



California ISO Perspectives and Discussion Paper Resource Adequacy Obligation

1. Introduction

The California Independent System Operator believes that an effective Resource Adequacy Program is the necessary foundation to prevent a recurrence of California's recent electricity crisis. Such a program is needed to ensure that adequate supply will be available, 24 hours of every day, to meet consumers' needs at reasonable prices. Below we provide our position on this issue, along with some suggested definitions about resource adequacy and recommendations regarding needed CPUC decisions. At the request of the State, the ISO deferred to the State agencies to develop and implement a resource adequacy program. To that end, the ISO has been actively participating in the CPUC Procurement proceeding with the understanding that this agency was seeking, as a principle outcome of the proceeding, to establish the Resource Adequacy Program for the investor owned utilities in California. In fact, the successful implementation of MD02 is entirely dependent on having clear and transparent rules for resource adequacy in place prior to or concurrent with the implementation of MD02.

With the current direction in the CPUC proceeding, the ISO believes there is great risk that it will not be provided adequate resources to serve the real-time electrical load requirements of consumers in California. The ISO's concerns fall into two areas: 1) Statement by the IOUs in testimony and as reflected in a "Joint Recommendation" with additional parties, that it is appropriate to continue to rely on the spot market; and 2) Statements by the presiding ALJ that she may not rule on all issues before her in the proceeding, in part because of the "ambiguity" surrounding the ISO's MD02 proposal. The first issue is of particular concern because of an apparent belief that shortfalls in forward procurement can readily be covered by the ISO in its spot markets. However, the ISO can only run markets with the resources that load serving entities make available through a resource adequacy obligation or that voluntarily bid to provide energy to California. More specifically, the ISO is not a supplier of last resort because it does not own or contract energy resources and the must offer obligation is not sufficient to prevent real-time shortages.

The position of the ISO is that load serving entities should be required to line up sufficient *capacity* one month ahead of time for use by the ISO. To implement this requirement, the ISO developed its proposal for a Monthly Obligation in the State's long-term resource adequacy program. Such an obligation would balance the need for flexibility to procure resource capacity cost-effectively with the essential need to make those resources available for the ISO to perform its primary function of assuring a reliable grid. The Monthly Obligation will ensure that load-serving entities in California procure sufficient resource *capacity* prior to the month of need. Note that this requirement does not preclude *energy* trading and optimization through the spot markets up to and including real time. The ISO believes this requirement is appropriate for three principles reasons. First, the forward commitment of resource capacity is a standard practice in the electric industry and most, if not all other ISOs. Second, it will ensure that readily available resources are committed to serve California load. Finally, once the selected resources are identified, they will be provided to the ISO for dispatch and servicing of *California* consumer load in real-time.

California ISO Perspectives and Discussion Paper

Resource Adequacy Obligation, con't

The ISO is interested in working together with the CPUC, the utilities—public and private—and other stakeholders to get the rules right such that effective incentives are created for short and long-term procurement of resources. The ISO is working diligently toward fixing the wholesale spot market so that we never again experience the events of 2000-2001. The ISO is committed to revisit the proposed MD02 design once final resource adequacy rules are in place to ensure that MD02 is aligned with the framework established by the State. However, our spot market design changes cannot succeed absent sufficient capacity available to meet real time demand. This requires effective, meaningful and mandatory resource adequacy requirements, including reliable procedures for making procured capacity available to the ISO for real-time dispatch.

2. Discussion Points

Resource Adequacy means planning and obtaining a sustainable supply of electricity in sufficient quantities at reasonable and stable prices/costs to serve load in real-time.

- a) Assessments of the 2000-2001 California crisis have identified the following conditions as underlying causes, all of which are addressed by an effective Resource Adequacy Program:
 - Absence of an explicit obligation to serve on Load-serving Entities (LSEs)
 - Elimination of long-term resource planning
 - Severe limits on or disincentives for LSE forward contracting
 - Excessive reliance on spot markets.
- b) Although a Resource Adequacy Program emphasizes forward planning and procurement, the ultimate test of resource adequacy is in real time, on a day-to-day basis.
- c) For an LSE to be adequate with respect to capacity on a month-ahead basis does not preclude that LSE from buying some of its energy needs on a spot basis (up to day ahead).
- d) Reliance on short-term purchases puts more reliance on the ISO to assure reliability through spot market supplies. This results in greater volume exposed to spot market prices, which translate to higher prices to consumers. A reliance on price caps to mitigate the price impacts is insufficient because California is a net importer and providers will rely on OOM (out-of-market) negotiations to establish prices above cap levels.
- e) An effective Resource Adequacy Program must stimulate needed investment in electricity infrastructure (generation and transmission).
- f) A regulatory framework that leaves Resource Adequacy up to the LSEs subject to ex post reasonableness and prudence review is fundamentally flawed.
- g) Effective Resource Adequacy Program must have an ongoing process that includes:
 - Required Reserve Margin
 - Limited Reliance on Spot Market
 - Rules for Counting of Resources towards meeting LSE requirements
 - Established Load Forecast
 - Availability of LSE-procured resources for use by the ISO
 - Ex-ante procurement and cost-recovery rules for LSEs
 - State policy direction for ISO real-time actions in the event of a supply shortage

3. Proposed Actions in the CPUC Procurement Proceeding

The two most important actions for the CPUC at this time are: (1) establish a month-ahead capacity requirement for LSEs, and (2) establish State policy guidance regarding the ISO's real-time actions when market outcomes result in a shortfall of reasonably priced supply.

In addition, the ISO has the following recommendations:

- a) Develop ex ante rules and penalties that define Resource Adequacy for LSEs. The objective of the rules should be to create clarity and certainty re cost recovery and thus foster an environment for generation investment/contracting and LSE financial stability. CPUC should reject a resource adequacy framework based on LSE discretion and ex post regulatory review.
- b) CPUC 2003 Procurement Ruling should formally endorse, facilitate, establish etc. a process that will lead to a comprehensive Resource Adequacy Program for the state.
 - Establish common/comprehensive definition for "Resource Adequacy";
 - Require integration of policies and rules across time frames from very long term (planning 10-20 years into the future) to medium term (5 years-ahead to month-ahead) to short term (week-ahead up to real time).
 - Establish procurement rules that support reliable *transmission* system operations and ensure that resources are deliverable to load.

It is important for the CPUC to understand that in the absence of such a resource adequacy framework, the ISO may again be faced with addressing real-time shortages. This risk is of particular concern to the extent LSEs are permitted to rely on spot purchases of energy without being required to procure adequate capacity to participate in the spot markets. In such instances, the choices are harsh and limited – either curtail demand or, as occurred during the 2000-2001 electricity crisis, negotiate with suppliers ("OOM" purchases) for the delivery of energy in real-time. As the Commission is aware, such "negotiations" rarely result in electricity prices that are viewed as either "just" or "reasonable". Yet, by creating clear rules for the forward procurement of capacity and the availability of LSE-procured resources to the ISO, the CPUC can both mitigate price risk exposure and ensure a reliable supply of power in real time.

- c) The CAISO is currently unable to support the Joint Recommendation because of its inherent risks, including:
 - absence of a month-ahead verification of adequate LSE capacity procurement.
 - reliance upon spot purchases with no mechanism to ensure adequate capacity will be offered in spot markets
 - a ramped-in planning margin that allows today's capacity surplus to shrink excessively before imposing effective obligations on LSEs

If the CPUC decides to accept the Joint Recommendation, it must do so in light of the risks noted above of facing shortage situations in real time where the only supply available, if any, is extremely expensive. Therefore, it becomes particularly urgent for the CPUC and State to recognize this dilemma.

- d) The CPUC should reject the notion that a comprehensive Resource Adequacy Program cannot proceed due to unresolved interaction issues in the ISO's MD02 design or implementation. Areas where MD02 is not decisive – particularly with regard to Resource Adequacy – reflect explicit deferment to State agencies, at the request of State parties.