

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

Order Instituting Rulemaking to Consider
Revisions to the Planning Reserve Margin for
Reliable and Cost-Effective Electric Service

Rulemaking 08-04-012
(April 10, 2008)

**COMMENTS OF THE
CALIFORNIA INDEPENDENT SYSTEM OPERATOR TO
ADMINISTRATIVE LAW JUDGES' RULING
INVITING COMMENTS ON RESTARTING THE PLANNING RESERVE
MARGIN PROCEEDING**

The California Independent System Operator Corporation (ISO) submits the following comments with respect to the Administrative Law Judges' Ruling Inviting Comments on Restarting the Planning Reserve Margin Proceeding, issued on February 8, 2010 in the above-referenced docket.

- 1. Because of its core obligation to reliably maintain and operate its Balancing Authority Area, the ISO is uniquely situated to manage the planning reserve margin study.**

In response to the Administrative Law Judges' ruling seeking comments related to funding mechanisms and contract management for necessary modeling work, the ISO submits that it is uniquely situated to lead and manage the planning reserve margin study. The ISO's core obligation is to reliably maintain and operate its Balancing Authority Area. To this end, the ISO has the technical expertise and experience required to determine grid reliability needs. In addition, the ISO must take into account all participating transmission owners and other load serving entities, including those not subject to CPUC jurisdiction, when determining the quantity of capacity necessary for maintaining reliability. As a result, the ISO has access to the full array of information

and has processes already in place to receive information essential to conducting this study and establishing an appropriate planning reserve margin.

Development of a meaningful planning reserve study will require the ISO's demonstrated expertise to lead and manage the analysis. Moreover, the ISO's independence will allow greater scrutiny of study results. For these reasons, and because planning reserve studies are necessary to determine the capacity needed to ensure the ISO meets its core obligation, the ISO submits that it is amenable to funding additional PRM studies and function as the contracting party with General Electric Energy (GE Energy). However, the ISO believes that reasonable bounds may need to be set on the number of additional studies to be undertaken, taking into consideration the funds that are available for such studies and the value and cost of any such additional studies.

As evidenced by the Local Capacity Requirement (LCR) study process, the ISO has a successful structure currently in place in which to model the planning reserve process. The LCR study process and, more specifically, the ISO's role in managing the LCR process is analogous to the ISO's proposal for the planning reserve study. As discussed above, the ISO is uniquely qualified to conduct studies that will benefit the integrated electrical system it operates, just as the LCR and planning reserve studies do. Moreover, the ISO has no financial or other commercial interest in the outcome of either the LCR or planning reserve studies. Furthermore, the ISO's stakeholder process allows interested stakeholders to participate in the LCR process, discuss study inputs, review preliminary results, and offer comments. This type of open and transparent process facilitated by the ISO could similarly accommodate the planning reserve process.

The collaboration that occurs between the ISO, California Public Utilities Commission, California Energy Commission and stakeholders in the LCR process is also similar to the collaboration that needs to occur in the planning reserve processes. Like the LCR process, the planning reserve process relies on coordination from the ISO, CPUC, CEC and stakeholders to develop the study parameters. Additionally, in order for load serving entities to successfully engage at the CPUC, as well as respond to and comply with obligations, coordination and proper timing is essential for both processes. As such, it makes sense to use the LCR model to guide the planning reserve study process, because doing so takes advantage of established efficiencies with demonstrated value.

2. The Energy Division’s Staff Modeling Manual provides an initial set of recommendations and Minimum Analytical Requirements that require refinement.

The ruling seeks comment on whether the Energy Division’s Staff Modeling Manual provides necessary and appropriate guidance for the modeling process required for purposes of the planning reserve margin proceeding.¹ As discussed above, the ISO’s Balancing Authority Area responsibilities compel the ISO to work closely with the CPUC in conducting the planning reserve margin studies. In this regard, the current Staff Modeling Manual lacks sufficient recognition of the ISO’s responsibility. Moreover, although the Staff Modeling Manual recommendations and minimum analytical requirements are an appropriate beginning point, further refinement is necessary. The ISO believes additional iterations of the Staff Modeling Manual are needed to clarify and

¹ The Staff Modeling Manual was posted by the Energy Division on its website on February 3, 2010 and is available at the following link:
http://www.cpuc.ca.gov/PUC/energy/Procurement/RA/PRM_reports_documents.htm.

enhance the methodologies required of the planning reserve margin proceeding. In particular, the industry's standard minimum reliability metric is a one day in ten years loss of load expectation (LOLE). The Energy Division proposes to use an hourly LOLE (to be specified in hours LOLE in a year).² The ISO questions the use of an hourly LOLE because it is not the standard in the industry. Rather, the ISO advocates for the use of the industry standard of one day in 10 years daily LOLE. At the very least, the ISO believes more consideration of this issue is necessary.

The ISO is also concerned that the commitment to study external areas as “bubbles,” consistent with the Transmission Expansion Planning Policy Committee (TEPPC) database, will delay the planning reserve margin process for California.³ At best, obtaining quality data from all load serving entities in the Western Interconnection presents a time consuming, arduous endeavor. Moreover, it is unclear whether modeling the area under the purview of the Western Electric Coordinating Council will result in any significant difference in establishing the planning reserve margin. Therefore, we recommend more careful consideration of the incremental benefits and timing of expanding the study scope to include external areas. From a policy perspective, such an effort might provide value in the future, but it should not be required until it can actually be accomplished effectively and provide demonstrable value.

Also, the ISO thinks it is unnecessary for the minimum analytical requirements to include the study of extra cases in order to establish reserve levels on a non-annual basis, in addition to an annual peak basis.⁴ While the extra cases would provide sensitivity regarding the relationship between a monthly basis (which the current 15% – 17% PRM

² *Id* at p. 21.

³ *Id* at p. 3.

⁴ *Id* at p. 4.

is based on) and an annual basis, the effort is duplicative of the initial planning reserve studies previously conducted in this proceeding. In fact, the relationship between monthly and annual planning reserve margins was already a subject of examination in the 2008 planning reserve margin study conducted by the ISO. As such, the ISO suggests that adding extra cases should be characterized as a sensitivity evaluation and not a minimum requirement for the planning reserve margin study methodology.

Similarly, the ISO suggests that including a minimum requirement of two cases to illustrate the reliability affects of load shapes resulting from future policy developments related to the advanced metering initiative (AMI) and plug in hybrids is a more appropriate subject for sensitivity studies, since it is unclear where this information would be collected from.⁵ The ISO—like the Energy Division—recognizes the difficulty in gathering these data inputs, and questions where and when the data would actually become available.

The ISO further believes clarification is needed regarding the modeling of hydro resources.⁶ In particular, the ISO is uncertain whether modeling of hydro may be carried forward monthly if energy is unused to meet demand in previous months. The ISO favors following industry practice to carry forward water reserves to the following month if it remains unused due to lack of demand.

Additionally, the ISO agrees with the inclusion of the minimum analytical requirements of stochastically modeling intermittent resources; however, the ISO submits that in order to evaluate intermittent resources stochastically, multiple generation profiles

⁵ *Id.*

⁶ *Id.*

must exist.⁷ As such, the ISO recommends that this particular requirement be articulated to specifically require multiple generation profiles. Furthermore, the ISO acknowledges that stochastic modeling may not be available until multiple years have occurred in which to rely on and extract data from. Given that stochastic modeling is a significant undertaking, the ISO believes more discussion and attention to this requirement is necessary. This is another concept that would provide value to the LOLE based analysis but should not be required until feasible.

3. The ISO is indifferent to whether to reactivate or terminate the current proceeding.

The ISO supports the Commission's objective to establish a planning reserve margin based on an appropriate LOLE methodology. The current proceeding has made significant progress towards this goal, yet, it is clear more work must be done to reach the objective of a fully designed approach that can be adopted and put into production.

Therefore, the ISO is indifferent to whether to reactivate this proceeding or terminate the current proceeding and open a subsequent proceeding to complete the effort. The ISO notes that it has received the initial draft planning reserve study performed by GE Energy, which is a result of studies completed previously in this proceeding. The ISO will release that study once it has been finalized, even if this proceeding is terminated.

⁷ *Id.*

Dated: February 26, 2010

Respectfully submitted,

/s/ Stacie L. Ford

Stacie L. Ford, Esq., Counsel
CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION
151 Blue Ravine Road
Folsom, CA 95630
Tel. (916) 608-7131
Fax (916) 608-7222
E-mail sford@caiso.com

CERTIFICATE OF SERVICE

I hereby certify that on March 1, 2010 I served, on the Service List for Proceeding R.08-04-012, by electronic mail, a copy of the foregoing:

COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
TO ADMINISTRATIVE LAW JUDGES' RULING INVITING COMMENTS ON
RESTARTING THE PLANNING RESERVE MARGIN PROCEEDING.

Executed on March 1, 2010 at
Folsom, California

Jane Ostapovich

Jane Ostapovich,
An employee of the California
Independent System Operator