



Gila River appreciates the opportunity to comment on the CAISO's Renewable Integration Market Vision and Road Map. We understand the need to enhance the current market design to accommodate the larger portfolio of variable energy resources and agree with the ISO's six guiding principles. However, Gila River does take exception with some of the proposals set out by the CAISO to achieve its goals. Below are some thoughts concerning a few of the ISO's market design enhancements.

### **Eliminate the existing Hour Ahead Scheduling Process (HASP) for clearing and pricing inertia bids.**

Gila River continues to urge the CAISO to implement a full hour-ahead market as we believe eliminating hourly scheduling of the inertias will violate the guiding principle of creating a deep and liquid market. The CAISO assumes that the 15-minute scheduling requirement, which is still only being considered by FERC, will foster a liquid and robust market for 15 minute increments of energy outside of the CAISO footprint. However, even if there is a 15-minute scheduling requirement, there would likely still be the issue of late e-tags if scheduling coordinators are attempting to create new tags 4 times per hour to coordinate with CAISO's RTED.

One reason cited for the elimination of the HASP is the history of HASP-RT price disparities which has led to substantial Real-Time Imbalance Energy Offset charges. As long as HASP is only binding to some entities and not others then there is no way to eliminate these uplifts. We believe a proper solution is to implement an hourly market that would be binding for all. If FERC requires 15-minute scheduling then there should be a flag to designate that a bid is for a full hour or that it can be split into 15-minute granularity.

The straw proposal states that there are no clear benefits to a full hour-ahead market which we believe is incorrect. First, the RT imbalance energy offset payments, as they relate to differences between the HA and RT prices, will be eliminated. Secondly, without economic bidding of hourly inertia schedules, the CAISO will be forcing inertia transactions to be price-takers for at least 75% of each hour. This act of self-scheduling is at odds with CAISO's desire to reduce self-scheduling which is one of the listed primary operational challenges. If the CAISO asks importers and exporters to wear the price risk, it will only cause participation at the inertias to decrease. The reduction will be most pronounced in the export direction since exporters not only pay the LMP but also various export charges that can make up a significant portion of their costs. With the reduction of export bids the CAISO could find themselves in more over-generation situations, which is again an issue the ISO has identified as an operational challenge.

### **Real-time Economic Dispatch occurs every 15 minutes**

Gila River is in favor of the ISO's proposal that RTED move to 15-minute granularity. The most convincing aspect of this is that the RTED and the STUC processes will run simultaneously which should result in prices more truly representative of unit commitment costs. As a result, we expect the market wide requirement for BCR will decrease significantly. It also seems likely there will be a decrease in self-scheduling since units will no longer be required to adjust their schedule 12 times in an hour as a result of economically bidding. By only providing as many as four dispatches per hour, slower units that do not wish to move often will be more inclined to participate in the market rather than self-scheduling



### **The creation of new ancillary services**

Gila River has several questions and concerns as it pertains to the new ancillary service products. Per the straw proposal, regulation services would become bi-directional. How would this work in practice as it relates to the current regulation-up and regulation-down products? Would resources be paid a single capacity payment for the ability to go up and/or down? Our interpretation is that units would need twice the capacity as is being procured for regulation. For example, first a generator must sell enough energy to create downward availability but also retain upward capacity which means to sell 1 MW of bidirectional regulation a resource must actually commit 2MWs. Is this interpretation correct? If so, will the market take this opportunity cost into account fully when procuring these services? Could the CAISO also explain how the market is going to essentially guarantee that net energy from regulation will be 0?

With regard to the Real-Time Imbalance Service, would the opportunity cost of energy be included in the capacity payment? Why is the net energy payment equal to just the RTED price? It seems likely that resources chosen to provide RTIS were uneconomic in RTED and as such when energy is dispatched it will cause that unit to be uneconomic. We believe the very least a resource should receive for being dispatched is its bid. Unlike regulation, the percent of capacity from this product that is dispatched as energy is likely to be relatively high, creating significant exposure to units providing this service. As an example, if a resource with \$100 energy is selected to provide RTIS during an interval where the RTED was \$20 then that resource is incentivized to cease offering such services in the future.

Lastly, we believe the CAISO should maintain substitutability between the ancillary services. In the occurrence of an energy shortfall that will require the ISO to dispatch energy from a unit providing regulation, the unit may not return to its null point until well past the intended time. As such the CAISO should require that units providing regulation to be able to maintain whatever dispatch level they are brought to for as long as it is needed. With that requirement in place regulation will remain perfectly substitutable for every other ancillary service and the RTIS will be able to replace spin and non-spin. Without this substitutability relative prices for AS could become distorted.