submit that report to the CPUC. (Public Utilities Code §399.13 and §399.15)
- 5) Requires the CPUC to annually report specified information to the Legislature in order to evaluate the progress of the state's electrical corporations in complying with the California RPS Program. (Public Utilities Code §913.4)
- 6) Requires the CPUC to adopt a process for each electrical corporation, ESP, or CCA to file an integrated resource plan (IRP) and a schedule for periodic updates to the plan, and to ensure that those entities take specified actions, including meeting certain GHG emissions reduction targets and procuring at least 60 percent eligible renewable energy resources by December 31, 2030, as specified. Requires the CPUC to consider the role of existing renewable generation, grid operational efficiencies, energy storage, and distributed energy resources in helping to ensure those entities meet energy and reliability needs during peak demand, while reducing the need for new electricity generation resources and new transmission resources in achieving the state's energy goals at the least cost to ratepayers. (Public Utilities Code §454.52)
- 7) Establishes the policy of the state that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. (Public Utilities Code §454.53)

This bill:

1) Requires the CPUC to waive any otherwise applicable penalty for noncompliance with the RA requirements if it finds that certain conditions have been met, including that the electrical corporation, ESP, or CCA has contracted for adequate resources to meet its RA requirements and that the contracted-for resources would otherwise be supplied, but for delays in the completion of a third-party transmission owner's deliverability network upgrades, as specified.

- 2) Requires each electrical corporation that owns electrical transmission facilities to annually prepare, and submit to the CPUC, a consolidated report on any delays to in-service dates of eligible renewable energy resources or energy storage resources and identify all prudent remedial actions to address and minimize those delays.
- 3) Requires that annual report to also include a system-wide assessment of delays to interconnection or transmission approvals for eligible renewable energy resources or energy storage resources, based on those annual consolidated reports.
- 4) Requires the CPUC, for the purposes of the IRP and RPS, to also consider the role of transmission, while deleting the requirement that such considerations reduce the need for new electricity generation resources and new transmission resources.
- 5) Requires the CPUC, in coordination with the State Energy Resources Conservation and Development Commission (CEC), California Air Resources Board (CARB), and CAISO, to identify and advance all interconnection or transmission approvals necessary to address potential capacity shortfalls and achieve that policy, and would require those entities to execute an accelerated approval and completion process for those purposes.

Background

Resource adequacy (RA). Following the California energy crisis of 2000-01, the California Legislature enacted legislation to prevent future incidents of widespread blackouts and rolling brownouts due to lack of electric generating capacity. Among the reforms adopted in response to the crisis was the adoption of Public Utilities Code §380 as an effort to better ensure reliability of electric supply. The statute directs the CPUC, in consultation with the CAISO, to establish RA requirements for all LSEs, including electric investor-owned utilities (IOUs), ESPs, and now includes CCAs, which did not exist at the time of the crisis. The program is designed to ensure that LSEs have sufficient forward capacity to meet peak load with a 15 (recently adjusted to 17) percent reserve margin. The current RA program consists of system, local, and flexible requirements for each month of a compliance year. In October of each year, load-serving entities (LSEs) must demonstrate that they have procured 90 percent of their system RA obligations for the five summer months (May-September) of the following year, as well as 100

percent of their local requirements, and 90 percent of their flexible requirements for each month of the coming compliance year. The CPUC issues citations and initiates enforcement actions when LSEs do not fully comply with RA program rules. LSEs have the opportunity to appeal these citations.

CAISO backstop procurement. If California RA rules fail to provide sufficient resources, the CAISO is compelled to utilize centralized backstop procurement mechanisms in order to maintain electric system reliability. Centralized backstop procurement is whereby the CAISO contracts with a generator to address the shortfall. Under federal rules, the CAISO, like all other balancing authorities, must ensure system reliability or face penalties. The CAISO has two mechanisms for centralized backstop procurement: Reliability Must Run (RMR) and Capacity Procurement Mechanism (CPM). A resource receiving RMR designation must continue to operate and is compensated by a rate set by the CAISO, per FERC approved tariffs. RMR contracts can be expensive relative to procurement through the CPUC process, especially considering their limited operating parameters. CPM can be used for resources that may be needed in the following year and where the resource is at risk of retirement. Like RMR contracts, CPM contracts are also often at a higher price relative to generation procured through the CPUC process. These costs are generally shouldered by ratepayers in the insufficient Local Capacity Area or by all ratepayers of the LSE(s) lacking the adequate RA. According to the CPUC, the CAISO does not typically need to engage in backstop procurement for LSE procurement deficiencies.

Transmission planning. Each year, the CAISO conducts its transmission planning process to identify potential system limitations, as well as, opportunities for system reinforcements that improve reliability and efficiency. The CAISO Transmission Plan provides a comprehensive evaluation of the CAISO transmission grid to address grid reliability requirements, identify upgrades needed to successfully meet California's policy goals, and explore projects that can bring economic benefits to consumers. The plan relies heavily on key inputs from state agencies in translating legislative policy into actionable policy driven inputs. The plan is updated annually, and culminates in a CAISO Board of Governors approved transmission plan that identifies the needed transmission solutions and authorizes cost recovery through CAISO transmission rates, subject to federal regulatory approval, as well as identifying non-transmission solutions that will be pursued in other venues as an alternative to building additional transmission facilities. The plan is prepared in the larger context of supporting important energy and environmental policies while maintaining reliability through a resilient electric system. The transmission plan is developed through a comprehensive stakeholder process and relies heavily on coordination with key energy state agencies – the CPUC and the CEC – for key

inputs and assumptions regarding electricity demand side forecast assumptions as well as supply side resource development expectations.

CAISO 20-year Transmission Outlook. The CAISO embarked on creating a 20-Year Transmission Outlook for the electric grid, in collaboration with the CPUC and the CEC, with the goal of exploring the longer-term grid requirements and options for meeting the state's GHG reduction and renewable energy objectives reliably and cost-effectively. The CAISO also intends for the expanded planning horizon to provide valuable input for resource planning processes conducted by the CPUC and CEC, and to provide a longer-term context and framing of pertinent issues in the CAISO's ongoing annual 10-Year Transmission Plan.

Transmission Development Forum. The Transmission Development Forum is a recent joint effort between the CAISO and the CPUC to discuss and track Participating Transmission Owners expansion and 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.

Tracking Energy Development (TED) Task Force. The TED Taskforce is also a recent 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 2021 efforts to provide energy resource project development support, as appropriate, and identify barriers and mitigation strategies to accelerate energy project development. Currently, the TED Taskforce is focused on near-term projects, roughly 200 contracted projects needed for summer reliability in 2022 and 2023.

SB 1174. This bill contains two main components: 1) related to changes to the RA program, and 2) reporting and activities related to transmission planning.

Proposed changes to RA. As currently drafted, this bill would require the CPUC to waive penalties associated non-compliance with the RA requirements under certain conditions. These conditions include the LSE has contracted for adequate resources to satisfy its RA requirements, the contracted generator has completed construction of the facility and associated interconnection facility, all other contractual and other requirements have been met, and, but for delays in the

completion of a third-party transmission owner's network upgrades, the LSE would be in compliance. The sponsor of this bill, American Clean Power (ACP), argues that the changes to RA penalties is necessary to "de-risk" new clean energy projects which might otherwise be hampered by delays in transmission upgrades outside the control of the generator. ACP wishes to better account for these instances by waiving RA associated penalties on LSEs whose contracted energy resources projects satisfy the proposed conditions. They note that the generators typically agree to fund network "deliverability upgrades" to ensure that load can be delivered during peak conditions. Completion of these upgrades are a requirement of the RA program. Yet, ACP notes, the transmission owners (often the electric IOUs) are responsible for constructing the upgrades based on the terms, conditions, and timelines outlined in the generator's Generator Interconnection Agreement. Many generators are experiencing lengthy delays, according to ACP, in the construction of these upgrades, which can expose LSEs to RA penalties. Although no specific example was provided for this analysis, ACP is concerned the RA penalties can jeopardize contracts for new clean energy projects.

Are RA changes needed? In opposition to this bill, San Diego Gas & Electric (SDG&E) expresses concern that the proposed changes to the RA penalties "could create the unintended result that there is no consequence for an LSE failing to arrange the third-party transmission service necessary for the supplier's planned inservice date." While ACP's concerns may be valid, the potential implications of waiving of penalties for RA, particularly at a time when the State is experiencing capacity concerns to meet peak demand, could pose greater risks to the overall electricity supply. Moreover, the additional language regarding transmission owner LSEs raises concerns, as noted in The Utility Reform Network's (TURN) letter regarding the appropriateness of the cost recovery language. Additionally, the specific subsection raises more questions regarding the specific laws and regulations intended to apply. The Legislature may wish to proceed with caution so as to not unduly undermine the State's efforts to require LSEs to procure the necessary capacity to meet customer load. In this regard, the author and committee may wish to amend this bill to remove the proposed changes to the RA program.

Transmission planning and reporting. The second main component of this bill focuses on improved transmission planning and reporting. As ACP notes, the efforts to achieve the State's SB 100 goals, including procuring one hundred percent zero-carbon and renewable energy resources by 2045, necessitates a concerted focus on electric transmission development. Last year, ACP raised concerns that the state was not focusing on transmission development. They provided a list of transmission interconnection projects that they stated were delayed in connecting needed new clean energy projects. Through the Chair, the

list was shared with the CPUC, CAISO, and CEC. In raising the concerns about transmission projects, the agencies and CAISO began a concerted effort, though largely informal, to increase accountability and transparency of the pending projects (over a thousand). These efforts are noted above in the named taskforces. The sponsor of this bill notes their encouragement by these recent efforts. This bill attempts to help formalize these efforts with more regular reporting and a requirement that the two agencies, along with CARB, and the CAISO advance all interconnection approvals, as specified, and execute an accelerated approval and completion process. As noted in conversations with the sponsor and author, the sponsor does not intend this language to circumvent any existing requirements, including those related to environmental review of projects. However, should this bill move forward, the author may wish to work with committee to more clearly articulate the aspects of the current informal process they may wish to formalize in statute.

Prior/Related Legislation

SB 887 (Becker, 2022) proposes changes to the existing transmission planning process, including requiring a 15-year horizon for planning and forecasting.

SB 529 (Hertzberg, 2022) authorizes the CPUC to consider changes within the RA program, including the use of a multiyear centralized resource adequacy mechanism, among other options. The bill is currently pending referral in the Assembly Committee on Rules.

SB 350 (Hertzberg, 2020) (before it was amended the Golden State Energy Act (Hill, Chapter 27, Statutes of 2020)) was identical to SB 529 and would have modified existing RA law to ensure, if the CPUC implements a multiyear central RA mechanism that includes a central procurement entity, that the CAM is suspended.

SB 1136 (Hertzberg, Chapter 851, Statutes of 2018) required the CPUC, in establishing RA requirements, to ensure the reliability of electrical service in California while advancing the state's goals for clean energy, reducing air pollution, and reducing emissions of greenhouse gases. The bill also adds a specified purpose minimizing the need for backstop procurement by the CAISO.

SB 695 (Kehoe, Chapter 337, Statutes of 2009) required that the net capacity costs of new generation resources deemed "needed to meet system or local area reliability needs for the benefit of all customers in the electrical corporation's distribution service territory" must be passed on to bundled service customers, direct access and CCA customers.

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

SUPPORT:

American Clean Power Association, Sponsor California Community Choice Association California Energy Storage Alliance California Environmental Voters California State Association of Electrical Workers Coalition of California Utility Employees Environmental Defense Fund Large-scale Solar Association Silicon Valley Leadership Group Solar Energy Industry Association

OPPOSITION:

San Diego Gas & Electric

ARGUMENTS IN SUPPORT: In support of the bill, the author states:

California is facing an unprecedented need for renewable energy resources to power the state's electric grid over the next 10 to 20 years. This heightened need is driven by increased customer demand for clean energy, the continued electrification of transportation and other industries, and state greenhouse gas reduction and renewable energy objectives. This transformation necessitates a substantial build out of transmission systems to deliver the new added capacity to end-use customers – our clean energy ambitions are nothing more than goals without the right infrastructure. California not only needs more clean power, it needs a modern transmission system that can deliver it to every community. SB 1174 will connect the state's bold plans for electrifying our economy with common-sense policy for ramping up the clean energy and modern infrastructure required to power a cleaner, greener California.

ARGUMENTS IN OPPOSITION: SDG&E opposes this bill out of concern for the proposed changes to RA and provisions related to reporting to the CPUC. Specifically, SDG&E expresses concerns with the proposed waiving of penalties for RA compliance on LSEs that have contracted for adequate resources but are unable to meet obligations due to delays in third-party transmission completion. SDG&E states: "This could create the unintended result that there is no consequence for an LSE failing to arrange the third-party transmission service necessary for the supplier's planned in-service date." SDG&E also expresses

concerns regarding the proposed required reporting by transmission owners related to in-service delays of eligible renewable energy and storage resources. SDG&E states that a transmission owner would not have information "related to causes of potential delays unless the resource developer is also the transmission owner. Causes for delays are known by the resource developer."

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