

SWP's comments on the CAISO proposed Tariff Language Standard Resource Adequacy Capacity Product

April 16, 2009

The California Department of Water Resources State Water Project (SWP) appreciates the opportunity to provide comments to the California Independent System Operator (CAISO) on its proposed tariff language "Standard Capacity Product Amendment Filing, 4th Replacement CAISO Tariff" dated April 9, 2009. SWP respectfully submits following comments, questions, and suggestions on the proposed tariff language. Suggested additions to the proposed tariff language are in blue color and underlined.

1) Day Ahead availability §40.6.1 (4) states that Integrated Forward Market (IFM) may reduce the energy self-schedule of a RA resource in order to secure 100% of Ancillary Services (AS). Such curtailment of self-schedule of energy should not jeopardize the environmental and operational constraints of RA resources that are hydraulically linked.

The proposed tariff language should be modified as:

- (4) Through the IFM co-optimization process, the CAISO will utilize available Resource Adequacy Capacity to provide Energy or Ancillary Services in the most efficient manner to clear the Energy market, manage congestion and procure required Ancillary Services. In so doing, the IFM will honor submitted Energy Self-Schedules of Resource Adequacy Capacity unless the CAISO is unable to satisfy 100 %t of the Ancillary Services requirements. In such cases, the CAISO may curtail all or a portion of a submitted Energy Self-Schedule to allow Ancillary Service-certified Resource Adequacy Capacity to be used to meet the Ancillary Service requirements. However, such curtailment of self-schedule of energy from designated RA capacity shall not jeopardize the environmental and operational constraints of the designated Resource Adequacy resource. If the IFM reduces the Energy Self-Schedule of Resource Adequacy Capacity to provide an Ancillary Service, the Ancillary Service Marginal Price for that Ancillary Service will be calculated in accordance with Section 27.1.2 using the Ancillary Service Bids submitted by the Scheduling Coordinator for the Resource Adequacy Resource or inserted by the CAISO pursuant to this Section 40.6.1, and using the resource's Default Energy Bid to determine the Resource Adequacy Resource's opportunity cost of Energy....

3) In order to accommodate a specific scenario in which a participating load provides RA for itself, participating load should not be required to be available if the participating load is not pumping because: a) The demand from participating pump load for which RA resource was provided by itself does not exist anymore, b) Since

the pump is not pumping, there is no pump load to drop that would have been a RA resource in case of pumping. To address this scenario “Day Ahead availability: §40.6.1” should add one more subsection which would look like:

Day Ahead availability §40.6.1, (7): A Participating Load that is providing designated RA capacity for its own demand, if not consuming energy, will not be required to be available for the hours it is not consuming energy.

Above addition should apply to §40.6.2 Real-Time availability also. §40.6.2 Real-Time availability should be added with last paragraph representing above case and should be modified as:

40.6.2 Real-Time Availability.

Resource Adequacy Resources that have received an IFM Schedule for Energy or Ancillary Services or a RUC Schedule for all or part of their Resource Adequacy Capacity must remain available to the CAISO through Real-Time, including.....

..... The CAISO may waive these availability obligations for a Short Start Unit that does not have an IFM Schedule or a RUC Schedule.

A participating load that is providing designated RA capacity for its own demand, if not consuming energy, will not be required to be available for the hours it is not consuming energy.

2) Tariff § 40.6.3 does not clearly state whether the Real Time Market (RTM) requirement of Use Limited Resources (ULR) to submit economic bids or self-schedules applies both to energy and AS. This section further states that the CAISO may waive the RTM availability obligation for a short start unit that does not have an IFM schedule. In what circumstances will it waive positively and vice versa?

3) Tariff § 40.6.8 Use of Generated Bids: (a) it mentions about “dispatchable RA capacity from short start units”. What is dispatchable RA capacity and what is a non-dispatchable RA capacity? (b) Why must the generated bid for AS be \$0 per MW/hour? (c) This tariff section should add a language that provides clarity on the issue of RA compliance by an LSE using ULR and non-ULR. The addition to the section should be as shown below:

40.6.8 Use of Generated Bids.

Prior to completion of the Day-Ahead Market, the CAISO will determine if Resource Adequacy Capacity subject to the requirements of Section 40.6.1 and for which the CAISO has not received notification of an Outage has not been reflected in a Bid and will insert a Generated Bid for such into the CAISO Day-Ahead Market. Prior to running the Real-Time Market, the CAISO will determine if Resource Adequacy Capacity subject

to the requirements of Section 40.6.2 and for which the CAISO has not received notification of an Outage has not been reflected in a Bid and will insert a Generated Bid for such capacity into the Real-Time Market. In addition, the CAISO will determine if all dispatchable Resource Adequacy Capacity from Short Start Units, not otherwise selected in the IFM or RUC, is reflected in a Bid into the Real-Time Market and will insert a Generated Bid for any remaining dispatchable Resource Adequacy Capacity for which the CAISO has not received notification of an Outage. A Generated Bid for Energy will equal the resources Default Energy Bid. A Generated Bid for Ancillary Services will equal zero dollars (\$0/MW-hour). Notwithstanding any of the provisions of Section 40.6.8 set forth above, the CAISO will not insert any Bid for a Resource Adequacy Resource that is a Use-Limited Resource. [LSEs that satisfy their Resource Adequacy obligation for applicable peak hours with Use-Limited Resources will not be required to make available other Resource Adequacy resources for the remaining hours of the Trading Day that are not covered by the designated Resource Adequacy Use Limited Resources.](#)

4) Tariff § 40.9.2(Exemptions): (2) states that RA capacity that was procured under a contract that was either executed or submitted to applicable Local Regulatory Authority for approval prior to January 1, 2009, and is associated with specific generating unit or system resource will be exempt from non-availability charges and availability incentive payment. This statement does not accommodate capacity under existing resource specific contracts that existed prior to January 1, 2009. Therefore, the proposed language should be modified to include such contracts also. The modified language should look as shown below:

- (2) [Capacity under a resource specific power supply contract that existed prior to January 1, 2009 and](#) Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval prior to January 1, 2009, and is associated with specific Generating Units or System Resources, will not be subject to Non-Availability Charges or Availability Incentive Payments. Such contracted Resource Adequacy Capacity, except for non Resource-Specific System Resources, will be included in the development of Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. The exemption will apply only for the initial term of the contract and to the MW capacity quantity and Resource Adequacy Resources specified in the contract prior to January 1, 2009. The exemption shall terminate upon the conclusion of the initial contract term. Exempt contracts may be re-assigned or undergo novation on or after January 1, 2009, but the exemption shall not apply for any extended contract term, increased capacity quantity or additional resource(s) beyond those specified in the contract prior to January 1, 2009. Scheduling Coordinators for Resource Adequacy Resources subject to

these contracts will be required to certify the start date of the contract, the expiration date, the resource ID(s), and the amount of Resource Adequacy Capacity associated with each resource ID included in the contract.

5) Tariff § 40.9.4.2(Availability Calculation for a Resource Adequacy resource): This section is missing the element of Ambient Outages corresponding to “Uncontrollable Forces” in which case the outages due to uncontrollable forces will not be counted against the availability. This section should add additional language as shown below:

40.9.4.2 Availability Calculation for a Resource Adequacy Resource.

The CAISO will calculate the monthly availability for each Resource Adequacy Resource subject to this Section 40.9.4 as the sum of the hourly available Resource Adequacy Capacity of the resource over all Availability Assessment Hours of the month, divided by the sum of the hourly Resource Adequacy Capacity of the resource as designated in the Supply Plan for the resource for those hours, and multiplied by 100 to obtain a number between zero and 100%.

A Resource Adequacy Resource will be determined to be less than 100% available in a given month if it has any Forced Outages, non-ambient derates, or temperature-related ambient derates that impact the availability of its designated Resource Adequacy Capacity during the Availability Assessment Hours of that month. Maintenance Outages and Scheduled Maintenance taken in a month will not decrease the Resource Adequacy Resource’s calculated availability. Outages properly submitted for temperature-related ambient derates for a Use Limited Resource will be counted against its availability only until such time as the Use Limited Resource reaches its energy limit constraint, at which time such Outages or derates will non longer count against the availability of the Use Limited Resource for the relevant month. [Ambient card outages representing outages due to Uncontrollable Forces will not count against availability of a Resource Adequacy resource.](#)

The start and end times used in calculating the availability of each resource each month will be the Outage time reported in the SLIC system or through the alternative reporting process of Section 40.9.5 for resources not included in the SLIC system.