SENATE RULES COMMITTEE

Office of Senate Floor Analyses

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UNFINISHED BUSINESS

Bill No: SB 887

Author: Becker (D) and Stern (D), et al.

Amended: 6/27/22

Vote: 21

SENATE ENERGY, U. & C. COMMITTEE: 13-0, 3/28/22

AYES: Hueso, Dahle, Becker, Borgeas, Bradford, Dodd, Eggman, Gonzalez,

Hertzberg, McGuire, Min, Rubio, Stern

NO VOTE RECORDED: Grove

SENATE APPROPRIATIONS COMMITTEE: 5-2, 5/19/22 AYES: Portantino, Bradford, Kamlager, Laird, Wieckowski

NOES: Bates, Jones

SENATE FLOOR: 29-6, 5/24/22

AYES: Allen, Atkins, Becker, Borgeas, Bradford, Cortese, Dahle, Dodd, Durazo, Eggman, Glazer, Gonzalez, Hueso, Hurtado, Kamlager, Laird, Leyva, Limón, McGuire, Newman, Pan, Portantino, Roth, Rubio, Skinner, Stern, Umberg, Wieckowski, Wiener

NOES: Grove, Jones, Melendez, Nielsen, Ochoa Bogh, Wilk

NO VOTE RECORDED: Archuleta, Bates, Caballero, Hertzberg, Min

ASSEMBLY FLOOR: 75-0, 8/18/22 - See last page for vote

SUBJECT: Electricity: transmission facility planning

SOURCE: Author

DIGEST: This bill requires 15-year projections of energy resource portfolios and energy demand to inform transmission planning to achieve the state's clean energy goals, and requires the California Independent System Operator (CAISO) to consider approval for specified transmission projects as part of the 2022-23 transmission planning process.

Assembly Amendments make clarifying and technical changes, including replacing references to "gas-fired" resources with "nonpreferred resources", and replacing "locally constrained areas" with "local capacity areas."

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. Provides the process and procedures for establishing transmission of electricity in interstate commerce by public utilities (including 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. (Public Utilities Code §345.5)
- 3) Establishes the California Public Utilities Commission (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 California Energy Commission (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. (Public Utilities Code §§454.51 and 454.55)

This bill:

1) Requires, by no later than March 31, 2024, the CPUC, in consultation with the CEC, to provide transmission-focused guidance to the CAISO about resource portfolios of expected future renewable energy resources and zero-carbon

resources, to allow the CAISO to identify and approve transmission facilities needed to interconnect resources and reliably serve the needs of load centers. Specifically, requires, among other requirements, resource portfolios and electricity demand by region for at least 15 years into the future.

- 2) Requires the CPUC, on or before January 15, 2023, to request the CAISO to:
 - a) Identify the highest priority transmission facilities that are needed to allow for increased transmission capacity into local capacity areas to deliver renewable energy resources or zero-carbon resources that are expected to be developed by 2035 into those areas; and
 - b) Consider whether to approve the identified transmission projects as part of the CAISO's 2022–23 transmission planning process.
- 3) Expresses the policy of the state that the planning for new transmission facilities consider the goals of minimizing the risk of wildfire and increasing system-wide reliability and cost efficiency, among other goals.

Background

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 CAISOapproved 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.

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 ten-year outlook for

electricity and natural gas sales, consumption, and peak and hourly electricity demand. The most recent demand forecast, published in January, is a 15-year forecast. Additionally, the CPUC provides energy resource supply-side inputs, including an annual resource portfolio, to inform the transmission planning by the CAISO.

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 (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 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 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.

Replacing 10-year outlook with 15-year outlook. The author and supporters note the desire to better plan and prepare for the transmission needs to achieve the SB 100 goals, given the long lead times needed to build new transmission. As noted by the CAISO 20-year Transmission Outlook, the need for new transmission is likely to be great. A 15-year outlook may prove to be more certain than a 20-year outlook, though less certain than a 10-year horizon. Nonetheless, the author is correct to note the need to better plan for long lead-time new transmission. The CPUC has noted in recent FERC filings, it would support a longer planning horizon. However, such a change may not happen quickly and would entail transforming many, yet to be fully identified, data collection and inputs to

accommodate this transformation. This bill provided for the transformation to happen as soon as possible, but no later than March 31, 2024.

Too soon? This bill requires the CPUC, CEC, and CAISO to take actions by January 15, 2023, roughly two weeks from the date this bill would be enacted. The author notes this date may seem ambitious, but since bill adoption would happen in September, the author believes this may be sufficient time before the January 15 dates.

Related/Prior Legislation

SB 1174 (Hertzberg, 2022) requires specified reporting related to the timeliness of interconnection projects and approval of electric transmission projects. The bill is pending before the full Assembly.

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.

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

According to the Assembly Appropriations Committee, the CPUC estimates it will need approximately \$500,000 (special fund) annually ongoing for two regulatory analysts (\$203,000 per year), one supervisory position (\$260,000 per year) and various software licensing and related costs (\$31,800). The CPUC also anticipates a cost, in the first four years following passage of this bill, of \$400,000 per year in contracting costs to develop modeling enhancements to identify optimal energy resource portfolios and the amount and location of zero-carbon resources needed in specific areas with constrained transmission, and to develop reports, presentations and white papers.

Conversely, the CEC anticipates no new costs to implement this bill.

SUPPORT: (Verified 8/18/22)

350 Humboldt: Grass Roots Climate Action 350 Silicon Valley American Clean Power – California California Biomass Energy Alliance California Energy Storage Alliance California Environmental Voters California State Association of Electrical Workers

California State Council of Laborers

California Wind Energy Association

Carbon Free Mountain View

Carbon Free Palo Alto

Carbon Free Silicon Valley

Clean Power Campaign

Climate Resolve

Coalition of California Utility Employees

EDP Renewables

Elders Climate Action – NorCal and SoCal Chapters

Engineering Contractors' Association

Environmental Defense Fund

Fernandeño Tataviam Band of Mission Indians

Foundation for Climate Restoration

International Union of Operating Engineers, Local Union No. 12

Laborers: Local 220 and Local 585

Laborers' International Union of North America – Pacific Southwest Region

Large-scale Solar Association

Menlo Spark

Natural Resources Defense Council

Pacoima Beautiful

Silicon Valley Youth Climate Action

Solar Energy Industry Association

Southern California Edison

The Climate Reality Project, Silicon Valley Chapter

OPPOSITION: (Verified 8/18/22)

None received

ARGUMENTS IN SUPPORT: According to the author,

We cannot meet the goals of SB 100 -- reaching 100% renewable or zero carbon electricity by 2045 -- without building the transmission necessary to deliver that clean power to our cities. SB 887 will accelerate planning and approval of new transmission to help us get to 100% clean energy. The Joint Agencies SB 100 report estimated that we will need to triple the state's electric generation capacity by 2045. California's transmission grid is not prepared to deliver this vast increase in clean energy... And this problem is only going to get worse as the electrification of transportation and buildings increases demand

for electricity – unless we begin to build the transmission capacity that we will need to handle the clean energy grid of the future.

California is on a path to build tens of thousands of megawatts of new clean electricity generation, but without comparable efforts to expand our transmission capacity, this effort will fail to meet our climate goals. SB 887 will cause our state agencies to focus on the urgent need for transmission to ensure it is tackled in a timely and cost-effective manner and does not become a barrier to the state's clean energy transition."

ASSEMBLY FLOOR: 75-0, 8/18/22

AYES: Aguiar-Curry, Alvarez, Bauer-Kahan, Bennett, Berman, Bigelow, Bloom, Boerner Horvath, Mia Bonta, Bryan, Calderon, Carrillo, Chen, Cooley, Cooper, Cunningham, Megan Dahle, Daly, Davies, Flora, Mike Fong, Fong, Friedman, Gabriel, Gallagher, Cristina Garcia, Eduardo Garcia, Gipson, Gray, Grayson, Haney, Holden, Irwin, Jones-Sawyer, Kalra, Kiley, Lee, Levine, Low, Maienschein, Mathis, Mayes, McCarty, McKinnor, Medina, Mullin, Muratsuchi, Nazarian, Nguyen, O'Donnell, Patterson, Petrie-Norris, Quirk, Quirk-Silva, Ramos, Reyes, Luz Rivas, Robert Rivas, Rodriguez, Blanca Rubio, Salas, Santiago, Seyarto, Smith, Stone, Ting, Valladares, Villapudua, Voepel, Waldron, Ward, Akilah Weber, Wicks, Wilson, Rendon NO VOTE RECORDED: Arambula, Cervantes, Choi, Lackey, Wood

Prepared by: Nidia Bautista / E., U. & C. / (916) 651-4107 8/19/22 13:08:53

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