BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop An Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements.	Rulemaking 16-02-007 (Filed February 11, 2016)

REPLY COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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REPLY COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Pursuant to the Joint Administrative Law Judges' Ruling Seeking Comment on Staff Proposal on Process for Integrated Resource Planning (Ruling), the California Independent System Operator Corporation (CAISO) provides this reply to comments on the May 17, 2017 Staff Proposal for Implementing Integrated Resource Planning at the CPUC (Staff Proposal) prepared by the Energy Division in Rulemaking 16-02-007.

I. Introduction

The CAISO's reply comments focus on the following general items: (1) the need for sufficient stakeholder vetting of the Commission's planned modeling given the complexity and novelty of the Integrated Resource Plan (IRP) process; (2) the CAISO's commitment to participate in modeling and reliability discussions; (3) CAISO net export limits; (4) process alignment; (5) clarifications on CAISO's transmission access charge; and (6) minor corrections to the CAISO's opening comments.

II. Discussion

A. The Commission Should Allow Sufficient Time for Stakeholders to Vet the IRP Modeling Process and Build an Evidentiary Record.

The CAISO agrees with comments offered by numerous stakeholders regarding the need for additional time throughout the IRP process to effectively engage with stakeholders. In terms of process, although additional opportunities for commenting are welcome, comments alone are insufficient and more time will be needed to build an evidentiary record.[1] As other parties noted in opening comments, not all of the information underlying the Commission's planned modeling has been provided or is planned to be provided to stakeholders.[2] Parties will need additional time to analyze any data provided after the expected July 19, 2017 release of the proposed Reference System Plan.

The RESOLVE model is new to many stakeholders and several parties suggested changes and improvements to the modeling process. Some of the proposed changes are fundamental, including changing the model itself or supplementing it with a full production cost model.[3] Another fundamental change is to use mass-based and load serving entity (LSE) specific greenhouse gas (GHG) planning targets.[4] In addition to proposed changes, several parties noted that the Staff Proposal contemplates studying a large number of modeling cases and that both the modeling and review of the results will require significant time.[5] The CAISO agrees with all of these comments, but there does not appear to be sufficient time or process built into the current IRP framework to address these issues.[6]

Many processes outlined by the Staff Proposal are suggestions or frameworks that will require significant discussion in a transparent forum and may require feedback from the Commission before a final framework can be developed. For example, PG&E and SDGE assert that the IRP should be only a planning process rather than a procurement process.[7] In contrast, CAISO believes that the IRP process should ultimately lead to efficient procurement coordinated with other state agencies and the CAISO.

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[1] *See,* for example, Natural Resources Defense Council (NRDC) comments, page 6; Pacific Gas & Electric (PG&E) comments, page 5; and San Diego Gas & Electric (SDGE) comments, pages 6, 15-16.

[2] *See,* for example, PG&E comments, pages 34-35; Southern California Edison (SCE) comments, pages 10, 11, and 27; and Union of Concerned Scientists (UCS) comments, page 4.

[3] *See,* for example, California Community Choice Association (CalCCA) comments, page 17 and 19; Office of Ratepayer Advocates (ORA) comments, pages 13-14; and SDGE comments, page 19.

[4] *See,* for example, California Environmental Justice Alliance and Sierra Club (CEJA and SC) comments, page 18; SCE comments, pages 25-26; and UCS comments, page 6.

[5] *See,* for example, PG&E comments, page 16; and SDGE comments, pages 21-22.

[6] *See*, for example, UCS comments, page 4.

[7] PG&E comments, pages 9 and 15; and SDGE comments, page 27.

The CAISO's annual transmission planning process (TPP) previously used depends on renewable portfolios developed in the Commission's Long-Term Procurement Plan (LTPP) proceeding to identify the need for policy-driven transmission expansion. The IRP replaces the LTPP proceeding, and there would be a disconnect if the TPP ultimately approved transmission projects for renewable portfolios that are not procured. As a result, the CAISO agrees with comments that the Staff Proposal should articulate the parameters by which LSE plans can deviate from a Commission approved plan and how the LSE plans will be aggregated and evaluated.[8] The CAISO also supports a process that would produce Commission approved renewable portfolios on a regular basis to be used in the CAISO's annual TPP.

B. The CAISO Will Actively Participate in the Modeling Advisory Group and Will Provide Input into Modeling and Reliability Discussions.

The CAISO reiterates that it will actively participate in the IRP Modeling Advisory Group and provide its reliability modeling analysis and expertise. As SDGE notes, the CAISO "performs modeling used to support resource planning efforts at the Commission. It does so through a collaborative process that leverages the knowledge and expertise of relevant stakeholders, including [investor-owned utility] IOU planners."[9] The IRP Modeling Advisory Group should include the input of other experienced modelers, such as the investor owned utilities (IOUs), and is the most appropriate forum to "explore other commercially available capacity expansion modeling tools for potential use by the Commission's Energy Resource Modeling Group" as suggested by PG&E.[10] As PG&E also notes, there are a significant number of reliability metrics that should be considered in the proceeding in addition to studies that the CAISO conducts such as local capacity needs one, five, and ten years forward.[11]

C. The Commission Should Maintain the 2,000 MW CAISO Net Export Limit.

Several parties commented that the Commission should consider a higher net export limit from the CAISO balancing area. The CAISO believes that the 2,000 MW net export limit is

[8] *See*, for example, PG&E comments, pages 44-45.

[9] SDGE comments, page 6.

[10] PG&E comments, page 6.

[11] PG&E comments, pages 33-34.

appropriate and provides additional clarifications regarding the basis for this limit.[12] First, it is important to note that the 2,000 MW limit is an assumed simultaneous net export limit that reflects how much energy other balancing authorities can take from the CAISO without a regional ISO. To accommodate this level of net exports the CAISO needs to re-export all prevailing existing imports (averaging 3,000–4,000 MW) in addition to exporting 2,000 MW of energy. This scenario is a significant departure from historical norms as the CAISO has traditionally been a net importer. In fact, net export limits above 2,000 MW would need to be assessed by the Western Electricity Coordinating Council (WECC) because there is currently no experience with any level of net exports out of California. ORA notes that Energy Imbalance Market (EIM) transfer limits are approximately 4,400 MW,[13] but it is not appropriate to compare this figure with net export limits because EIM transfer limits are based on non-simultaneous transmission path capabilities. The CAISO believes that unless a significant change occurs (such as a regional ISO), the 2,000 MW net export is the most appropriate assumption.

D. The Commission Should Continue Its Role in Developing Renewable Portfolios to Identify Necessary Transmission Solutions.

SDGE suggests that "[i]f the modeling performed by the [Commission] for the IRP process is not at a similar level to the CAISO's, the CAISO should modify its current policy of evaluating only those renewable portfolios that are supplied by the [Commission]. Instead, the CAISO should have the freedom to evaluate alternative renewable portfolios provided by stakeholders where the stakeholders are able to demonstrate through analysis that the alternative renewable resource portfolio is likely to produce a significant cost savings for consumers."[14] Additionally, SDGE notes that "the RESOLVE model does not contain the level of transmission detail necessary to fairly evaluate certain kinds of options that may be part of a least-cost resource portfolio. Identifying the transmission upgrades that will cost-effectively facilitate the delivery of renewables, will require modeling that is beyond the capabilities of RESOLVE. The CAISO's modeling capabilities are better-suited to identifying such transmission needs."[15] The

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[12] For example, CEJA and SC comments, pages 27 and 72; GridLiance West comments, page 13; ORA comments, pages 13-14; and PG&E comments, page 35.

[13] ORA Comments, page 14.

[14] SDGE comments, page 27.

[15] SDGE comments, page 48.

CAISO clarifies that the Commission should not deviate from the current external process alignment with the CAISO to rely on renewable portfolios for policy-driven transmission solutions identified in the TPP. While the CAISO agrees that RESOLVE will not provide the level of detail necessary to identify policy-driven transmission solutions, the CAISO looks forward to working collaboratively with the Commission and stakeholders to develop such portfolios in the IRP process.

E. Clean Coalition's Comments Do Not Accurately Describe the CAISO's Transmission Access Charge.

The transmission access charge (TAC) is the structure the CAISO uses to recover participating transmission owners' costs of owning, operating, and maintaining transmission facilities under CAISO operational control. Clean Coalition claims that the CAISO "charges investor owned utilities TAC on every kilowatt-hour of electricity that crosses their customers' meters—regardless of whether that energy is actually delivered via the transmission grid."[16] Clean Coalition goes on to contrast this with supposedly different and appropriate treatment of municipal utilities.[17] These statements do not accurately reflect CAISO's current TAC allocation. The difference in allocation processes is not based on whether an entity is an IOU or municipal utility, but rather whether the entity is a CAISO participating transmission owner or not.

The allocation methodology Clean Coalition describes as applicable to municipal entities is how the CAISO allocates transmission costs to non-CAISO members (*i.e.*, non-participating transmission owners). Although it is true that some of the municipal utilities within the CAISO footprint are also non-participants in the CAISO, other municipal utilities that are participating transmission owners are treated comparably to the three IOUs. The Federal Energy Regulatory Commission adopted this framework on the basis that deliveries to non-participant entities within the CAISO footprint are situated similarly to exports.

The CAISO also notes that Clean Coalition's analysis relies on untested assumptions regarding the ability of distributed energy resources to reduce transmission costs. The CAISO is

[16] Clean Coalition comments, page 3.

[17] Clean Coalition comments, page 8.

reviewing the current volumetric TAC structure, and its interaction with distributed energy resources, in a new stakeholder initiative.[18]

F. Miscellaneous Corrections to the CAISO's Opening Comments.

The CAISO wishes to provide minor corrections to opening comments. Specifically, the second paragraph in response to Question 35 should be modified as follows (additions in red bold text, deletions in red strikethrough text):

> To respond to the questions above, it is important to note the timing of each plan. For example, if the 2018 Preferred System Plan is to be aligned with IEPR and TPP so that it provides information into these processes, then the 2018 Preferred System Plan should have as its starting point the ~~2018~~ **2017** IEPR ~~update~~ demand forecast. The 2018 Preferred System Plan (which is expected to be adopted by the Commission at the end of 2018) can then be considered in the 2019 full IEPR, which starts at the beginning of the 2019 and is expected to be approved by the CEC in early 2020. Once the CEC approves the 2019 full IEPR, it will be used as the foundation of the 2020-~~2019~~ **2021** TPP. The 2018 Preferred System Plan may produce a renewable portfolio for the 2019-2020 TPP but the CAISO notes that there will be a misalignment because the underlying demand forecast for the 2019-2020 TPP will be the 2018 IEPR update whereas the underlying demand forecast for the 2018 Preferred System Plan will be based on the 2017 full IEPR. There may not be a remedy for this misalignment until the 2020-2021 TPP, which will be based on the 2019 full IEPR and will be aligned with the renewable portfolio developed via the 2018 Preferred System Plan **(assuming also the demand side outputs are consumed into the 2019 full IEPR)**. The CAISO notes, however, that the proposed non-binding nature of the 2018 Preferred System Plan (per the CAISO's response to Question 4) still needs clarification. While the timing of the various processes can be made to align, the CAISO seeks clarification on what the process would be for the IEPR to consume information from the IRP. See response to question 36.

[18] See: http://www.caiso.com/informed/Pages/StakeholderProcesses/ReviewTransmissionAccessChargeStructure.aspx

III. Conclusion

The CAISO appreciates the opportunity to submit these comments and looks forward to working with the Commission to develop the IRP process in a manner that ensures electric reliability while meeting California's state policy goals.

Respectfully submitted,

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