



Submit comment on meeting

20-Year transmission outlook (2023-2024)

1. Please provide your organization's comments on the approach to out-of-state wind resources.

First, regarding out-of-state wind and all other resources, the proposed 2045 portfolio presented on Slide 11 in the CAISO's January 4, 2024, presentation is significantly inconsistent with the 2045 Preferred System Plan (PSP) portfolio included in the CPUC's January 10, 2024, Proposed Decision (PD). The CPUC's PD includes substantially more "in-state" wind (including resources directly interconnected to CAISO), particularly Baja California and Northern California wind resources. While CAISO's August 16, 2023, responses to party comments indicate that the resource portfolio and busbar mapping were provided by the CEC and CPUC, the 20-year Outlook would be most useful if it tracks the latest adopted agency (or joint agency) resource plan. Rather than conducting the 20-Year Transmission Outlook update in parallel with CAISO's 2023-2024 transmission planning process, as indicated on slide 8, it would make sense to update the Outlook portfolio based on the CPUC's 2023 adopted plan, expected in February 2024, that extends to 2045 and will serve as the basis for the 2023-2024 TPP.

Regarding out-of-state wind, CalWEA supports CAISO's planned assessment of an alternative that would inject a portion of Wyoming and/or Idaho wind into Northern California. As CalWEA advocated in the CPUC's IRP docket, strengthening the Northern California grid will provide optionality for in-state, out-of-state, and/or offshore wind resources.

The 2045 portfolio included in the CPUC's PD includes considerably more in-state wind (8.3 GW) than does CAISO's proposed 2045 portfolio (3 GW). The CPUC mapped much of that in-state wind to Northern California (almost 3 GW in 2034). Planning deliveries of out-of-state wind through Northern, rather than Southern, California will provide additional optionality to deliver in-state wind to load centers and the same backbone upgrade will support the transfer of North Coast offshore wind.

The out-of-state energy should be at least partially sunk into the Greater Bay Area load center. Thus, the upgrades should involve 500-kV backbone upgrades between the newly approved Fern Road and the Greater Bay Area. Accommodating Humboldt offshore wind would additionally require connecting the Humboldt Bay area to the Fern Road Substation. Based on rough calculations, CalWEA believes that such upgrades could readily transfer up to 3 GW of wind from the Humboldt wind energy area and/or onshore wind resources (in-state or out-of-state) to the Greater Bay and other load centers in Northern and Central California.

2. Please provide your organization's comments on the approach to offshore wind resources.

Again, the Outlook will be most useful if pegged to the most recently adopted CPUC or Joint Agency plan. CalWEA will, however, be urging the CPUC to substantially increase the amount of offshore

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wind from what was included in the PSP portfolio in the CPUC's PD. In any case, the PD would map 1.6 GW of OSW to Humboldt for transmission planning purposes, which supports the Northern California build-out that we suggest in response to Question 1.

Should the adopted PSP not include 20 GW or other substantial amount of OSW, we encourage the CAISO nevertheless to include an offshore wind planning alternative that conceptualizes the network interconnection configurations needed to support 20 GW of OSW to inform the state's future planning efforts as they may evolve, particularly after implementation of the 24-hourly RA program. This should include at least 6 GW at the Central Coast, as the three BOEM lease areas can support at least that amount of capacity, and 3 GW of storage resources in the queue that are seeking to interconnect effectively in same generation pocket. Accommodating all these resources will require additional TPD capacity.

CalWEA was encouraged by the discussion on the January 4 call that CAISO is studying a full network configuration to interconnect offshore wind resource areas, beginning with the initial OSW project in each area. CalWEA appreciates that CAISO will continue to refine its conceptual offshore networks, deliveries to the grid, and resolution of downstream constraints.

3. Please provide your organization's comments on the high-level technical assessment scenarios, mapping of resources, load forecast and dispatch.

The CPUC's PD (at p. 80) indicates that the CPUC will request that CAISO conduct a gas-plant-retirement sensitivity analysis that addresses local reliability needs on a more granular and detailed level than the CPUC's system level studies can accomplish. The CAISO's Outlook could add substantial value if it (a) studies whether gas plants in locally constrained areas will need to play a greater role than detected in the CPUC's models, (b) estimates the associated costs of greater reliance on gas plants and how the state's GHG goals will be impacted, and (c) whether transmission solutions are warranted to enable plant retirements in conjunction with supporting other 20-year Outlook planning goals, such as delivering offshore wind into LA load centers.

4. Please provide your organization's comments on the preliminary results of the HSN scenarios.

No comment.

5. Please provide any additional comments your organization has on the 20-Year Transmission Outlook update.

No comment.