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Integrated Energy Policy Report - Electric Transmission-Related Data Collection

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Each LSE or electric transmission system owner shall submit a description of its bulk electric system or its latest long-term transmission expansion plan. They must also provide some discussion of how the SB 100 electric system decarbonization by 2045 requirements will affect the need for new or upgraded transmission.

The electric system description shall include:

1. Detailed descriptions of the transmission facilities greater than 100 kV that the transmission owner or LSE needs over the long term to:
 - a. Meet applicable reliability and planning standards.
 - b. Reduce congestion.
 - c. Interconnect new generation.
 - d. Meet state policy goals such as the Renewables Portfolio Standard, SB 100 and state climate goals, or aging power plant/once-through cooling retirements.

Answer: The East Bay Community Energy Authority (EBCE) is a load serving entity serving customers located within the CAISO balancing authority and CAISO-controlled transmission system. EBCE does not itself own, operate, or maintain existing, nor plan new transmission system facilities. EBCE falls under the CAISO for transmission planning. As such, considerations towards transmission planning for future or contemplated projects occur exclusively as part of the CAISO's Transmission Planning Proceeding (TPP). Additionally, interconnection facilities (i.e., transmission infrastructure) needed to interconnect resources are often the responsibility of the project developer.

2. A description of the transfer capabilities for transmission lines or transmission paths delivering electric power into the electric transmission system owner's grid.
 - a. The description shall include the size (for example, megavolt ampere [MVA] or megawatt [MW]) and length of the lines or lines included in the path and the substations to which the line connects.



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- b. A description of any planned upgrades to the facilities that are used to import power into the electric transmission system owner's grid including:
 - i. Descriptions of the upgrades including costs, benefits, maps, and the MW impact of the upgrades on transfer capabilities.
 - ii. Descriptions of the alternatives considered in developing the upgrades.
- c. Any maintenance or construction that could impact transfer capabilities or the ability to move power over a path between January 2023 and December 2026.
- d. A description of any planned transmission facilities that would create a new transmission path or transmission line to import electric power into the electric transmission system owner's bulk electric network including:
 - i. Descriptions of the facilities, including costs, benefits, maps, and the MW impact of the upgrade on transfer capabilities.
 - ii. Descriptions of the alternatives, including nonwire alternatives, considered in developing the upgrades.
- e. A more general description of any planned upgrades to the transmission network that imports electric power into the electric transmission system owner's bulk transmission grid that are anticipated to be required to meet California's long-range 2045 decarbonization goals.

Answer: As described in response to question 1, supra, EBCE does not itself own, operate, or maintain existing, nor plan new transmission system facilities; rather, EBCE relies on the CAISO for transmission system operation and planning. EBCE has an executed agreement for a geothermal project located in the State of Nevada outside the CAISO balancing authority area. This resource is needed to meet EBCE's procurement obligations under CPUC Decision 21-06-035 requiring procurement for Mid-Term Reliability. This resource is expected to have a generating capacity of 40 MW. This generating resource is planned to be dynamically transferred into the CAISO-controlled grid. Transmission upgrades may be required to increase the available capacity for deliverability from the project to the CAISO.

- 3. A description of the transfer capabilities for the bulk transmission lines or bulk transmission paths limiting the delivery of electric power within the electric transmission system owner's grid.
 - a. The description shall include the size (MVA, MW) and length of the line or lines included in the path and the substations to which the line connects.
 - b. A description of any upgrades to the facilities that are used to deliver power within the electric transmission system owner's grid including:
 - i. Descriptions of the facility or upgrade costs, benefits, maps, and the MW impact of the upgrade on transfer capabilities.
 - ii. Descriptions of the alternatives, such as nonwire alternatives, considered in developing the upgrades.

- c. Any maintenance or construction that could impact transfer capabilities within the electric transmission system owner’s bulk transmission grid between January 2023 and December 2026.
- d. A description of any planned transmission facilities that would create a new means to transfer electric power within the electric transmission system owner’s bulk transmission network, including:
 - i. Descriptions of the facility or upgrade costs, benefits, maps, and the MW impact of the upgrade on transfer capabilities.
 - ii. Descriptions of the alternatives, such as nonwire alternatives, considered in developing the upgrades.
- e. A more general description of any planned upgrades to the transmission network that transports electric power within the electric transmission system owner’s bulk transmission network that are anticipated to be required to meet California’s long-range 2045 decarbonization goals.

Answer: As described in response to question 1, supra, EBCE does not itself own, operate, or maintain existing, nor plan new transmission system facilities; rather, EBCE relies on the CAISO for transmission system operation and planning. However, as part of its Integrated Resource Planning (IRP) analysis, EBCE modeled constraints that could impact currently contracted projects. EBCE’s IRP analysis and filing content were approved by its Board of Directors on October 19, 2022, and are expected to be filed with the CPUC by November 1, 2022. For further information regarding EBCE’s transmission modeling, please see EBCE’s IRP materials. EBCE’s as-approved, but not yet filed, IRP materials are available as agenda item 12 on EBCE’s board meeting event website, available here: <https://ebce.org/meetings/board-of-directors-meeting-10-19-22/>. Please note that the IRP materials that will be filed with the CPUC may differ non-materially from the as-approved version.

- 4. A description of the bulk transmission facilities needed for meeting state-mandated electricity policy goals such as SB 100 and state climate goals, renewable energy requirements, replacement, or retirement of aging power plants, and complying with the State Water Resources Control Board policies for phasing out power plants that use once-through cooling or eliminating or reducing local capacity requirements.
 - a. The description shall include the size (MVA, MW) and length of the line or lines included in the path and the substations to which the line connects.
 - b. A description of any planned upgrades to the facilities in the electric transmission system owner’s grid through 2045, including:
 - i. Descriptions of the upgrades including costs, benefits, maps, and the MW impact of the upgrade on transfer capabilities.
 - ii. Descriptions of the alternatives, such as nonwire alternatives, considered in developing the upgrades.

Answer: As described above, EBCE does not itself own, operate, or maintain existing, nor plan new transmission system facilities; EBCE relies on the CAISO for transmission system

operation and planning. EBCE has not evaluated the transmission facilities that are required for meeting State-mandated electricity policy goals other than through its IRP analysis. EBCE has executed agreements for projects that have near term commercial operation. These agreements were executed based on existing transmission with the majority of these projects located within the CAISO balancing authority area; the remaining projects are dynamically transferred into the CAISO.

5. Identify the power purchase agreements, contracts, and resources that require new or upgraded transmission to serve California loads. For example, if an LSE has a contract with a wind generator in Wyoming but the contract can be fulfilled only if a specific transmission line is completed, such as the TransWest Express project.
 - a. For each generator/contract/PPA provide the name of the resource, the size of the resource in MW and expected KWH and the name and owner of the required transmission facilities. The name of the resource should be consistent with the supply forms.

Answer: EBCE has executed agreements for two out-of-state renewable projects which are discussed below:

Tecolote: A portion of the larger Western Spirit Wind Project,¹ the Tecolote Wind Project is a 271.68 MW Dynamic Resource wind project located in Torrance and Guadalupe County in the State of New Mexico and owned by Pattern Energy. This resource reached commercial operation in December 2021. EBCE has contracted for 100 MW of the energy from this project, translating to approximately 300,000,000 kWh per year. The project is sited in New Mexico and the transmission owner is PNM. The energy is dynamically scheduled from the project to the CAISO.

FEC Nevada 1: The FEC Nevada Project will be a 40 MW Dynamic Resource geothermal project located in Churchill County in the State of Nevada and has an expected commercial operation date (COD) of May 2026. The project is being developed by Fervo and the project will provide approximately 300,000,000 kWh of energy each year after COD. The project is sited in Nevada and NV Energy is the transmission owner. The energy will be dynamically scheduled from the project to the CAISO.

¹ See <https://patternenergy.com/projects/western-spirit-wind/>.