

2018-19 Transmission Planning Process (TPP)

| Submitted by | Company | Date Submitted |
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PG&E provides the following comments in the 2018-19 Transmission Planning Process (TPP) based on the Draft Transmission Plan published on February 4, 2019, and the Stakeholder meeting held February 14, 2019.

Assessment of Previously Approved Projects

PG&E appreciates and supports the CAISO’s efforts to re-evaluate previously approved projects in the PG&E service territory.

PG&E offers the following commentary on projects with “on-hold” status in the 2017/2018 TPP Re-Assessment:

Diablo Canyon Voltage Support Project

The CAISO recommends cancelling the Diablo SVC project which was originally proposed to meet Nuclear Power Interface Requirements (NPIR) at Diablo Canyon Power Plant (DCPP), and instead to rely on local Under Voltage Load Shedding (UVLS) schemes such as Divide UVLS and Mesa UVLS to meet NPIR until DCPP retires in 2025. PG&E agrees to cancel this project but is concerned about the local UVLS’s capability to meet NPIR at DCPP without any modifications. For example, these existing local UVLSs are not designed to monitor the voltage at the Diablo 230kV bus so that they may not be triggered when the voltage is below NPIR requirements at the Diablo 230kV bus. In addition, the total amount of armed load for these UVLSs are not designed to meet NPIR, so they may not be able to trip enough load to mitigate the low voltage issues at the Diablo 230kV. As such, PG&E recommends to further evaluate the need for any necessary upgrades or modifications for the local UVLSs to ensure the NPIR could be met.

South of Mesa Upgrade Project

Part of the CAISO recommended scope is to rerate the winter emergency rating for the Sisquoc – Santa Ynez 115 kV line. However, pursuant to PG&E’s Conductor Rerate Process for Overhead Transmission Circuits procedure manual, TD-1004P-04, PG&E cannot rerate the transmission line to 4fps on the winter emergency ratings. Given this, PG&E recommends the CAISO approve the alternative scope of reconductoring roughly 23 miles of the Sisquoc – Santa Ynez 115 kV line using at least 715 AAC. PG&E’s initial total AACE Class 5 Cost estimate for the entire South of Mesa Project will be increased to \$59.2M accordingly.

PG&E offers the following clarifying comments on a previously approved project that was not “on-hold” in the 2017/2018 TPP Re-Assessment:

Cottonwood 115 kV substation shunt reactor project

The Cottonwood 115 kV substation shunt reactor project (approved in the 2015-16 TPP cycle) has been re-scoped to include the replacement of Cottonwood 230/115 kV transformer banks 1 and 4 with 420/462 MVA transformers and LTC, but the CAISO TPP project name has not been revised to align with the scope. For clarity and ease of tracking, PG&E recommends officially renaming the project to “Cottonwood 230/115 kV Transformers 1 and 4 Replacement” in the CAISO Plan.

PG&E will continue to support the CAISO as requested in evaluating alternatives identified, including providing cost and feasibility information for identified alternatives.

Assessment of Newly Proposed Projects

PG&E offers the following commentary on newly proposed projects presented in the CAISO’s 2018-2019 draft Transmission Plan.

Pease Economic Project

The CAISO’s analysis of the Pease sub-area suggests a BCR of 0.99 for looping in of Pease-Marysville 60kV line into East Marysville 115kV substation, installing a 115/60kV transformer at East Marysville substation and adding 25MVAR of voltage support. Since the date of PG&E’s original project submittal in September 2018, which included an AACE Class 5 cost estimate of \$26M to \$52M, inclusive of 100% contingency, PG&E has further refined the project cost estimate range to be \$26M - 32M. As of the date of these comments, this \$26M – 32M is the “expected” cost estimate. CAISO’s analysis suggesting a BCR of 0.99 utilizes the now dated, high-end estimate presented in the original project submittal of \$52M. Given this newly revised, and relatively lower cost estimate, the updated BCR is projected to be greater than one. PG&E recommends the CAISO approve this project in 2018-19 TPP cycle.

500kV Voltage Control Projects

PG&E supports the CAISO’s conclusion that 500kV voltage control projects are needed at both the Round Mountain and Gates substations. Based on previous experiences with competitive solicitations, PG&E recommends the competitive solicitation materials be clear and explicit about the scope delineation between the competitive and non-competitive scope elements for each of the two 500kV voltage control projects.

Kingsburg-Lemoore Reconductoring

The reconductoring of the Lemoore to Hanford section of the Kingsburg-Lemoore 70 KV Line addresses two major business risks - reliability and safety. In addition to increasing emergency load serving capability for Lemoore Substation customers (as explained in the project submittal document), reconductoring the section will address aging and obsolescent infrastructure. PG&E plans to further assess its assets in this section of the line and implement necessary mitigations.

Oakland Clean Energy Initiative (OCEI)

During the 2017-18 TPP, PG&E proposed and the CAISO approved an innovative project to resolve reliability issues that would otherwise occur in the absence of the aging Dynegy/Vistra Oakland Power Plant, which is currently designated as a Reliability Must Run (RMR) facility. In its Board Approved Plan¹, the CAISO stated:

The ISO review found that the OCEI project address [sic] all reliability issues identified in the Oakland area without local generation. The ISO is recommending the approval of the transmission regulated assets of the Oakland Clean Energy Initiative project for the substation upgrades at Moraga and Oakland X, rerating of Moraga-Claremont 115 kV Lines #1 and #2 and the installation of the battery storage at the Oakland C and Oakland L 115 kV substations that are estimated to cost \$56 to \$73 million with an in-service date of 2022. The ISO is recommending PG&E to seek approval through the CPUC procurement process [for] the additional identified preferred resources for the Oakland Clean Energy Initiative.

Based on the last year of additional study and after consultation with CAISO Staff, PG&E requests that CAISO amend its approval language for the OCEI in the following ways:

- 1) Under contingency, there is an additional subarea constraint at Oakland L requiring a minimum of 7 MW/28 MWh. PG&E should modify its plan to include the most cost-effective combination of either additional transmission solutions and/or dedicated resource procurement at Oakland L. The new language would state that, of the total resource mix (20 MW/120 MWh) to be sited within the Oakland C and Oakland L 115 kV substation pocket, no less than 7 MW/28 MWh should be either located at the Oakland L substation or interconnected via the PG&E distribution system to the CAISO-controlled grid at Oakland L.
- 2) CAISO should no longer explicitly require a utility-owned storage battery as part of the OCEI solution. Instead, CAISO should encourage PG&E to seek the most cost-effective combination of resources, with no minimum prescribed amount of utility ownership. PG&E may competitively solicit (and seek CPUC approval to procure) market-participating preferred resources to meet any amount up to the total 20 MW/120 MWh need within the Oakland C and Oakland L 115 kV substation pocket.

¹See [2017-18 Board Approved Transmission Plan](#), March 22, 2018, p. 129