

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

Order Instituting Rulemaking to Integrate and  
Refine Procurement Policies and  
Consider Long-Term Procurement Plans.

Rulemaking 12-03-014  
(Filed March 22, 2012)

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**COMMENTS OF THE CALIFORNIA INDEPENDENT  
SYSTEM OPERATOR CORPORATION ON PROPOSED DECISION  
ADOPTING LONG-TERM PROCUREMENT PLANS  
TRACK 2 ASSUMPTIONS AND SCENARIOS**

On November 20, 2012 ALJ Gamson issued a Proposed Decision (PD) adopting study assumptions and scenarios for forecasting system reliability needs in Track 2. The California Independent System Operator Corporation (ISO) has been involved in this proceeding, both in Track 1 and in the development of these scenarios in Track 2. Additionally, the ISO will conduct the system studies for Track 2 using the scenarios and assumptions described in the PD. As the ISO has described in comments leading up to the PD, it is important that the study assumptions and scenarios provide realistic “bookends” of possible future needs so that the Commission will have a reasonable basis for making procurement decisions. On the other hand, the ISO has limited time and resources to conduct numerous LTPP scenarios in addition to the transmission planning studies being conducted in the current transmission planning process (TPP) cycle. For the most part the PD provides the framework needed by the ISO to conduct studies during 2013. However, there are certain items not sufficiently addressed in the PD that should be incorporated into the final decision that are the subject of these comments.

## **I. Building Scenarios**

Attachment A, Section VI. 2 poses a series of questions under the general question “What mix of resources minimizes cost to customers over the planning horizon?”

The ISO does not understand the CPUC’s expectation of this bullet. The production simulations will produce minimum production cost portfolios for the scenarios. However, the portfolios, especially the additional flexible capacity need identified in the production simulations, may need to be further evaluated over the planning horizon under more stressed operating conditions to meet control performance standards following a contingency.

The evaluation should be done using studies including power flow, stability analysis and/or a fleet characteristic analysis. It is important that the portfolios meet all reliability requirements under normal and abnormal operating conditions. The ISO does not have the time or resources to conduct these additional studies; therefore the Commission should not expect the ISO’s study results to address this question.

## **II. Developing Realistic Scenarios**

In its comments, the ISO asked that the Commission identify the scenario that the ISO can use as its operational reference case, such that the other scenarios would be used to determine possible alternatives to meeting system needs.<sup>1</sup> The PD does not appear to have addressed this issue, although the PD does state that the assumptions in the Base scenario shall be used by the IOUs in their ongoing bundled procurement, consistent with D.12-01-033 in the 2010 LTPP case.<sup>2</sup> However, the Base scenario does not provide the ISO with a realistic operational “bookend.” While described in Attachment A, Section 2.VIII.A as “modestly

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<sup>1</sup> ISO comments, October 5, 2012, page 3.

<sup>2</sup> PD, page 5.

conservative future world,” the Base scenario does not provide a realistic operational scenario. This scenario uses a 1-in-2 peak load forecast combined with the mid-level energy forecast, which combines 50-50 weather conditions with reduced energy levels. The forecast is then adjusted for the mid value of incremental EE and demand response. This combination does not provide the ISO with a valid operational scenario.

The ISO can use the Replicating TPP scenario as the operational scenario because it uses the 1-in-5 peak load forecast combined with the mid energy forecast. In addition, although this scenario does not include incremental uncommitted energy efficiency, the ISO would be willing to layer in the CEC’s low value level for this scenario because it will align with the level of uncommitted energy efficiency that the ISO will use for the (2013/2014) TPP planning assumptions.<sup>3</sup> The low value is the appropriate level because, for modeling purposes, energy efficiency is assumed to be located uniformly throughout the system and equally throughout each customer class.<sup>4</sup> If these assumptions are erroneous, the ultimate study results can be dramatically impacted, and assuming higher levels of energy efficiency will cause greater impacts and would not produce reliable results. This is because energy efficiency, when factored into the load forecast, is assumed to be the most efficient and effective resource that is available 8760 hours a year and therefore is a 1-to-1 offset to load.

### **III. Early SONGS Retirement Sensitivity**

The ISO seeks clarification about the local capacity assumptions that should be included in the Early SONGS Retirement sensitivity. This information was not provided in the

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<sup>3</sup> The ISO notes that the Attachment A description of the Replicating TPP scenario, under “How to Get There,” states that this scenario “terminates policies relating to preferred resources.” This, of course, is not an accurate description of the ISO’s planning assumptions, as has been explained repeatedly in this docket. The ISO consistently uses the CEC levels of preferred resources embedded its load forecasts.

<sup>4</sup> See Attachment A explanation of Locational Impacts.

assumptions for this scenario. Alternatively, the ISO is preparing a “mid-term” study looking at the means to mitigate future unplanned long term SONGS (and Diablo Canyon) outages, as well as the “long-term” study associated with relicensing study requirements for the utilities. These studies should be expected to indicate a range of trade-offs possible in addressing local needs, between some level of local generation, additional dynamic reactive support, and transmission line development. If clarity cannot be provided now as to the sensitivity assumptions the ISO should include in the Early SONGS Retirement sensitivity, then the ISO needs direction as to which end of the spectrum the sensitivity should lean.

#### **IV. Import Levels**

In both technical and policy comments on the proposed scenarios, the ISO provided information as to the correct import level that should be incorporated into the scenarios. However, it appears that there is still some confusion about this assumption and the ISO data was overlooked. Attachment A, Section 4.B.4 states that imports shall be based on the ISO Maximum Imports minus Existing Transmission Contracts, or, alternatively, on historical expected imports calculated by the CEC.<sup>5</sup> Besides the fact that it is not clear which alternative should be used in the studies, the ISO would again emphasize that neither calculation reflects the historical simultaneous net import level. The ISO’s analysis of hourly historic imports into the ISO for the past 10 years, which includes both high and low hydro years in California, shows a maximum simultaneous net import of no more than 12,400 MW. This number represents the maximum LSE utilization of import capacity and is the appropriate level to use as a planning assumption.

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<sup>5</sup> See footnotes 36 and 38.

## **V. Deliverability**

The discussion in Attachment A, under Supply Side Assumptions, about Deliverability raises an issue that requires clarification (Section 4.B.6). This section states that “resources can be modeled as Energy-only or Deliverable.” However, deliverability levels are not modeled in the studies being conducted in this LTPP proceeding and this concept pertains largely to the ISO’s generation interconnection studies. For the purposes of these studies (and the ISO’s TPP studies), generation is modeled at the nameplate capacity of the existing or generic resource. The ISO suggests that this section be deleted from Attachment A.

## **VI. Event-Based Demand Response**

The ISO does not understand what characteristics are included in “event-based demand response.” At Attachment A, Section 4.B.7 the PD explains that the mid value for supply-side event-based demand response shall be based on the Load Impact reports submitted to the Commission, with 10% adjustments for both high and low ranges. For modeling purposes, the ISO seeks clarification about the details of the demand response programs that will be included as supply side resources; *e.g.* the timing and duration of these resources, the lead time needed before the resources show up on the system, etc.

## **VII. Scenario Priorities and Extended Planning Horizon**

The ISO generally agrees with the scenario priorities described on PD pages 9 and 10. However, the ISO does not understand the analysis that is contemplated with the extended planning horizon Scenario 3A, the High DG + High DSM, 40% RPS by 2030. Since it is not likely that there will be time to model this scenario, the Commission should remove it from this LTPP proceeding.



## VIII. Timing of Studies

At page 9 the PD states that the modeling results are expected “in the second quarter of 2013.” This is a very tight schedule for the ISO to complete four scenario studies and two possible sensitivities. It is likely that the ISO can provide the results of the first priority scenario in March 2013. The other study results probably will not be available until the very end of the second quarter of 2013 and possibly early in the third quarter. The ISO is mindful that a decision on system operational flexibility needs must be issued no later than the end of 2013 and will take all steps necessary to reach that goal, within reason. However, it is a time consuming process for the ISO and the working group to develop the base cases and run the models. The ISO urges the Commission to build some flexibility into the Track 2 schedule that recognizes the likely dates by which the study results will be made available.

Respectfully submitted,  
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## **SUBJECT INDEX**

### **RECOMMENDED CHANGES TO PROPOSED DECISION**

#### **3.6 Replicating the Transmission Planning Process**

The CAISO suggests that there were differences in the retirement assumptions currently used in their Transmission Planning Process (TPP) and the Replicating the TPP Scenario. In order to reconcile this difference, and consistent with our intent in developing the scenario, the retirement assumptions in the Replicating the TPP Scenario are set to “low”, with the exception of once-through cooling (OTC) plants and other announced retirements. *The CAISO may use the Replicating TPP as the operational scenario.*

#### **3.7 Import Level**

*The ISO’s analysis of hourly historic imports into the ISO for the past 10 years, which includes both high and low hydro years in California, shows a maximum simultaneous net import of no more than 12,400 MW. This number represents the maximum LSE utilization of import capacity and is the appropriate level to use as a planning assumption. The import level to use in the studies should be 12,400MW.*

#### **3.8 Deliverability**

*The ISO does not model resource deliverability in its studies. Therefore, Section 4.B.6 should be removed from Attachment A.*

### **4 Next Steps for Track 2**

With this decision, we will proceed to determine the IOUs’ long-term system needs. First, we now formally request that the CAISO use the Standardized Planning Assumptions and Scenarios in Attachment A to conduct operational flexibility modeling, to be filed in Track 2 of this proceeding. The purpose of this modeling is to evaluate the resources needed to maintain system reliability under various forecast conditions. This modeling will then be used to inform the Commission in our Track 2 determination of system needs. We expect the modeling result in *approximately the end of the second quarter of 2013 early in the third quarter of 2013*. The assigned Administrative Law Judge (ALJ) and/or assigned Commissioner will issue a Ruling setting the schedule for the remainder of Track 2 of this proceeding.

To the extent that the CAISO changes their assumptions in their TPP, Energy Division should update the “Replicating the TPP Scenario” in Attachment A to align with the CAISO’s assumptions.

Regarding prioritization for the operating flexibility modeling, we provide the following guidance. The Base Scenario is the first priority, followed by the Replicating the TPP, then assessing the impacts of the early SONGS retirement sensitivity, and lastly the High DG and

High DSM scenario. If time and resources allow, the Stress Case sensitivity and High DG and High DSM with a 40% RPS by 2030 should be modeled.

<b>Scenario</b>		
<b>#</b>	<b>Name</b>	<b>Modeling Priority</b>
1 Base		1
2 Replicating	TPP	2
1A Early	SONGS Retirement	3
3	High DG + High DSM	4
1C	Stress Case	5 (if time allows)
3A	High DG + High DSM, 40% RPS by 2030	6 (if time allows)
1B Early	Nuclear Retirement	7 (not at this time)
1D	Environmental	8 (not at this time)

**APPENDIX  
PROPOSED FINDINGS OF FACT**

NOTE: There are many facts contained in Attachment A that are not specifically addressed in the PD Findings of Fact. The ISO, in its comments, seeks clarification of several topics set forth in Attachment A and anticipates that the final decision would simply include clarifying language in the attachment in response to the ISO. To the extent that the comments seek a factual decision, the ISO has proposed the additional Findings of Fact set forth below.

**Proposed Findings of Fact (insertions are italicized)**

3. *The ISO may use the Replicating TPP as its operational scenario.*
4. *The appropriate import level to use in modeling the scenarios is 12,400MW.*
5. *Section 4.B.6 should be deleted from the standardized planning assumptions (Attachment A).*
6. *The ISO's study results will likely be available at the end of the second quarter or early in the third quarter of 2013.*