SENATE COMMITTEE ON ENERGY, UTILITIES AND COMMUNICATIONS
Senator Steven Bradford, Chair
2023 - 2024 Regular

Bill No:	SB 319	**Hearing Date:**	4/24/2023
Author:	McGuire		
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Urgency:	No	**Fiscal:**	Yes
Consultant:	Nidia Bautista		

SUBJECT: Electricity: transmission planning

DIGEST: This bill codifies a December 2022 memorandum of understanding (MOU) between the California Public Utilities Commission (CPUC), California Energy Commission (CEC), and the California Independent System Operator (CAISO) regarding transmission and resource planning and implementation. This bill also requires the three entities to develop a permit streamlining roadmap for transmission projects.

ANALYSIS:

Existing law:

1) Establishes that U.S. Federal Energy Regulatory Commission (FERC) has exclusive jurisdiction over the transmission of electric energy in interstate commerce. Also establishes the process and procedures for establishing transmission of electric energy in interstate commerce by public utilities, i.e., the rates, terms & conditions of interstate electric transmission by public utilities. (Federal Power Act §§§201, 205, 206 (16 USC 824, 824d, 824e))

2) Establishes the CAISO as a nonprofit public benefit corporation, and requires the CAISO to ensure the efficient use and reliable operation of the electrical transmission grid consistent with the achievement of planning and operating reserve criteria, as specified. (Public Utilities Code §345.5)

3) Establishes the CPUC with jurisdiction over all public utilities, including electrical and gas corporations. Grants the CPUC certain general powers over all public utilities, subject to control by the Legislature. (Article XII of the California Constitution)

4) Requires the CEC to conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices and to use these assessments and forecasts to develop and evaluate

energy policies and programs that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. (Public Resources Code §25301(a))

5) Requires the CPUC, as part of the Public Utilities Act, to identify a diverse and balanced portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy in a cost-effective manner. The act also requires the CPUC, in consultation with the CEC, to identify all potentially achievable cost-effective electricity efficiency savings and establish efficiency targets for an electrical corporation, as specified. (Public Utilities Code §§454.51 and 454.55)

6) Requires the CPUC, in consultation with the CEC on or before March 31, 2024, to provide transmission-focused guidance to the CAISO about resource portfolios of expected future renewable energy resources and zero-carbon resources, including the allocation of those resources by region based on technical feasibility and commercial interest in each region to allow the CAISO to identify and approve transmission facilities needed to interconnect resources and reliably serve the needs of load centers, as specified. (Public Utilities Code §454.57)

This bill:

1) Codifies a December 2022 MOU between the CPUC, CEC, and the CAISO regarding transmission and resource planning and implementation.

   a) Requires the CEC, CPUC, and CAISO to coordinate and implement a joint workplan through specified proceedings and other resource planning activities led by the CEC, and to agree on principles for forecast cases and a single recommended forecast set and use it consistently in transmission planning and resource procurement cycles to the extent possible.

   b) Requires the CPUC to incorporate long-term statewide resource planning efforts led by the CEC into its proceedings for resource portfolios developed for resource procurement and transmission planning purposes. Requires the CAISO to provide the CPUC with an assessment of transmission planning needs and estimates spanning the CAISO balancing authority area for resource planning purposes, and to coordinate with the CEC on transmission needs in support of long-term informational analysis.

   c) Requires the CPUC to incorporate CAISO-provided transmission information into its considerations in developing resource portfolios and to

map the resulting portfolio resources to specific electrical locations through a joint effort with the CEC and CAISO.

d) Requires the CAISO, in its transmission planning process, to conduct a stakeholder process that enables meaningful public participation to ensure that appropriate study assumptions and scenarios are identified to support development of its final transmission plan, as specified.

e) Requires the CPUC, in authorizing or requiring procurement of resources by electrical corporations, electric service providers, or community choice aggregators, to provide direction to pursue resources with the operational characteristics and geographic locations consistent with the resource planning conducted by the CEC and CPUC and the transmission planning conducted by the CAISO based on that resource planning.

f) Requires the CAISO to prioritize interconnection process activities that support resources with operational characteristics and geographic locations consistent with that resource planning and its transmission planning based on that resource planning, and to coordinate with the CEC and CPUC to manage the resource interconnections and network upgrade projects in the interconnection process and provide transparency to ensure timely interconnection to the extent possible.

2) Requires the CEC, CPUC, and CAISO to jointly develop and recommend an expedited permitting roadmap that describes timeframes and milestones for a coordinated, comprehensive, and efficient permitting process for electrical transmission infrastructure, and to provide an opportunity for stakeholder input and public comment. Requires the CEC, CPUC, and CAISO, on or before December 31, 2024, to complete and submit the recommended framework for the expedited permitting roadmap to the Natural Resources Agency and the relevant fiscal and policy committees of the Legislature.

3) Requires the CPUC to require each electrical corporation to annually review its long-term transmission infrastructure needs for the subsequent 10 years, based on the interconnection requests it receives, to annually report to the CPUC on that review, and to coordinate with local governments to identify each local government's present and future interconnection needs.

4) Requires the electrical corporation, when an electrical corporation completes a transmission infrastructure project, to report the final cost of the project to the CPUC. Requires the CPUC, in consultation with California balancing authorities, on or before December 1, 2024, and annually thereafter, to submit a

report to the Legislature that evaluates transmission and resource planning that has been conducted or implemented.

Background

Transmission projects. Electric transmission lines are generally high voltage lines that move electricity from generation resources (power plants) to distribution lines in neighborhoods. Companies, usually electric investor-owned utilities, proposing the construction of new transmission, are required to obtain a permit from the CPUC for construction of certain specified infrastructure listed under Public Utilities Code §1001, including transmission projects. The CPUC reviews permit applications under two concurrent processes: (1) an environmental review pursuant to the California Environmental Quality Act (CEQA), and (2) the review of project need and costs pursuant to Public Utilities Code §1001 and General Order (GO) 131-D (Certificate of Public Necessity and Convenience (CPCN)).

CPUC's GO 131-D. GO 131-D specifically addresses the procedures to be followed in applications for siting of electric transmission infrastructure. In essence, it implements the requirements of Public Utilities Code §1001. Under GO 131-D, the CPUC has established the criteria that would trigger the need for a permit to build or renovate electrical facilities, including transmission lines and substations. Of the hundreds of major capital electric transmission projects completed in California each year, on average one-two per year may trigger a permit, and thus CEQA. Most projects are reviewed through the CPUC's advice letter approval process, which tends to be more simplified and expedient than a full application for a CPCN.

The level of analysis performed by the CPUC varies with the size (measured in voltage) of the transmission project.

- Projects below 50 kilovolts (kV) are considered distribution projects, rather than transmission projects, and in general do not require CPUC approval.
- Projects between 50 kV and 200 kV require a Permit to Construct from the CPUC, which consists primarily of an environmental review pursuant to CEQA. The CPUC process generally does not require a detailed analysis of the need for or economics of these projects.
- Projects over 200 kV require a CPCN from the CPUC. The CPCN process analyzes the need for the project and the economics of the project, as well as, the environmental impacts of the project.

Transmission planning process. 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 transmission plan fulfills the CAISO's core responsibility to identify and plan the development of solutions, transmission or otherwise, to meet the future needs of the electricity grid. 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. Transmission owners recover the costs of CAISO-approved projects through the Transmission Access Charge (TAC). The transmission owner submits an application to FERC to recover project costs. FERC approves just and reasonable costs and rate of return. CAISO charges transmission customers based on FERC-approved costs. These costs are collected from electric utility customers as part of the transmission and distribution portion of the electric utility bill.

The development of the transmission plan entails annual public stakeholder process that is conducted pursuant to the CAISO's FERC-approved tariff. It includes a three phase process that leads to annual CAISO Board of Governor approval of transmission plan and associated transmission projects. The plan is prepared in the larger context of supporting important energy and environmental policies while maintaining reliability through a resilient electric system.

There are three main categories of CAISO approved transmission projects:

- Reliability projects to meet federal standards;
- Policy projects to meet state policy goals (i.e., renewable portfolio standard);
- Economic projects that reduce congestion, production costs, transmission losses, capacity requirements or other electric supply costs.

Additionally, there are other transmission planning efforts, including local capacity requirements, special studies, interregional transmission project, and others. Transmission owners recover the costs of ISO-approved projects through the TAC. The transmission owner submits an application to FERC to recover project costs. FERC approves just and reasonable costs and rate of return. The CAISO charges transmission customers based on FERC-approved costs.

Forecasting by CEC and supply-side inputs by CPUC. The CEC conducts energy demand forecast used to inform several planning processes, including the CAISO's transmission planning process. The demand forecast is often a 10-year outlook for

electricity and natural gas sales, consumption, and peak and hourly electricity demand. The most recent demand forecast update, is a 13-year forecast. Additionally, the CPUC provides energy resource supply-side inputs, including an annual resource portfolio, to inform the transmission planning by the CAISO.

CAISO Annual Transmission Planning Process (TPP) which evaluates the electricity system's needs based on portfolios developed by the CPUC and in consultation with the CEC, identifies the necessary new transmission lines and upgrades to existing transmission lines required to assure reliability and to further public policy goals. The most recent 2023-24 TPP Portfolios were transmitted to CAISO last month, planning for approximately 86 gigawatts of new resources by 2035.

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 California Air Resources Board, 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 and found that the state may need upwards of three times the energy resource capacity to meet the SB 100 goals.

CAISO 20-Year Transmission Outlook. The CAISO created 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 SB 100 clean energy objectives reliably and cost-effectively. The 20-Year Transmission Outlook was released in September 2021 and the CAISO 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.

December 2022 MOU. The CPUC, CEC, and CAISO entered an updated MOU, replacing the 2010 MOU, in order to better coordinate their respective and shared efforts for the timely development of resources needed to achieve the state's clean energy goals reliably and economically, and focuses on:

- Establishing or reaffirming linkages between the CEC's Integrated Energy Policy Report and SB 100 activities, the CPUC's Integrated Resource Planning process and the ISO's 20-Year Transmission Outlook and annual transmission planning and approval process.
- Affirming the commitment to tighten linkages between planning, procurement direction, and the ISO interconnection process - and local planning - to the greatest extent possible; and,
- Folding the existing state agency and single forecast coordination into the MOU.

Comments

This bill codifies the December 2022 MOU into the statute. Entities have raised concerns that codifying the MOU could limit the ability of the agencies and CAISO to remain nimble to changing conditions. The author has expressed his desire to avoid limiting the agencies and CAISO unnecessarily by codifying the MOU. *With this in mind, the author and committee may wish to amend this bill to delete the language related to the MOU and joint workplan, and instead, replace with language requiring the CPUC and CEC, in consultation with the CAISO, review the MOU and related workplan every five years to ensure it reflects the coordination that is needed to meet the state's goals.*

This bill also requires the CPUC, CEC, and CASIO to jointly develop and recommend an expedited permitting roadmap with timeframes and milestones for permitting electrical transmission infrastructure. San Diego Gas & Electric (SDG&E) supports this bill's efforts to streamline permitting and recommends that this bill be revised to require the agencies to set a maximum limit on the entire permitting process of two to three years.

Amendments needed. The language in this bill needs clarification between the need to address transmission interconnections or energization of new customers. *The author and committee may wish to amend this bill to reflect these distinctions, including the role of coordination with local governments as it pertains to both.*

Prior/Related Legislation

SB 420 (Becker, 2023) allows transmission projects, identified by an agency chosen by the governor to be necessary for reliability and to meet the state's clean energy goals, to become environmental leadership development projects eligible for CEQA streamlining. The bill is pending in this committee.

SB 619 (Padilla, 2023) requires the CEC to give priority to applications for eligible electrical transmission facilities applying for the opt-in permit streamlining, if the applicant certifies that a capital investment of at least $250,000,000 will be made over a period of five years. The bill is pending in this committee.

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

SUPPORT:

Clean Air Task Force
County of Humboldt
Sonoma Clean Power

OPPOSITION:

San Diego Gas & Electric, unless amended

ARGUMENTS IN SUPPORT: According to the author:

> It's become abundantly clear that PG&E has some pretty significant constraints surrounding capacity and an antiquated transmission system. We also need to conduct a system-wide capacity analysis of PG&E to learn about issues like insufficient transmission infrastructure and head off problems like those that

occurred in Humboldt County. This has gone on for far too long and this State has to put a stop to it. That's why we're advancing critical legislation, SB 319, which would force PG&E to do their job connecting homes, businesses and green power projects with safe and reliable distribution and transmission lines along with advancing a long term fix-it plan for their antiquated system. The bill will require utilities to analyze challenges with providing service to individual customers and what shortfalls they have in capacity to provide power across their service area.

ARGUMENTS IN OPPOSITION: SDG&E opposes this bill arguing it would limit flexibility in transmission planning by codifying the MOU between the CEC, CPUC, and CAISO. Additionally, SDG&E contends that load serving entities already plan for the needs of their customers through the CPUC's Integrated Resource Planning process, therefore, they believe the elements of the bill related to coordinating with local governments are not necessary. Lastly, SDG&E "recommends that this bill be revised to require the agencies to set a maximum limit on the entire permitting process of two years, or three years at most."

-- END --