

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769.	Rulemaking 14-08-013 (Filed August 14, 2014)
And Related Matters.	Application 15-07-002 Application 15-07-003 Application 15-07-006
(NOT CONSOLIDATED)	
In the Matter of the Application of PacifiCorp (U901E) Setting Forth its Distribution Resource Plan Pursuant to Public Utilities Code Section 769.	Application 15-07-005 (Filed July 1, 2015)
And Related Matters.	Application 15-07-007 Application 15-07-008

COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION ON THE PROPOSED DECISION OF COMMISSIONER PICKER

I. Introduction

The California Independent System Operator Corporation (CAISO) submits these comments in response to the Proposed Decision on Track 3 Policy Issues, Sub-Track 1 (Growth Scenarios) and Sub-Track 3 (Distribution Investment and Deferral Process).

The CAISO appreciates the Commission’s efforts to develop Distribution Resources Plans (DRP) that will better align with other forecasting and planning efforts across the state. The CAISO’s comments center around the following major topics:

- Track 3, Sub-Track 1: Growth Scenarios.
 - a. The CAISO strongly supports the collaborative approach taken with the California Energy Commission (CEC) to align DRP growth scenarios with the Integrated Energy Policy Report (IEPR).
 - b. The CAISO will work closely with investor owned utilities (IOUs) in their capacity as Participating Transmission Owners (PTOs) of the CAISO to

- disaggregate the distributed energy resource (DER) forecast.
- c. The CAISO supports efforts the IOUs will undertake, as directed by this Proposed Decision, to evaluate the effectiveness of past forecasts and calibrate their circuit-level DER forecasts based on actual data.
 - d. The CAISO will participate, to the extent practical, in the Growth Scenario Working Group.
 - e. The CAISO provides clarifications on the annual Transmission Planning Process (TPP) with regards to the Locational Net Benefits Analysis.
- Track 3, Sub-Track 3: Distribution Investment and Deferral Process. The CAISO supports the proposed distribution investment and deferral framework and requests future discussion on how this relates to the Integrated Resource Planning process.

II. CAISO Comments regarding Track 3, Sub-Track 1: Growth Scenarios

The Proposed Decision takes a positive step forward in creating transparency and consistency across numerous forecasting and planning processes. In the future, the CAISO requests further discussion on how the growth scenarios will be reflected in the Integrated Resource Planning process. The CAISO addresses five specific, though interrelated issues, regarding the development of growth scenarios.

A. Alignment with CEC's IEPR

The CAISO strongly supports alignment of the DRP process with forecasts that are produced by the CEC's IEPR process. As explained in greater detail in Section II.E. below, the CAISO's annual TPP also uses the CEC's IEPR forecast, and the Proposed Decision presents an opportunity to align several processes for greater transparency, consistency, and informed decision making as DERs rapidly increase penetration on the grid. As noted in the Proposed Decision, the CEC is evaluating the feasibility of producing annual updates to photovoltaic (PV), electric vehicle (EV), and energy storage forecasts. The CAISO strongly supports the move to annual updates of PV, EV, and storage and encourages all parties to work together to support this effort. For example, the CEC may rely on the IOUs' timely input for forecasting data in the IEPR update years. More broadly, the CAISO supports timely provision of necessary input data from the IOUs and the Commission (*i.e.*, Potential and Goals Study) to the CEC for both the

update and full IEPR years. The CAISO will proactively work with the Commission, CEC, IOUs, and other parties as necessary to further this new effort to provide DER updates in the IEPR update years.

The CAISO also believes the Proposed Decision has laid out a clear and practical process to incorporate new policies that impact PV, EV, and storage. It is the CAISO's understanding that the Commission prefers any policy changes to PV, EV, and storage to be captured by the CEC's annual forecast updates. This will greatly improve the timeliness of incorporating changes into the CEC's forecasts so that the most up-to-date forecast is reflected in the IOUs' distribution plans. If there is a greater than nine month lag between new policies and when the next CEC forecast is available, the IOUs may submit Tier 2 Advice Letters to the Commission to reflect this. The CAISO believes the Tier 2 Advice Letter is an improvement over today's process and creates greater transparency. If Tier 2 Advice Letters are used to supplement existing CEC forecasts, the CAISO will work with relevant parties to understand how this new information will be incorporated into the CAISO's annual TPP, as also discussed in Section II.B. below.

Lastly, CAISO supports the Proposed Decision's direction to use the 2017 IEPR (full IEPR), available in early 2018, for the IOUs' 2018-2019 distribution planning cycle.

B. Coordination with IOUs on DER Forecast Disaggregation

The CAISO appreciates the Commission's direction to the IOUs to work with the CAISO on disaggregating DER forecasts to the busbar level. More specifically, the CAISO already relies on the IOUs, in their capacity as CAISO PTOs, to disaggregate most DERs to the circuit level for use in the CAISO's annual TPP. The only exception to this is Additional Achievable Energy Efficiency (AAEE), which is disaggregated under an existing CEC process.

Should new information become available, such as changes to the DER forecasts resulting from a Tier 2 Advice Letter, or additional considerations for how to address DERs, the CAISO will also work with the PTOs to appropriately disaggregate the forecast. If necessary and to the extent practical, the CAISO will participate in the Growth Scenario Working Group, as discussed below in Section II.D.

C. IOUs to Calibrate Circuit-Level DER Forecasts

The CAISO appreciates the Commission's efforts to better understand and improve forecast accuracy. The CAISO supports any efforts the IOUs may undertake to evaluate the effectiveness of past forecasts and calibrate their circuit-level forecasts based on actual data.

D. Growth Scenario Working Group

The Proposed Decision lists several issues that may be vetted through the Growth Scenarios Working Group, including any issues that may require resolution between the CAISO and IOUs for DER forecast disaggregation. The CAISO welcomes this offer but notes that when the CAISO coordinates with IOUs, it is in their roles as PTOs. As such, the CAISO relies on the PTOs to provide disaggregation information and any remaining issues are largely technical. However, if there are policy-driven issues, this is best resolved in the CEC's forecasting process (*e.g.*, at the Demand Analysis Working Group) or additionally in the Growth Scenario Working Group. At this juncture, both the Proposed Decision and the forthcoming IEPR forecast are focused on system-level forecasts with limited granularity. In the future, it is the CAISO's understanding that the IEPR forecasts will increase in spatial granularity. Therefore, DER forecast disaggregation should be consistent across the IEPR, TPP, and the IOUs' distribution plans.

The CAISO will participate, to the extent practical and necessary, in the Growth Scenario Working Group. Given the significant change large DER penetration has on the forecast, the CAISO believes it is important to include the participation of DER growth drivers such as Community Choice Aggregators in the various working groups.

E. Clarifications regarding the CAISO's annual TPP with regards to the Locational Net Benefits Analysis

Several sections of the Proposed Decision make reference to the Locational Net Benefits Analysis (LNBA) use case adopted in the Track 1 decision (D.17-09-026) that will be used to determine the cost and benefits to the distribution grid of "autonomous" DER growth. As part of this discussion, the Commission has also sought to understand the potential transmission infrastructure deferrals resulting from increasing DERs. The CAISO has participated in the LNBA sub-working group meetings established to explore this issue. The CAISO takes this opportunity to offer some clarifications about the annual TPP.

As agreed between the CAISO, the CEC, and the Commission, the managed forecast for energy and demand from the CEC's IEPR is used as the base scenario for all planning processes. Using the CEC IEPR forecast, the CAISO annual TPP assesses the reliability needs and develops mitigation plans with the forecast DER that are incorporated into the base scenario. The CAISO does not conduct counterfactual analyses to assess the reliability needs or mitigation plans without the DER included in the CEC IEPR energy and demand forecast. This analysis would be overly burdensome and would require the CAISO to develop mitigation plans to meet the requirements of the applicable reliability standards under the counterfactual scenario. The CAISO does conduct sensitivity analyses that are incorporated into the annual study plan. The annual process allows for stakeholder comments in February of each annual planning process cycle. These sensitivities have included assessments of the reliability constraints that would occur if the AAEE in the managed forecast does not materialize; however mitigation plans are not developed for these conditions as they provide information only on potential reliability needs if the planned AAEE identified in the CEC IEPR forecast does not materialize as forecast. This information can be used to identify potential areas of targeting for AAEE or applicable other DER programs to ensure that the forecasted load modifiers in the CEC IEPR energy and demand forecast are developed as planned. Again, the CAISO does not develop mitigation plans for these sensitivity assessments because the AAEE is assumed to be part of the managed forecast as agreed to between the Commission, the CEC, and the CAISO.

III. CAISO's Response to Track 3, Sub-Track 3: Distribution Investment and Deferral Process

The CAISO believes the Distribution Investment and Deferral Framework (DIDF) outlined in the Proposed Decision is an ambitious but necessary evolution in the distribution planning process. In future, the CAISO hopes to see clarifications on how the DIDF interacts with the forecast assumptions used in the Integrated Resource Planning process and the outcomes of metrics used to track the effectiveness of DER deployment to address distribution needs.

IV. Conclusion

The CAISO appreciates this opportunity for continued dialogue on the Commission's development of the Distribution Resources Plans and looks forward to providing more input as

this proceeding progresses.

Respectfully submitted,

By: /s/ Jordan Pinjuv

Roger E. Collanton

General Counsel

Anthony Ivancovich

Deputy General Counsel

Anna A. McKenna

Assistant General Counsel

Jordan Pinjuv

Senior Counsel

California Independent System

Operator Corporation

250 Outcropping Way

Folsom, CA 95630

T – (916) 351-4429

F – (916) 608-7222

jpinjuv@caiso.com

Attorneys for the California Independent
System Operator Corporation

Dated: January 8, 2018