

Date of Hearing: April 17, 2024

ASSEMBLY COMMITTEE ON UTILITIES AND ENERGY

Cottie Petrie-Norris, Chair

AB 3246 (Garcia) – As Amended March 18, 2024

**SUBJECT:** Electricity: permit to construct: advanced reconductoring: exemption

**SUMMARY:** Requires the California Public Utilities Commission (CPUC) to revise General Order 131-D to approve requests for the advanced reconductoring of transmission projects through the CPUC’s informal advice letter process.

Specifically, **this bill:**

- 1) Requires, by January 1, 2026, the CPUC to update General Order 131-D to provide an electrical corporation with an exemption from the requirement to receive a Permit to Construct (PTC) and instead authorize the approval of advanced reconductoring of transmission projects through the informal Tier 2 advice letter process, regardless of whether the voltage of the facility being modified exceeds 200 kilovolts (kV).
- 2) Requires the advice letter to contain specific information, including, an estimate of the increased capacity expansion, and a demonstration that the advanced reconductoring is a prudent and reasonable investment.
- 3) Defines “advanced conductors” to mean electricity wires that decrease electrical resistance by at least 10% and “advanced reconductoring” as the replacement of existing conductors with advanced conductors.

**EXISTING LAW:**

- 1) Authorizes the CPUC to supervise and regulate every public utility, including electrical corporations, and to do all things that are necessary and convenient in the exercise of that power and jurisdiction. (Public Utilities Code §201 et seq., and §701)
- 2) Requires the CPUC to certify the “public convenience and necessity” for a transmission line over 200 kilovolts (kV) before an electrical corporation may begin construction (This process is known as a Certificate of *Public* Convenience and Necessity (CPCN). The CPCN process includes CEQA review of the proposed project, as well as validation of the need for the project. The CPCN confers eminent domain authority for construction of the project. A CPCN is not required for the extension, expansion, upgrade, or other modification of an existing electrical transmission facility, including transmission lines and substations. (Public Utilities Code § 1001)
- 3) Requires an electrical corporation to obtain a discretionary PTC from the CPUC for electrical power line projects between 50-200 kV. A PTC may be exempt from CEQA pursuant to CPUC orders and existing provisions of CEQA. Electrical distribution line projects under 50 kV do not require a CPCN or PTC from the CPUC, nor discretionary approval from local governments, and therefore are not subject to CEQA. (CPUC General Order (GO) 131-D)

- 4) Requires the CPUC, by January 1, 2024, to update GO 131-D to authorize IOUs to use the PTC process or claim an exemption under GO 131-D Section III(B) to seek approval to construct an extension, expansion, upgrade, or other modification to its existing electrical transmission facilities, including electric transmission lines and substations within existing transmission easements, rights of way, or franchise agreements, irrespective of whether the electrical transmission facility is above 200 kV. (Public Utilities Code § 564)
- 5) Establishes the policy of the state that eligible renewable energy resources and zero-carbon resources supply 90% of all retail sales of electricity to California end-use customers by December 31, 2035, 95% of all retail sales of electricity to California end-use customers by December 31, 2040, 100% of all retail sales of electricity to California end-use customers by December 31, 2045, and 100% of electricity procured to serve all state agencies by December 31, 2035. (Public Utilities Code § 454.53)

**FISCAL EFFECT:** Unknown. This bill is keyed fiscal and will be referred to the Committee on Appropriations for its review.

#### **BACKGROUND:**

*California's Ambitious goals.* SB 100 (De León, Chapter 312, Statutes of 2018) established the state policy that renewable and zero-carbon resources supply 100% of retail sales and electricity procured to serve all state agencies by 2045.<sup>1</sup> This policy was recently updated under SB 1020 (Laird, Chapter 361, Statutes of 2022) by accelerating the requirement on state agencies to 100% by 2035, and establishing interim targets to meet the sector-wide 100% goal. The updated 2022 Scoping Plan<sup>2</sup> released by the California Air Resources Board (CARB) in December 2022 calls for targets of 38 million metric tons of carbon dioxide equivalent (MMTCO<sub>2e</sub>) in 2030 and 30 MMTCO<sub>2e</sub> in 2035 in the electricity sector.<sup>3</sup> These sector-wide targets establish the planning goal that informs all subsequent electricity procurement and transmission planning.

*California's Transmission Development.* A recent study by the Clean Air Task Force and the Environmental Defense Fund concluded a doubling — at a minimum — of transmission capacity is needed to interconnect new renewables by 2045.<sup>4</sup> Unfortunately, the current transmission development process is lengthy and complex and can take over a decade from conception to completion as permitting and siting may require approvals from a wide range of stakeholders that include federal, state and local agencies, and landowners.

*Transmission Planning Process (TPP).* Each year, the California Independent System Operator (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.<sup>5</sup> The TPP fulfills the CAISO's core responsibility to identify and develop

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<sup>1</sup> Public Utilities Code §454.53

<sup>2</sup> In its previous draft plan, CARB set the electric sector targets at 38 million metric tons of carbon dioxide equivalent (MMTCO<sub>2e</sub>) in 2030 and 30 MMTCO<sub>2e</sub> in 2045.

<sup>3</sup> Pg.75, CARB, "DRAFT 2022 Scoping Plan Update," May 10, 2022

<sup>4</sup> Lucid Catalyst, Clean Air Task Force, and the Environmental Defense Fund, "California's Clean Energy Transition: Understanding Today's Challenges to Reach Tomorrow's Goals," presentation January 18, 2022.

<sup>5</sup> 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.

solutions to meet the future needs of the electricity grid. The TPP relies on the CPUC's integrated resource plan (IRP) process<sup>6</sup> to identify the optimal mix of system-wide resources capable of meeting greenhouse gas planning targets for the electric sector. CAISO receives the IRP results as inputs into its TPP.

*The Transmission Permitting Process.* Usually, 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 of applicable projects pursuant to CEQA and CPUC environmental rules. To prepare for the environmental review, the utility first conducts and submits a Proponents Environmental Assessment (PEA). The PEA is a preliminary assessment of the project's potential environmental impacts and alternatives. Some projects may trigger a federal National Environmental Policy Act (NEPA) review if they cross federal land or use federal funds.
- 2) The review of project needs and costs according to Public Utilities Code §1001 and General Order (GO) 131-D, also known as a CPCN, or — depending on project size — a PTC.

*Permit/Certificate Review.* Parallel to environmental review under CEQA, the CPUC reviews the utility's application for a CPCN or a PTC, depending on the size of the project. The CPUC's decision on the CPCN or PTC cannot be issued until the environmental review is complete, if one is required. But most transmission projects are categorically exempt from CEQA.<sup>7</sup> Most of the CPCN/PTC process is outlined in General Order (GO) 131-D.

*CPUC's GO 131-D.* GO 131-D was first adopted in 1970 and before a recent update late in 2023, it had not been updated since 1995. It establishes the criteria to be followed to trigger the need for a permit to construct (PTC) or renovate electrical facilities, including transmission lines and substations, and also sets out public notice requirements for proposed transmission projects.<sup>8</sup> The level of analysis performed by the CPUC pursuant to GO 131-D varies with the size (measured in voltage) of the transmission project.

- Projects below 50 kV are considered distribution line projects and in general, do not require CPUC approval.
- Projects between 50 kV and 200 kV generally require a PTC, which includes an environmental review pursuant to CEQA, if applicable. The CPUC process generally does not require a detailed analysis of the need for or economics of these projects. An application for a PTC must be filed at least 9 months before a decision is required.

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<sup>6</sup> Called for under SB 350 (De León, Chapter 547, Statutes of 2015). IRP provides the umbrella process by which the CPUC oversees long-term procurement for its regulated load-serving entities.

<sup>7</sup> From a data request to the CPUC by this committee on March 29, 2023, in which there were 602 instances between 2012-2023 of projects for which the applicant filed an advice letter at the CPUC noting they were using an exemption to the CEQA document requirement process. There are a variety of exemptions claimed, including categorical exemptions. The CPUC does not track the type of exemptions claimed per advice letter.

<sup>8</sup> Public Utilities Code § 451,701,702,761, 762,768,770, and 1001

- Projects over 200 kV generally require a *Public Convenience and Necessity* (CPCN) and are subject to CEQA review, as applicable. The CPCN process analyzes the need for the project and the economics of the project, as well as, the environmental impacts of the project if CEQA applies. An application for a CPCN must be filed at least 12 months before a decision is required.

*GO 131-D Reforms.* SB 529 (Hertzberg, Chapter 357, Statutes of 2022)<sup>9</sup> sought to revise the permitting process at the CPUC. The bill directed the CPUC to revise GO 131-D to authorize a utility to use the PTC process or claim an exemption to seek approval to construct an extension, expansion, upgrade, or other modification to its existing transmission facilities regardless of the voltage level by January 1, 2024. However, CEQA still applies. In May 2023, the CPUC opened a rulemaking to solicit comments that would revise the GO 131-D rules to accommodate this legislation.<sup>10</sup> Based on the feedback, the assigned commissioner determined the issues to be considered in the proceeding should be separated into two phases. Phase 1 includes consideration of changes to GO 131-D necessary to conform it to the requirements of SB 529 and updates to outdated references. Phase 1 decision was approved on December 14, 2023. Currently, the CPUC is in Phase 2 of this proceeding, which includes consideration of changes to GO 131-D not addressed in the Phase 1.

*Advanced Reconductoring.* As eluded earlier in the background, the transmission planning and permitting process can be complex and can take more than a decade from start to finish. As such, some have argued, “[w]ithout revisions to current planning and permitting processes, it will be tremendously difficult for California to authorize new transmission capacity, to connect new clean generation to the grid, and meet its clean energy and climate goals.”<sup>11</sup> Due to these challenges in building new transmission, transmission planners are looking solutions within the existing electric grid infrastructure. However, the current grid infrastructure is aging. In that regard, technology capable of simultaneously addressing both capacity expansion and aging infrastructure needs may be helpful.

Advanced reconductoring means replacing an existing transmission or distribution line with an advanced conductor. Advanced conductors refers to conductive material used in transmission lines with lower-than-average resistance. Reconductoring can replace an old line with a new one with the identical conductor technology, or it can utilize different conductor technologies.<sup>12</sup> This process can create new transmission capacity faster and cost-effectively in the absence of new, large-scale transmission. CAISO supports the deployment of these technologies and has considered them on a case by case basis as potential alternatives in its annual transmission planning processes.<sup>13</sup> One of the primary barriers to the adoption of more advanced conductors is cost.

*Advice Letter.* An advice letter is a request by a utility for CPUC approval, authorization, or other relief, including a request for approval to change rates, charges, terms or conditions

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<sup>9</sup> Public Utilities Code §564

<sup>10</sup> CPUC, “CPUC To Update Transmission Siting Regulations To Address Electricity Reliability and Climate Goals”; <https://www.cpuc.ca.gov/news-and-updates/all-news/cpuc-to-update-transmission-siting-regulations-2023>

<sup>11</sup> Pg. 2, “Clean Air Task Force, “Transmission Development in California – What’s the Slowdown?”; January 2023

<sup>12</sup> Pg. 10, Grid Strategies; Jay Caspary & Jesse Schneider “Advanced Conductors on Existing Transmission Corridors to Accelerate Low Cost Decarbonization”.

<sup>13</sup> Pg. 24, CAISO; “2023-2024 Transmission Plan”.

contained in the utility's tariffs currently in effect. An advice letter is an informal request made to the CPUC outside a formal proceeding such as an application, complaint, investigation, or rulemaking at the Commission. The advice letter process provides a faster and simplified review of the types of utility requests that are expected neither to be controversial nor to raise important policy questions.<sup>14</sup> Commission General Order 96-B governs the various rules on advice letters. There are three tiers of advice letters as follows:

- Tier 1 advice letter is effective upon publication by the utility
- Tier 2 advice letter needs to be approved by CPUC staff
- Tier 3 advice letter needs to be approved by a vote of the CPUC Commissioners

This bill would allow requests for approval of advance reconductoring via Tier 2 advice letter.

#### COMMENTS:

- 1) *Author's Statement.* According to the author, "California faces a transmission crisis if we are unable to drastically increase the capacity on the existing grid in the near term while awaiting the approval and buildout of new transmission projects (taking on average 10 years), in addition to threats against grid-reliability, affordability, and clean energy curtailment. Advanced conductors can help resolve these problems in both the interim and longer-term, but there are currently little-to-no incentives for IOUs to utilize this technology. AB 3246 offers an easier, shorter permitting route for reconductoring projects that utilize advanced conductors, expanding grid capacity quickly and cost-effectively."
- 2) *Definitions.* California has currently not defined advance conductoring and advanced conductor. This bill defines: "advanced conductor" to mean an overhead electricity conductor installed in a transmission or distribution project that has a direct current electrical resistance at least 10% lower than existing conductors of a similar diameter on the system, and "Advanced reconductoring" to mean replacing an existing transmission or distribution line with an advanced conductor.
- 3) *Faster Approval Process.* This bill requires by January 1, 2026, the CPUC to update General Order 131-D, by providing a utility with an exemption from requiring a PTC and instead authorize the approval of advanced reconductoring of transmission projects through the informal Tier 2 advice letter process, which requires CPUC approval at the staff level. The author contends that this process generally reduce permitting timelines for transmission projects. As referenced in the background, transmission projects between 50 kV and 200 kV generally require a PTC, and facilities over 200 kV generally require a CPCN, under existing law. A Tier 2 advice letter is essentially a simpler process to go through than a PTC or a CPCN, but also inherently subject to less intense scrutiny as a result.

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<sup>14</sup> CPUC, "About Advice Letters" <https://www.cpuc.ca.gov/about-cpuc/divisions/water-division/wd-advice-letters-section/wd-about-advice-letters>

#### 4) *Related Legislation*

AB 2779 (Petrie-Norris) would require the CAISO, upon approval of each transmission plan, to report to the CPUC and the Legislature any new use of grid-enhancing technology in the plan and the associated cost or efficiency savings of that deployment. Status: *pending hearing* in the Assembly Committee on Utilities and Energy. Status: *pending hearing* in the Senate Committee on Energy, Utilities, and Communications.

AB 3238 (Garcia) among other requirements, exempts projects that would require a certificate of public necessity and convenience (CPCN) from the California Public Utilities Commission (CPUC) and any other electrical infrastructure projects, as defined, from existing requirements to compare prospective projects with cost-effective alternatives such as energy efficiency, distributed generation, and demand response resources. Status: *pending hearing* in the Assembly Committee on Water, Parks and Wildlife.

SB 1006 (Padilla) would require specified utilities to jointly prepare a grid-enhancing technology strategic plan, and to evaluate which existing circuits may be reconducted cost-effectively, among other changes. Status: *pending hearing* in the Senate Committee on Energy, Utilities, and Communications.

#### 5) *Prior Legislation.*

SB 1020 (Laird) accelerated the 100% Clean Energy Policy to require electricity procured to serve all state agencies be 100% clean energy by 2035, and established interim targets to meet the sector-wide 100% goal. Status: Chapter 361, Statutes of 2022.

SB 529 (Hertzberg) 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 PTC process for these approvals. Status: Chapter 357, Statutes of 2022.

SB 887 (Becker) 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. Status: Chapter 358, Statutes of 2022.

SB 7 (Atkins) extended the Jobs and Economic Improvement Through Environmental Leadership Act, specifically providing the Governor until January 1, 2024, to certify a project and the Act will be repealed by its own provisions on January 1, 2026. Status: Chapter 19, Statutes of 2021.

SB 100 (de León) established the state policy that renewable and zero-carbon resources supply 100% of retail sales and electricity procured to serve all state agencies by 2045. Status: Chapter 312, Statutes of 2018.

SB 1037 (Kehoe) established a “non-wires” consideration in transmission project approvals at the CPUC. Status: Chapter 366, Statutes of 2005).

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

350 Humboldt  
350 Sacramento  
California Energy Storage Alliance  
California Environmental Voters (formerly Clcv)  
California Wind Energy Association  
Climate Action California  
Climate Reality Project, California Coalition  
Environmental Defense Fund  
Independent Energy Producers Association  
Large-scale Solar Association  
Santa Cruz Climate Action Network  
Solar Energy Industries Association

**Oppose Unless Amended**

California Solar & Storage Association

**Analysis Prepared by:** Lina V. Malova / U. & E. / (916) 319-2083