

Fact Sheet:

Decision Transmitting Electric Resource Portfolios to the California Independent System Operator for the 2025-2026 Transmission Planning Process (<u>R.20-05-003</u>)

February 20, 2025

Overview of the 2025-2026 Decision

On February 20, 2025, the California Public Utilities Commission (CPUC) adopted a Decision on the Transmission Planning Process (TPP) portfolios for the California Independent System Operator (CAISO) to analyze as part of its transmission planning cycle. This cycle's 2025-2026 TPP base case portfolio builds off of the 2024-2025 TPP base case portfolio that the CPUC adopted in <u>D.24-02-047</u>. The adopted base case continues to facilitate the analysis of the transmission needed to bring online over 60 gigawatts (GW) of new clean generation and storage resources to cost-effectively achieve a 25 million metric ton (MMT) greenhouse gas (GHG) emissions level by 2035, while maintaining system reliability at the lowest cost to ratepayers.

By 2035, the adopted 2025-2026 TPP base case portfolio is modeled to reduce GHG emissions by over 45 percent compared to the 2026's modeled 47 MMT target and surpasses Senate Bill (SB) 1020's target of 90 percent clean energy retail sales, which is also on the pathway to SB 100's clean energy goals for 2045. This adopted 2025-2026 portfolio continues to model decreased use of natural gas plants in the CAISO-system throughout the modeling timeframe, with a projected 71 percent decline in annual natural gas generation in terawatt-hours by 2035 as compared to the first modeled year, 2026. By 2040, modeled natural gas usage in the adopted portfolios is reduced by 80 percent from modeled 2026 usage.

The Decision also recommends that the CAISO study a sensitivity portfolio with a high upper bound for resources that require longer lead times to develop and come online, such as geothermal and long duration energy storage.

CPUC Transmittal of IRP Resource Portfolios to CAISO's TPP

The CPUC's annual process for TPP portfolio development ensures that electricity resources identified within Integrated Resource Planning (IRP) inform CAISO's transmission system planning to facilitate infrastructure development to meet state goals. A 2010 MOU between the CAISO and the CPUC outlines this process in coordination with the California Energy Commission (CEC).

The CPUC's 2025-2026 TPP portfolio development continues the annual process of establishing generation and storage portfolios as key inputs into the CAISO's TPP. The modeling to develop these portfolios uses electric system planning tools and a robust stakeholder process, which included formal stakeholder comments to an administrative law judge ruling on draft busbar mapping results. The CPUC's 2025-2026 TPP portfolio development process builds off the one used to develop last year's portfolio.

Summary of the Portfolios for the 2025-2026 Transmission Planning Process

Adopted 2025-2026 TPP Base Case Portfolio

- The adopted base case portfolio like the portfolio adopted in the 2024-2025 TPP includes all generation and storage resources procured or planned by CPUC jurisdictional load serving entities (LSEs) in their November 2022 Integrated Resource Plans, plus additional resources identified in IRP modeling.
- The 2025-2026 base case portfolio will allow the CAISO to identify and authorize transmission development needed to meet the required reliability standard, a 25 MMT GHG target, and increased demand as forecasted in the California Energy Commission's (CEC) Integrated Energy Policy Report (IEPR).
- IRP modeling shows that the two study years for the base case portfolio satisfy the 0.1 Loss of Load Expectation (LOLE) standard, meaning that the modeling portfolios are aligned with the reliability target.



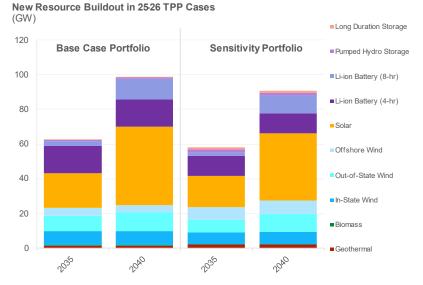


As in the previous 2024-2025 TPP cycle, the CPUC is transmitting a portfolio with ten-years-out 2035 results and 15-years-out 2040 results, pursuant to SB 887.

Adopted 2025-2026 TPP Sensitivity Portfolio

- In addition to the 2025-2026 base case, the Decision recommends that the CAISO study a sensitivity portfolio that depicts a potential long lead-time resource deployment future reflective of the upper bound of the CPUC's need determination that was adopted in <u>D.24-08-064</u>, pursuant to Assembly Bill 1373.
- The sensitivity portfolio is designed to serve as a reasonable alternative to the base case and will allow the CAISO to continue studying transmission infrastructure needs and costs that could be needed to meet the upper bounds quantity of long lead-time resources.

The cumulative buildout of new resources included in the two cases for the key TPP study years is shown below:



To help ensure that California continues to cost-effectively identify infrastructure needs to meet the needs of diverse resource types, the Decision also adopts the following recommendations to the CAISO:

- Study the necessary transmission capacity needed to ensure the deliverability of potential out-of-state wind and offshore wind resources.
- Reserve transmission deliverability for future geothermal, non-battery long-duration energy storage, offshore wind, and biomass development in locations identified through the CPUC's resource-to-busbar mapping process.
- Conduct further studies on potential new transmission and possible alternatives needed by a portion of the out-of-CAISO onshore wind identified in the 2025-2026 TPP base case before approving the specific transmission needed to ensure upgrades are optimal and cost-effective.

References

- <u>Proposal Approved</u>
- <u>CPUC IRP Website</u>
- <u>Relevant 2025-2026 TPP Modeling and Mapping Materials</u>