



CALIFORNIA ISO

California Independent
System Operator

Integration of Resource Adequacy and MRTU

Market Surveillance Committee Meeting

September 22, 2005

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RUC Availability Payments

- Should RA resources be eligible to receive RUC availability payment?
- July 1, 2005 FERC issued order that was unclear with regard to the CAISO's ability to include tariff provisions requiring RA resources to bid \$0 for the RUC market and not receive any RUC availability payment.

...Capacity obligations by sellers are to be handled through the CPUC resource adequacy requirements which could easily incorporate basic RUC bidding restrictions on "capacity suppliers" if the CPUC feels that such bidding commitments are necessary. For instance, suppliers of resource adequacy capacity could simply be required to bid zero for RUC capacity in the CAISO market as a condition of its resource adequacy agreement. Additionally, the LSE that has procured the capacity could be eligible to receive any revenues that result from the sale of RUC capacity should the price ever exceed zero

- The CAISO requested rehearing requested FERC to clarify that the July 1, 2005 order does not preclude the CAISO from including its tariff provisions to ensure that resources compensated for RA resource capacity are not eligible for CAISO RUC availability payments



Options

- Suppliers interpret July 1, 2005 FERC order to indicate suppliers and LSE should be able to negotiate terms of RUC bidding and availability rebate rules
- For administrative efficiency, the CAISO proposed that RA resource are ineligible to receive RUC availability payment to avoid double payment and LSE rebate process
- On September 19, 2005 FERC Order clarified that CAISO is not precluded proposing such tariff language to the extent such provisions are consistent with CPUC RA Policy and agreements LSE with suppliers



Requested MSC Action

- Should RA resources be allowed to bid non-zero bid in RUC process?
- Should CAISO ensure RA resources are not paid RUC availability payment or should suppliers negotiate rebate process with LSEs?



What Is The Obligation on RA Resources?

- Short Start Resources
- Partially Dispatched RA Resources
- Imports
- Use Limited Resources
- Exports
 - Not subject to a MOO but MRTU design provides flexibility
- RUC Availability Payments



Elements of RA-MOO Policy

- It is the ISO's job to operate the grid reliably. The ISO must make day-ahead commitment decisions and real-time adjustments to address contingencies and/or system conditions.
- It is the LSEs job to procure sufficient resources in advance and make those resources available to the ISO.
- RA resources which are subject to a must offer obligation should not bid or be paid an availability payment in the ISO processes.



Short-Start Resources

CAISO Proposal:

- RA-MOO does not expire after the Day-Ahead market. SS resources have the obligation to be available into Real-Time.
- Any necessary compensation should be established in bilateral RA contracts between LSEs and suppliers.
- Short-start units (start-up + minimum run time < 5 hours) must self-schedule or offer into the Hour Ahead Scheduling Process and Real Time Market for each hour of the operating day [except for Use-limited]
- ISO will work with stakeholders to develop a post DA manual “release” mechanism for use in MRTU Release 1



Partially Dispatched Resources

CAISO Proposal:

- RA-MOO will extend into real time for RA resources that are committed, but only partially dispatched in the DA process. The remaining RA capacity, that is not dispatched, must continue to be offered into the real-time, subject to a release mechanism.
- The Day-Ahead IFM/RUC commitment of a resource will result in either a full energy schedule or a schedule that results in the commitment (start-up) of the unit, but only a partial dispatch of the energy.
- An SC may revise its Day-Ahead energy bids for that portion of the capacity that was unscheduled in the Day-Ahead process.



Imports

CAISO Proposal:

- The RA-MOO obligation for import RA in the day-ahead and real-time markets depends on the temporal constraints associated with the import.
 - IFM observes multi-hour block constraints on import supply bids
 - RUC views such supplies as available for designation in each hour of the subsequent day for which they were bid into the IFM, without any requirement for the RUC optimization to recognize multi-hour block constraints. Any RA imports designated as RUC capacity will be required to self-schedule or offer with economic bids into the HASP/RT for each applicable hour.
 - RA supply from multi-hour block energy imports that is not cleared in the IFM and is also not designated as RUC capacity will have no further obligation to be available.



Use-Limited Resources

CAISO Proposal:

- The RA-MOO for a ULR will be implemented like any other RA resource, subject to its limits.
 - A ULR must offer its daily capacity with a bid or self-schedule in the Day Ahead market for a minimum of those hours for which it qualified as an RA resource.
 - A ULR may be subject to additional offer obligations; e.g. short-start resources, available during peak-hours.
 - A ULR may be requested to reschedule its energy in real-time if necessary for system reliability.
 - ULRs will be managed through an annual or seasonal resource usage plan for each such resource.



Exports

CAISO Proposal:

- MRTU provides market participants significant flexibility to take advantage of other opportunities to sell their output in markets after the CAISO Day-Ahead commitment process.
- In DA process, all self-scheduled load and exports not associated with ETC or TORs have the same priority and RA resources are free to serve export load.
- Day-Ahead IFM does not differentiate exports supported by RA and non-RA resources.
- Any load bid is competing for available supply.
- In HASP, incremental export bids may be served after ISO load forecast is satisfied.



Requested MSC Action

- Is it reasonable to expect a RA resource to make itself available through Real-Time if physically capable, subject to a release mechanism after the day-ahead processes?
- Is CAISO providing sufficient means for short-start resources to extract value after RUC?