

Stakeholder Comments Template

RI Phase 2 – Day-of Market 7/6/11 Initial Straw Proposal

Submitted by	Company	Date Submitted
Spence Gerber sgerber@olivinecorp.com (916) 259-3960	Olivine, Inc	July 29, 2011

Olivine Inc appreciates the opportunity to provide comments on the initial straw proposal.

1. Please provide any comments on the ISO's proposed schedule, timeline, or process for this stakeholder process. The schedule and timeline is aggressive and needs to be mindful of other proceedings and developments in the broader RPS arena. Since the stakeholder process is moving faster than the development of studies, care must be taken so as not to determine outcomes that are incompatible with the end state of RPS makeup of the resource fleet in California.

2. Are there additional goals or operational challenges that the ISO should be addressing through this stakeholder process?

3. Please indicate whether your organization agrees with the guiding principles listed in the straw proposal. If not, please indicate why not. If you would like to have other guiding principles added, please describe those additional principles. The guiding principles establish a reasonable basis for the development of workable proposal. While the first guiding principle states that the proposal is technology agnostic, technology is only defined in the context of resources. The proposal needs to also be technology agnostic with respect to the development of resource interfaces with the grid in terms of communication and Information Technology. As the proposal presupposes significant changes to market design and products, there is also the opportunity to revamp existing IT standards and structures simultaneously.

4. Please provide your organization's views on any incremental ancillary services you believe are necessary to accommodate the intermittency of renewable resources. Ancillary Services need to be considered in the context of WECC and NERC reliability standards and the first order of business is to determine if the current suite of AS products meets those needs. Second, procurement practices need to be reviewed to determine if a change to the current procurement methodology of the current services can meet the projected needs of the landscape under 33%+ RPS. The addition of new ancillary services, particularly as market products can create unnecessary complexity and the addition of little used services increasing

operations overhead. There is a lesson to be learned from the Black Start service and others that were envisioned and conceived as market products that never materialized.

5. Does your organization believe that Residual Unit Commitment should be performed more granularly than daily (i.e. on-demand RUC)? Is on-demand RUC needed if the 15 minute unit commitment, either in RTED (Option A) or RTPD (Option B) looks forward 8-10 hours? Any changes to RUC need to be considered in the broad context of Long Term Procurement and the requirements to make contracted capacity available to the market. It is not clear at this point whether or not performing RUC on demand would bring any value to the market or increases reliability in a manner that is cost effective. An 8 to 10 hour forward look unit commitment process would seem to adequately address the shortcomings of the current short term forecasting process.
6. Please provide your organization's views on replacing today's Hour Ahead Scheduling Process (HASP) for inter-ties with a simpler method that would not involve establishing separate hourly prices for the inter-ties and that would not include bid cost recovery. Please suggest proposals concerning what accommodations are necessary at the inter-ties to provide scheduling flexibility for western market entities. Any method that provides for consistent pricing methods in the CAISO market is preferred over the current situation especially if it eliminates situations that require the complexity of a bid cost recovery mechanism.
7. Does your organization prefer a two settlement market or a three settlement market? Please describe why. A two settlement market is preferred for the relative simplicity that it brings. The CAISO markets already have a plethora of charge codes and adding a third settlement market would only create additional charge codes. Further, a third settlement market would likely require additional inter-market settlements with complex calculations and additional validation and verification requirements for market participants.
8. Please provide your organization's feedback on the concept of a 1 minute Real Time Imbalance Service (RTIS).
 - a. Does your organization agree that with RTIS, regulation should be changed to a bi-directional service? If RTIS is implemented with the option to provide unidirectional service and depending on the eventual method of dispatch, it makes sense to make Regulation a bi-directional service as a pure AGC responsive product. As the current straw proposal infers that RTIS could displace the need to procure large amounts of regulation for expected ramping requirements then Regulation could become a symmetrical bi-directional product.
 - b. Is one minute the correct dispatch interval for RTIS? With the limited amount of information regarding the integration of the RTIS with real-time energy at this point, it is reasonable to assume that a one minute dispatch interval is correct. The CAISO may find it prudent to contemplate a range for the dispatch interval of one to several

minutes that can be adjusted through the BPM process provided that any adjustment to the dispatch interval can be made relatively simply in the market software.

- c. How should RTIS be bid, selected, and dispatched? Should a mileage bid be used for dispatch with a market clearing mileage price determined each minute? If RTIS is to be used for continuous dispatch similar to regulation, it does not make sense to provide for a flag that would allow resources to receive a capacity payment for offering RTIS energy and simultaneously indicate that they are only available on a limited basis as discussed at the bottom of page 19 of the straw proposal. While including a mileage rate as a bid parameter increases the complexity of bid structures, it would “set the table” for determining dispatch order and in the interest of relative simplicity and transparency, allow for single market clearing price for purposes of settlement.
 - d. Does your organization’s opinion on RTIS differ depending on whether Option A or Option B is chosen? Yes, if Option B is chosen, there doesn’t seem to be that much separation between a one minute and five minute energy dispatch which would seem to make RTIS ambiguous and potentially confusing when receiving dispatch notices and determining resource performance.
9. Please comment on your organization’s preference for Option A or Option B with regard to the real time market. If neither option is feasible in your view, please provide input on how the real time market should be configured.
- a. Would 15 minute real time prices enable price responsive demand or demand response? 15 minute dispatch periods with dispatches occurring approximately 7 minutes in advance as noted in the straw proposal are a good fit for an element of interruptible load and storage technology that is currently untapped in California. CAISO should also re-examine the need to require telemetry for real-time energy in this proposal since RTIS provides the visibility to resources in a short time horizon. Finally the 15 minute market might ultimately allow dynamic competitive path mitigation to be included in real-time Market Power Mitigation since the extending the duration for the RTED runs could be better tolerated.
 - b. In Option A, with 15 minute RTED, what is your organization’s opinion about a 10 minute ramp period? 10 minute ramping for a 15 minute dispatch period will allow form additional participation from non-generation resources that may not be equipped with automated notification equipment. 10 minute ramping might also ease some of the concerns regarding intra hour schedule changes with other Balancing Authorities.
10. How often should renewable resources be allowed to schedule? At this juncture it isn’t clear how the CAISO would integrate the more granular resource forecast information into the unit commitment and real-time energy dispatch. Further information is needed.

- a. In Option A does every 15 minutes make sense? Threshold question notwithstanding regarding how the information would be integrated, intuitively it makes sense to include more granular forecasting and scheduling to be broken down into increments that align with the short term unit commitment timelines
 - b. In Option B should renewable generation be able to schedule every 5 minutes, 15 minutes, or some other time interval? 15 minutes
 - c. Does it make sense to limit this scheduling opportunity to only renewable resources, or should it apply more generally? Who should be able to schedule more granularly than hourly? Treating one class of resources differently than another violates the technology agnostic principle and scheduling granularity should be applied equally to all resources.
11. Please provide any other comments your organization would like the CAISO to consider through this initiative. The CAISO recently updated its technical documentation to clarify that the internal policy that telemetry for ancillary services is not allowed to be delivered via public internet. With the addition of the RTIS as an ancillary service and the likelihood that NGRs will be participating in RTIS, prohibiting the use of public internet will present a barrier to entry for smaller resources. Olivine urges the CAISO to rethink this prohibition and focus on the root causes that may give the appearance that public internet is less reliable than ECN. Olivine would be happy to engage in any discussion that would shed light on the perceived shortcomings of public internet and to develop standards that need to be articulated to deliver telemetry to the CAISO via public internet with the same level of reliability of ECN.