Rulemaking	12-03-014
Exhibit No.:	ISO - 05
Witness:	Mark Rothleder

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.	Rulemaking 12-03-014

REPLY TESTIMONY OF MARK ROTHLEDER
ON BEHALF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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

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Q. What is your name and by whom are you employed?

A. My name is Mark Rothleder. I am employed by the California Independent System Operator Corporation (ISO), 250 Outcropping Way, Folsom, California as Executive Director Market Analysis and Development.

Q. Have you previously submitted testimony in this proceeding?

A. Yes, I have. On May 23, 2012, I submitted initial testimony discussing the need for flexible generation in the LA Basin and Big Creek/Ventura areas. I also provided updated information about the renewable integration studies at a workshop held on June 4, 2012.

Q. What is the purpose of your reply testimony?

A. I will respond to concerns raised by CEERT and TURN regarding my recommendations that generation procured in the local areas should have flexibility characteristics.

Q. At page 19 of his testimony, TURN witness Woodruff argues that the high load scenario, which he calls the 4600 study, from the renewable integration study should not be used to make procurement decisions based on renewable integration needs in Track 1. Does the ISO expect the Commission to make a finding of need for system flexible resources for 2020 at this time based on these study results?

A. No, and that was not the point of my testimony. For the purpose of this Track 1 proceeding, I am providing support for making a local capacity decision, and evidence that if the local resources that are procured have the flexibility characteristics needed to integrate renewable resources, the quantity of potential need for system capacity is reduced. As the testimony indicates, the ISO is continuing its study work and believes the ultimate system decision can be taken up in 2013 after being informed by the Commission's decision on local capacity needs at the end of this year.

Q. Mr. Woodruff also states that the ISO's references to the 4600 study, both in your testimony and in other venues, is not consistent with the settlement agreement in R.10-05-006 and constitutes bad faith. What is your response to these statements?

A. The settlement agreement in that proceeding quite clearly states that there were some scenarios showing no need but that an additional scenario studied by the ISO did show a need for additional resources. As Mr. Woodruff and the other parties know, this additional case is the high load scenario (the 4600 study) which the ISO views as an operationally relevant case indicating the potential for needs and identifying potential shortages. As I discuss below, this higher load case was identified in the Scoping Memo in the R. 10-05-006 LTPP case and is compliant with the 33% RPS goals. In the settlement the ISO also agreed that further study of

local resource needs and alternatives was needed. My testimony, and ISO comments in other venues based on the results of this operationally relevant scenario, are consistent with these statements in the settlement agreement.

Q. CEERT witness Caldwell, at pages 2-3 of his testimony, takes issue with your statements about the potential need for 1200 MW of incremental system generation, arguing that the ISO's use of the high load scenario reflects the ISO's "hunch" that the 33% RPS goals will not be met. What is your response to these assertions?

A. Mr. Caldwell's conclusion in this regard is inaccurate. The high load scenario (referred to by Mr. Woodruff as the "4600 study") uses a 10% higher load assumption than the trajectory scenario and was developed to reflect a scenario that Commission requested in R.10-05-006 at Section 3.1.2.3.3 of the December 3, 2010, Scoping Memo.[1] The assumptions in that Memo stated that a high load sensitivity study shall be performed to account for future uncertainties.

The ISO agreed with the Commission that it is operationally prudent to consider such uncertainties. Importantly, the high load scenario is still a 33% RPS compliant scenario. In fact 1,497 MW of additional renewable capacity was added to maintain compliance with the 33% RPS goals.

Q. At page 5 of his testimony, Mr. Caldwell argues that the need for flexible resources in the local areas is not supported by the study you described in your testimony because the new local resources modeled in the study were running

[1] Specifically, Section 3.1.2.3.3 provides:

> In the sensitivity analysis for demand levels for both gigawatt hour (GWh) and MW, the IOUs shall use high and low demand levels that reflect a 10% variance from the demand forecast value for each year. This value is reflective of any combination of future uncertainties (e.g., increased or decreased load growth or programmatic performance).

at baseload or near baseload capacity. Do your studies show that only baseload resources are needed in local areas?

A. No. While the study results I discussed in my initial testimony and at the workshop did show the local resources with high capacity factors, the resources provided flexibility in that they were dispatched up and down to meet the net load. Furthermore the CCGT resources modeled in the local areas did provide reserves, including load following.

The ISO also realized that outages were not being modeled on the local CCGT. As a result the resources reflected higher capacity factors. Therefore, as part of the ISO's work with the Air Resources Board (ARB), the ISO updated the studies to reflect the forced and maintenance outages. These updated results, in which these outages have been modeled, are contained in ISO Ex. 21, which is a draft report provided for use by ARB in their AB 1318 planning and report. The conclusion from these new results indicates the LCR resources assumed in the study are not just baseloaded. The CCGT resource capacity factors range from 57% - 66%. The results also indicate that the local CCGT do provide significant amount of load following and spin reserves. A base load resource would not dispatch to follow load or provide such reserves.

Regarding the need for flexible local resources, while energy from inflexible resources may be able to unload other flexible resources, further study is needed to determine to what degree this trade (inflexible for flexible) can occur or is economic. Furthermore, Mr. Sparks' testimony indicates that local resources may need to be flexible for local reliability reasons in addition to system needs. Finally, making the local resources flexible may provide additional options when it comes to other non-OTC retirements that may arise over time.

Q. Does this conclude your reply testimony?

A. Yes, it does.