

Date of Hearing: June 22, 2022

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Eduardo Garcia, Chair

SB 1032 (Becker) – As Amended June 6, 2022

SENATE VOTE: 35-0

SUBJECT: State Energy Resources Conservation and Development Commission: electrical transmission grid development and expansion: study

SUMMARY: Requires the California Energy Commission (CEC) to identify, study, and report on proposals to accelerate the development and reduce the costs of transmission. Specifically, **this bill:**

- 1) Requires the CEC to identify and study proposals to accelerate the development of the state's transmission, grid, while reducing costs, to achieve the state's goals to reduce the emissions of greenhouse gases, and:
 - a) Consult with the California Public Utilities Commission (CPUC), Treasurer's Office, Governor's Office of Business and Economic Development (GO-Biz), California Independent System Operator (CAISO), and other California balancing authorities (BAs);
 - b) Consider public financing, public private partnerships, opportunities to reduce redundancy, streamline permitting processes, any other proposals which considered as possible to accelerate transmission and reduce costs, the cost savings of each proposal, and the impact of each proposal on the state's liability for transmission-ignited wildfires;
 - c) Provide opportunities for public input; and
 - d) Report back to the Governor and the Legislature by January 1, 2024.

EXISTING LAW:

- 1) Establishes the Federal Energy Regulatory Commission (FERC) which has exclusive jurisdiction over the transmission of electricity in interstate commerce. Also establishes the process and procedures for establishing transmission of electricity in interstate commerce by public utilities, i.e., the rates, terms, and conditions of interstate electric transmission by public utilities. (Federal Power Act §§ 201, 205, 206 [16 USC 824, 824d, 824e])
- 2) Prohibits any construction by an electrical corporation¹ of a line, plant, or system, or their extensions, without first obtaining from the CPUC a certificate that the present or future public convenience and necessity (CPCN) require or will require such construction. For electric transmission facilities, the CPUC shall consider cost-effective alternatives,

¹ Or other corporations, as specified, including railroad, gas, water, telephone, and sewer.

including demand-side alternatives during their project review. (Public Utilities Code §§ 1001-1103)

- 3) 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)
- 4) Creates the Renewables Portfolio Standard (RPS) which requires retail sellers and publicly owned utilities to increase purchases of renewable energy such that at least 60% of retail sales are procured from eligible renewable energy resources by December 31, 2030. (Public Utilities Code § 399.11 et seq.)
- 5) Establishes the policy that all of the state's retail electricity be supplied with a mix of RPS-eligible and zero-carbon resources by December 31, 2045, for a total of 100% clean energy. This is called throughout this analysis the “SB 100 policy.” (Public Utilities Code § 454.53)

FISCAL EFFECT:

According to the Senate Appropriations Committee:

- CPUC estimates one-time costs of about \$500,000 (ratepayer funds) for a consultant contract to develop a report on potential transmission development and strategies for reducing ratepayer costs for transmission expansion. This bill requires CPUC to consider multiple transmission financing scenarios, including public ownership and public financing of transmission facilities, public-private partnerships, opportunities to streamline transmission permitting processes, and the costs savings of all proposals.
- Unknown, likely minor costs for the Treasurer’s Office, Governor’s Office of Business and Economic Development, California Independent System Operator, and CEC to coordinate with CPUC on the study.

BACKGROUND:

CAISO – The CAISO is a nonprofit public benefit corporation created by California statute as part of the effort to deregulate the electricity market in the late 1990s. The CAISO manages the flow of electricity across the high-voltage bulk power system that makes up 80 percent of California’s, and a small part of Nevada’s, electric grid. CAISO is registered as both a transmission operator and BA under federal reliability requirements. Transmission operators direct the operations of transmission facilities and are responsible for their reliability. BAs ensure electric reliability over an area that includes the generation, transmission, and loads and also balance electricity supply and demand at every moment. As with other BAs, the CAISO is regulated by federal statute, with oversight by FERC and the North American Energy Reliability Corporation.

Transmission Planning Process (TPP) – Each year, the CAISO conducts its TPP to identify potential system limitations as well as transmission projects in need of upgrades or new

infrastructure in need of construction to improve reliability and efficiency.² The TPP fulfills the CAISO's core responsibility to identify and develop solutions to meet the future needs of the electricity grid. The TPP relies on the CPUC's integrated resource plan (IRP) process³ to identify the optimal mix of system-wide resources capable of meeting greenhouse gas planning targets for the electric sector.⁴ CAISO receives the IRP results as inputs into its TPP. In February 2021, the CPUC transferred the electric resource portfolios to the CAISO to begin the CAISO's 2021-2022 TPP.⁵ The CAISO also receives the CEC's demand forecast of electricity and natural gas sales, consumption, and peak and hourly electricity demand. The most recent CEC demand forecast published in January 2022 was a 15-year forecast.

The development of the TPP entails an 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 Governors' approval of a transmission plan and associated transmission projects. 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., RPS-needed projects);
- Economic projects that reduce congestion, production costs, transmission losses, capacity requirements or other electric supply costs.

Following the CAISO Board's approval of a TPP, new projects that are identified as necessary go through a competitive solicitation process. Transmission developers – which may be public or investor-owned utilities or private, for-profit entities – apply for the project solicitation and those applications are evaluated on a number of qualifying criteria, including cost. The CAISO Board recently approved its 2021-2022 TPP on March 17, 2022,⁶ and identified 23 projects – at an estimated \$2.9 billion – needed for reliability and to meet state policy goals; four of these projects are eligible for competitive solicitation.⁷

What Happens after Winning the Solicitation – Once a transmission developer's project proposal is selected in the competitive solicitation, it undergoes two application processes at the CPUC: a California Environmental Quality Act (CEQA) review and a CPCN review. The CEQA review requires the examination of particular environmental issues such as water and air quality, noise,

² There are other transmission planning efforts, including local capacity requirements, special studies, interregional transmission project, and others that are not mentioned here for sake of clarity.

³ Called for under SB 350 (De León, Chapter 547, Statutes of 2015)

⁴ Via the Reference System Plan (RSP) and Preferred System Plan (PSP). The CPUC creates the Reference System Plan (RSP) to meet the electric sector target informed by the California Air Resources Board Climate Change Scoping Plan. The CPUC uses this RSP to establish filing requirements for the load-serving entities. The second year considers the procurement each load-serving entity proposes to meet these GHG targets. As each load-serving entity has its own local constraints to consider, each files its own plan. The CPUC reviews, modifies, and aggregates these individual load-serving entities' plans into a preferred system plan (PSP). Based on the approved PSP, the CPUC considers authorizing load-serving entities to procure resources within the next 1-3 years to meet GHG planning targets.

⁵ D. 21-02-008 *Decision Transferring Electric Resource Portfolios to California Independent System Operator for 2021-2022 Transmission Planning Process*; R. 20-05-003; issued February 17, 2021.

⁶ Kavya Balaraman, "CAISO approves nearly \$3B of transmission projects to prepare for California's clean energy goals," *Utility Dive*, March 18, 2022.

⁷ See CAISO Notice from March 22, 2022, "2021-2022 Transmission Planning Process: Competitive Solicitation Key Selection Factors Posted," <http://www.aiso.com/Documents/2021-2022-Transmission-Planning-Process-Competitive-Solicitation-Key-Selection-Factors-Posted.html>

land uses, and agricultural, biological, mineral, and cultural resources, among others. As part of the CEQA review, alternatives to the proposed transmission project must be evaluated. The CPCN review considers the need for the project based on economic, reliability, and/or renewable goals. The CPCN review also requires the examination of alternatives, with a focus on cost-reduction. CAISO is often a party to these CPCN proceedings, making the case for why a particular transmission project is necessary, per their TPP.

Tracking Energy Development (TED) Task Force – The TED Taskforce is 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.

COMMENTS:

- 1) *Author's Statement.* According to the author, “We are going to have to build a lot of transmission to support our clean energy goals. CAISO’s recently developed 20 Year Outlook for transmission planning estimated that more than \$30 billion in new transmission capacity will be needed by 2040, and even more will be needed to reach the 100% clean energy target by 2045. If we are going to build that much new transmission, then we’d better try to make sure that we are doing it as efficiently, cheaply, and fairly as possible.

Today, transmission takes too long and costs too much to build, and everyone thinks it should be built somewhere far from them. This bill requires the CEC to explore better, alternative options to the status quo development: state ownership and financing of transmission lines, public-private partnerships for land use and siting, opportunities to expedite permitting and land use right processes. In addition, this legislation would provide information about the associated cost savings for ratepayers and wildfire risk reduction which each option would provide.”

- 2) *Public Ownership of Transmission.* All transmission serving the customers of the state’s investor-owned electric utilities is owned and maintained by private corporations – primarily the IOUs. Rates are controlled by the Federal Energy Regulatory Commission and that corporations earn a rate of return – approximately ten percent.

Implicit in this study is the consideration of state ownership and/or public financing of new transmission. One such model is the New York Power Authority (NYPA) which owns and operates generation and transmission and manages other programs. Electricity produced from NYPA’s facilities is sold to large and small businesses, not-for-profit organizations, public power systems, government agencies, private utilities for resale (without profit) to their customers, and neighboring states, under federal requirements, and also sold into the wholesale electricity market. NYPA also operates one-third of the major transmission lines (1,400 miles) in New York State which helps to form the backbone of the statewide grid for electric power distribution.

- 3) *Technical Amendment.* The bill requires the CEC to study “opportunities to reduce redundancy and streamline permitting processes related to transmission projects.”

Redundancy is a fundamental component of transmission planning which helps maintain the reliability of the power system by providing multiple routes (aka redundancy) for power to flow and by allowing generators to supply electricity to many load centers. The author reports that the intent to study “redundancy” concerns duplicate regulatory reviews for approvals of transmission (e.g. needs assessment by the CAISO and the CPUC for the same transmission line). *The committee may wish consider amendments to clarify the author’s intent by striking “redundancy” and insert “duplicative reviews” at page 3, line 33.*

4) *Related Legislation.*

SB 887 (Becker, 2022) adjusts the planning horizon for the annual electricity transmission plan from 10-years to 15-years, and requires the CAISO to consider approval for specified transmission projects as part of the CAISO 2022-23 transmission planning process. Status: Set for hearing in Assembly Utilities & Energy Committee, June 22, 2022.

SB 1174 (Hertzberg, 2022) Requires specified reporting related to electric transmission projects, and also requires the California Public Utilities Commission (CPUC) in coordination with other state agencies to identify interconnection transmission projects and prioritize necessary approvals, as specified. Status: Set for hearing in Assembly Utilities & Energy Committee, June 22, 2022.

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. Status: Held in Senate Committee on Environmental Quality.

REGISTERED SUPPORT / OPPOSITION:

Support

350 Conejo / San Fernando Valley
 350 Humboldt: Grass Roots Climate Action
 350 Silicon Valley
 Acterra
 California Energy Storage Alliance
 California Municipal Utilities Association
 Clean Air Task Force
 Clean Power Campaign
 Menlo Spark
 Silicon Valley Youth Climate Action
 The Utility Reform Network (TURN)

Opposition

Sempra Energy Utilities

Other

Edison International and Affiliates, Including Southern California Edison
Rural County Representatives of California (RCRC)

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