

March 13, 2020

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Dear CAISO Transmission Planning:

Western Grid Development LLC ("Western Grid") appreciates the opportunity to comment on the on the CAISO's 2020-2021 Draft Study Plan and submit this economic study request **for the Pacific Transmission Expansion Project ("PTE" or "PTEP")**. As more fully described below, Western Grid also requests that CAISO study the PTEP as a transmission solution that will address State Public Policy Requirements. And, as part of the study, Western Grid requests that the CAISO consider the reliability and other benefits that the PTEP will provide. This is particularly appropriate in light of the recent requests made by a number of parties, including Western Grid and CAISO, for the California Public Utilities Commission ("CPUC" or "Commission") to provide specific policy direction on issues that can affect the CAISO's 2020-2021 Draft Study Plan and the CAISO's ultimate conclusions in its Transmission Plan Report.¹

The PTEP is a 2,000 MW controllable HVDC subsea transmission cable that the CAISO has found will allow existing supply available to the Diablo Canyon 500 kV switchyard or new sources of offshore wind to be delivered to the West LA Basin and reduce local capacity requirements in the West LA Basin thereby allowing 1,993 MWs of gas plant generating capacity to close. PTE is described in Section 4.8.2 of the CAISO's draft Transmission Report issued January 31, 2020 ("Draft 2019-2020 Report")². The PTEP was studied in the 2019-2020 Transmission Planning cycle and we request again that CAISO study the project's economic, policy and reliability benefits to the State's ratepayers under the updated 2020-2021 study assumptions and considering any further policy guidance from the Commission, specifically with regards to the following:

¹ See CAISO comments filed on March 12, 2020 with respect to the Administrative Law Judge's Proposed Decision on the "2019-2020 Electric Resource Portfolios to Inform Integrated Resource Plans and Transmission Planning" in R16-02-007 (CAISO Comments).

² http://www.caiso.com/Documents/Draft 2019-2020TransmissionPlan-January312020.pdf



1. PTEP LCR Reduction Benefits

We appreciate that in the Draft 2019-2020 Report, the CAISO determined that the PTEP will provide net 1,993 MW's of LCR reduction benefits by reducing the LCRs in the LA Basin and, thereby, allowing1,993 MW's of existing gas plants to close in the West LA Basin and Big Creek/Ventura area. *Draft 2019-2020 Report at page 339.* However, the CAISO applied a very conservative value to the LCR benefits. In this regard, the CAISO stated that:³

The [PTE] project provides other benefits for which the CAISO is valuing with conservative assumptions at this time, due to uncertainty regarding future reliance on gas-fired generation for system and flexible needs.

The CAISO went on to explain that:

The uncertainty regarding the extent to which gas-fired generation will be needed to meet those system and flexible capacity requirements necessitated taking a conservative approach in this planning cycle in assigning a value to upgrades potentially reducing local gas-fired generation capacity requirements. The CAISO accordingly placed values on benefits associated with reducing local gas-fired generation capacity requirements *primarily on the difference between the relevant local area capacity price and system capacity prices*. This conservative assumption was a key difference between the economic benefits calculated in this study, and the economic assessments stakeholders provided in support of their projects. *The ISO recognizes that the capacity value of many of these projects will need to be revised <u>when actionable direction</u> on the need for gas-fired generation for system and flexible needs <u>is available</u>.⁴*

Western Grid believes that CAISO should continue to consider the PTEP as an economic alternative to local capacity including any policy or "actionable direction" it receives from the Commission on how and when to begin planning for the eventual closure of the local gas-fired capacity currently providing LCR. We agree with and support CAISO's comment to the Commission that transmission solutions can have long lead times and, therefore "planning for transmission-dependent projects should start as soon as possible."⁵ Indeed, if the State is to reach its 2030 and 2045 GHG SB 100 requirements in a reliable and least-cost manner, the CAISO will need to begin planning now for transmission solutions

³ *Id.* At 341

⁴ *Id* at 342 (emphasis added).

⁵ CAISO Comments at 7.



that reduce LCRs currently provided by gas-fired resources. In order to do so, CAISO will need to change its conservative assumptions and use realistic capacity values for that replacement in its economic analysis.

2. PTEP Public Policy Benefits

With respect to the LCR studies performed in the 2019-2020 cycle CAISO states on page 264 of the Draft TPP Report:

These studies were conducted under the economic analysis framework, *as there is currently not a basis for identifying solutions on a reliability basis or policy basis*. If there are sufficient local resources to maintain reliability, reducing the use of those resources is not necessary to meet NERC or ISO planning standards. Further, *there are no applicable federal or state policies at this time* that necessitate planning for reduced local capacity levels beyond state policies for generation relying on coastal waters for once-through-cooling, and those needs have been addressed in previous transmission plans.

Western Grid believes that SB 100 creates a clear state public policy requiring all reasonable efforts to achieve zero-carbon portfolio including phasing out gas-fired generation. We have filed comments to the CPUC requesting they clarify public policy requirements. In this regard we have requested that an additional public policy sensitivity scenario be included in the 2020-2021 transmission plan which allows CAISO to identify transmission projects that will allow gas plants to close while providing other renewable integration and LCR reduction benefits.

In studying a public policy transmission alternative, CAISO should also consider whether the transmission project alternative can provide enough grid support and operating flexibility while also addressing other State public policy requirements. In this regard, PTEP is a viable solution for achieving SB 100's zero-carbon portfolio goal. CAISO has already determined that the PTEP will provide net 1,993 MW's of LCR reduction benefits by reducing the LCRs in the LA Basin and, thereby, allow 1,993 MW's of existing gas plants to close in the West LA Basin and Big Creek/Ventura area. Moreover, the PTEP converters with their grid forming attributes, can respond much faster than the synchronous generators used on gas fired units. The faster response applies both in reaction time and impact for AC voltage control and frequency stabilization while providing effective short circuit capacity and system damping requirements. In addition, PTEP can also deliver system flexibility to the locally constrained area.



As presented at the February 28, 2020 stakeholder meeting, CAISO will receive from the CPUC an updated baseline and two sensitivity portfolios for study in the Policy-driven assessment. Western Grid requests the CAISO consider the PTEP as a transmission alternative which can support renewable integration by reducing expected curtailment of renewables in the CPUC portfolios and that will allow sharing of energy and ancillary services among multiple Balancing Area Authorities (BAAs). The PTEPs unique location off shore also offers California an option to interconnect and deliver up to 2,000 MW of economic offshore wind energy as well as support delivery of renewable energy between northern and southern California.

3. Other Benefits of the PTEP

The PTEP will allow the gas fired plants in the local capacity (coastal) areas to be replaced with renewable energy (including offshore wind) outside the local area. It will also improve air quality particularly in the LA area where the poor air quality falls disproportionately on disadvantaged neighborhoods.

The PTEP will provide reliability support to the Big Creek/Ventura Area of SCE, specifically within the Goleta area. The Goleta area is subject to voltage collapse issues under a double line (N-2) outage of the two 220 kV lines feeding Goleta substation from Santa Clara substation. The proposed PTEP will mitigate this issue by providing up to 500 MW into Goleta in the event of an outage. Further, as noted in the CAISO 2020 Local Capacity Technical Study, page 165, the Elwood generating station "will only be allowed to retire after suitable replacement is in place at or near the same bus (Goleta)". The PTEP is proposed to have a direct connection to Goleta substation and would serve as a viable replacement, several times over, for the Elwood generating station and eliminate the need for Elwood to be under a Reliability Must Run ("RMR") contract.

Finally, the PTEP reduces the risk of another wildfire cutting off electric service to the LA coastal area. The PTEP with its associated subsea cables would have allowed the lights to stay on in LA even without the local gas plants when service from the terrestrial lines from the east were cut off this past summer. With the vast number of MW's in the CPUC resource portfolio assumed to come from solar and batteries that will be located in the interior part of the State and will need additional transmission to reach the coastal population, it makes good sense to have at least some capacity delivered by subsea cables that do not involve the same wild fire risks.



We appreciate CAISO's consideration of our comments and stand ready to discuss the PTEP's benefits with the transmission planners.

Thank you for your consideration!

Sincerely yours,

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Martin Walicki