



Submit comment on Policy & Economic Preliminary Assessment and Study Updates

2024-2025 Transmission planning process

1. Please provide your organization's comments on the Recommended Reliability Projects less than \$50 million for the North Region.

No comments at this time.

2. Please provide your organization's comments on the Recommended Reliability Projects less than \$50 million for the South Region

No comments at this time.

3. Please provide your organization's comments on the MIC Expansion Requests

No comments at this time.

4. Please provide your organization's comments on the Preliminary Policy Assessment Results for the SCE & GLW areas

SCE Northern Area

Development of cost-effective and IRP-planned resources in the SCE Northern Area, and specifically in the Tehachapi wind resource area, has been hampered by near-zero TPD capacity for that area as well as the CAISO-imposed Windhub Substation export limit under the extreme system event criteria – potential blackout condition due to simultaneous loss of both 500kV lines from Windhub. CalWEA's studies show that the addition of a 230kV double-circuit transmission line using high-capacity double-bundle conductors from the Windhub 230kV bus to the Vincent 230kV bus would obviate the need for the export capacity limit out of the Windhub substation. Further, when combined with a low-cost fix (<\$20M) to eliminate the ground clearance limitation for the Antelope Vincent 500kV line, this 230kV line upgrade would add more than 3,000 MW of TPD capacity to the Tehachapi wind resource area at Windhub, Whirlwind, and/or Antelope Substations. More than double that amount of solar and wind capacity is included in the 2024-25 CPUC portfolio as well as the CPUC's draft 2025-26 portfolio. Thus, CalWEA strongly recommends that CAISO consider approving the Windhub-to-Vincent 230kV line and addressing the ground clearance limitation for the Antelope Vincent 500kV line as part of its 2024-25 TPP.

East of Pisgah ("EOP") area

CalWEA Comments as submitted into CAISO Template on Nov. 27, 2024

CalWEA urges CAISO to address the lack of deliverability capacity in the East of Pisgah (“EOP”) area where numerous cost-effective renewable energy and storage resources have located. This can be done simply by responding to the most recent CPUC Preferred System Plan (as well as the plans from the previous few cycles). To that end, we recommend that CAISO approve the Trout Canyon-Lugo 500kV line already vetted as part of the 2022-23 TPP. This upgrade relieves the identified EOP deliverability constraints, providing much-needed deliverability capacity for EOP resources. This upgrade will also eliminate the dependency on multiple complex RASs being considered and already planned for the area that will not add sufficient TPD capacity and could compromise the reliability and flexibility of CAISO’s grid operations. In addition, given the State’s plan to import out-of-state (“OOS”) wind energy from New Mexico and Wyoming wind areas via EOP, CalWEA recommends that such OOS wind resources be accommodated via subscribed DC EHV lines directly from those areas into the Los Angeles Basin (e.g., Lugo 500kV Substation).

Our analysis indicates that the Trout Canyon-Lugo upgrade will increase the EOP TPD capacity from its current zero level to levels high enough to accommodate the deliverability capacity of all stranded Cluster 14 and earlier-queued EOP resources, including OOS wind imports (assuming injection at the Harry Allen 500kV bus and Lugo 500kV bus), while still leaving some TPD capacity for allocation to Cluster 15 projects.

5. Please provide your organization’s comments on the Preliminary Policy Assessment Results for the SDG&E area

No comments at this time.

6. Please provide your organization’s comments on the Preliminary Policy Assessment Results for the PG&E area

The welcome addition of the Collinsville Substation and the addition of Collinsville-to-Pittsburg 230kV cables in the 2022-23 TPP was hampered by the fact that the Collinsville Substation became a bottleneck for deliverability capacity for practically all queued projects in PG&E’s North of Greater Bay Area (“NGBA”) and even for many projects in the Greater Bay Area (“GBA”) that did not have such a constraint before the Collinsville addition. This concern became even more acute after CAISO approved the Fern-Road-to-Humboldt-to-Collinsville 500 kV upgrade as part of the 2023-24 TPP. The Collinsville deliverability bottleneck will not only prevent Humboldt offshore wind resources from attaining FCD status but will also deprive at least 1,000 MW of in-state wind in Northern California from obtaining deliverability capacity. CalWEA’s studies show that the addition of a Collinsville-to-Tesla 500kV line upgrade will address all these deliverability concerns. Hence, CalWEA strongly recommends that CAISO consider approving a Collinsville-to-Tesla 500kV line upgrade as part of its 2024-25 TPP.

The CPUC’s 2024-25 busbar mapping includes 2,259 MW of wind energy in Northern California, and there is 900 MW of demonstrated commercial interest in Lassen County. Thus, Northeastern California is a very promising area for wind resource development. However, CAISO has no high-voltage transmission infrastructure anywhere close to this wind resource area (thus active developments are currently in the NV Energy queue). A 230kV or 500kV substation located north of the City of Susanville, along with a 230kV or 500kV line to Round Mountain or Fern Road Substation, should also be seriously considered as part of the CAISO 2024-25 TPP. Consideration should then be made to connect this high voltage infrastructure with the planned NVE 500kV line (as part of its Greenlink expansion project plans) in that same area as part of the CAISO 2025-26 TPP.

CalWEA Comments as submitted into CAISO Template on Nov. 27, 2024

This would offer an additional path for Northwest and Wyoming OOS wind resources to reach CAISO loads.

7. Please provide your organization's comments on the Preliminary Economic Analysis Results

No comments at this time.

8. Please provide any additional comments on the November 13, 2024, Transmission Planning Process Stakeholder Meeting

CalWEA encourages CAISO to provide to the CPUC and other stakeholders the detailed gas plant utilization forecasts that can be derived from the CAISO's models to inform the development of the CPUC's resource portfolios. The CPUC's September 11, 2024, *Ruling Seeking Comments on Electricity Resource Portfolios for 2025-2026 Transmission Planning Process* (at p. 11) assumes that its proposed portfolio will significantly reduce gas generation while retaining all existing gas fired capacity. However, the CPUC's RESOLVE and SERVVM models cannot accurately forecast gas plant utilization for gas plants located in transmission constrained local areas. Therefore, information from CAISO's more granular models is necessary to fully inform CPUC decisions and ensure that gas generation (and related emissions) can be reduced without resolving local transmission constraints.