

**BEFORE THE ENERGY COMMISSION
OF THE STATE OF CALIFORNIA**

Electricity Demand Forecast

24-IEPR-03

I. Introduction

The California Independent System Operator (CAISO) submits comments on the December 12, 2024 *Integrated Energy Policy Report Commissioner Workshop on Draft Forecast Results*. The CAISO appreciates California Energy Commission (Energy Commission) staff's year-round efforts to update the Integrated Energy Policy Report (IEPR) forecast. Energy Commission staff made several updates to forecast inputs and enhanced its hourly model based on feedback from the 2023 forecast cycle. Energy Commission staff also focused on load growth areas, particularly load growth associated with data centers. The CAISO supports the Energy Commission's revised data center projections¹ and overall forecast results for the 2024 IEPR cycle.

II. Background

The CAISO works closely with the Energy Commission, California Public Utilities Commission (CPUC), and California Air Resources Board through the Joint Agency Steering Committee (JASC) to review forecast updates year-round. The 2022 Memorandum of Understanding signed by the CPUC, Energy Commission, and the CAISO establishes the use of an Energy Commission single forecast set in resource and transmission planning processes.² The Energy Commission's IEPR forecast is a key input into downstream planning processes including the CPUC integrated resource plan (IRP) and the CAISO's annual transmission planning process (TPP). The TPP relies on the Energy Commission's

¹ Energy Commission staff, Data Center Forecast Update, December 23, 2024: https://www.energy.ca.gov/sites/default/files/2024-12/Data_Center_Forecast_Update_ada.pdf

² Memorandum of Understanding between CPUC, Energy Commission, CAISO Regarding Transmission and Resource Planning and Implementation, December 2022: <https://www.caiso.com/documents/iso-cec-and-cpuc-memorandum-of-understanding-dec-2022.pdf>

forecast and CPUC's IRP to plan and identify both transmission and non-transmission solutions required to reliably connect new loads and generation. To support the timely development of new grid infrastructure, the CAISO must have sufficient lead-time to study and identify solutions that support new loads and generation.

III. Discussion

A. The CAISO Supports the Energy Commission's Revised Draft Scenario 1 Mid-Case Data Center Forecast.

The CAISO appreciates the time and effort Energy Commission staff spent this year to include data center loads in the 2024 forecast update, and the CAISO supports including these new loads in this cycle's forecast. It is prudent for the Energy Commission to include these new loads to ensure downstream planning processes, including the CAISO's TPP, have sufficient time to plan the resources and infrastructure necessary to timely connect new loads. Over the last five forecast cycles, the Energy Commission's forecast has increased year over year in IRP and TPP planning horizons, resulting in larger resource and transmission plans. Timelines for transmission reinforcements to support increasing loads may already be tight. Therefore, planning for projected new loads in this cycle will allow the CAISO to identify infrastructure needs as soon as possible and mitigate the risk of delays in transmission infrastructure development. The CAISO notes that if future forecast cycles determine the pace of load growth is slower than projected currently, there are opportunities to reconsider the pace of transmission development in the transmission planning and execution stages.

The CAISO supports moving forward with the revised Scenario 1 presented in the December 23 Demand Analysis Working Group as the mid-case used in the Planning Scenario. To develop a reasonable data center forecast, Energy Commission staff balanced the need to incorporate new utility data that show significant data center load growth with the risks that data center loads represented in utility applications may not materialize. Energy Commission staff's approach strikes the appropriate balance between the need to timely reflect new data center loads in order to support downstream planning processes and the need to take a conservative approach to utility data in order to account for risks that loads may not materialize. In addition, Energy Commission staff benchmarked its analyses

against other studies and historical data, where available, to produce reasonable forecast assumptions. For these reasons, the CAISO supports using Energy Commission staff's Scenario 1 December update mid-case data center forecast for the Planning Scenario.

The CAISO looks forward to continued collaboration with Energy Commission staff to refine its data center forecast as new information becomes available.

B. The CAISO Supports Energy Commission's Draft Overall Forecast Results.

The CAISO supports the Energy Commission's draft overall 2024 forecast results. The CAISO appreciates several enhancements that Energy Commission staff made to this cycle's forecast, including: (1) updating behind the meter solar and storage capacity and capacity factor assumptions based on new data from utilities and the CPUC; (2) improving transportation models; and (3) incorporating new loads into the forecast, including data centers, agricultural loads, and increased load associated with replacement aircraft carriers at Naval Base Coronado.

The CAISO also appreciates Energy Commission staff's enhancements to its hourly model, which address feedback and questions from the 2023 IEPR forecast results. Specifically, these enhancements address discrepancies between utility sales and CAISO Energy Management System data that contributed to a forecasted July peak in 2024 and 2025 in the 2023 IEPR forecast. The 2024 draft forecast results show a return to forecasted peak load in September for 2025, which is more consistent with recent years' actuals.

IV. Conclusion

The CAISO supports the Energy Commission's revised data center projections and overall forecast results for the 2024 IEPR cycle. The CAISO looks forward to continued

collaboration with parties and Energy Commission staff on this important effort.

Respectfully submitted,

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