

## Stakeholder Comment Template

### CAISO Integration of Renewable Resources (IRRP)

October 24, 2008 Stakeholder Meeting

**Organization:** Jack Ellis

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**Organization Representative:** WPTF

**Contact Number:** 650-948-0938

**Industry Segment:** (Regulatory Agency, Load Serving Entity, Generator, Marketer, Municipal Utility, Participating Transmission Owner, Non-Participating Transmission Owner, Association) Association

Instructions: The CAISO is requesting written comments on information discussed at the Integration of Renewable Resources Program (IRRP) stakeholder meeting held on October 24, 2008. This template is offered as a guide for entities to submit comments.

All documents related to the CAISO's IRRP Program Plan are posted on the CAISO Website at the following link: <http://www.caiso.com/1c51/1c51c7946a480.html>

Upon completion of this template please submit (in MS Word) to Jim Blatchford at [jblatchford@caiso.com](mailto:jblatchford@caiso.com). Submissions are requested by close of business on **Friday November 7, 2008**.

***The IRRP effort is currently divided into two components – 20% RPS and 33% RPS. Each of these components will assess operational and infrastructure needs, which will then drive solutions that will fall with four categories: (1) infrastructure additions, (2) internal operational tools, (3) market products, and (4) regulatory modifications. Many of the tasks identified are consistent with the specific projects included in the IRRP High-Level Plan published in May 2008. Please comment on whether those tasks, as discussed at the stakeholder meeting, are appropriate and whether other projects should be included as part of the IRRP.***

From WPTF's perspective, the only substantive difference between the tasks and associated levels of effort required to meet the two different RPS goals are related to timing. If, as the CAISO concluded in its 2007 study, the existing fleet of gas-fired generators provides sufficient flexibility to balance the grid using existing market products when up to 20% of load is provided by renewable energy resources, then more time is available to address the issues noted above. However, since regulatory and market product changes in particular are typically complex and have long lead times, the CAISO's initiative is timely and work on these tasks should commence as soon as practical.

As WPTF describes later in these comments, the CAISO should either create a fifth category (integration services needs) of activities in its high level work plan or make sure that the attendant activities are clearly included in one of the other four task categories. This integration services needs category should comprise tasks required to develop a technology-agnostic methodology and associated analytical tools for determining what renewable integration services the CAISO needs and how much of each service it should be procuring at any point in time based on its load forecast and the types and amounts of intermittent generation resources.

With respect to the category of infrastructure additions, WPTF supports activities that identify transmission-related additions, but tasks that attempt to determine the specific types and amounts of supply resources required to integrate intermittent resources are not appropriate activities for the CAISO.

- ***Please indicate whether you believe such tasks should be included for 20% RPS or beyond 20% RPS.***

Work on the market products, regulatory modifications and integration services needs (fifth category described above) categories of tasks should commence as soon as possible due to their long lead times, and independently of any deadlines for meeting a specific RPS requirement.

- ***If included in the 20% component, please provide a proposed schedule that would ensure the results of the task could impact meeting the 20% RPS goal by the start of 2012.***

***There are many renewable activities occurring in California and various areas across the country. Please list those studies or activities that you believe have merit that may serve as an appropriate model or otherwise assist the CAISO in conducting the IRRP. If ongoing, please indicate how such activities may be coordinated with the IRRP.***

At the technical level, the CAISO should track activities in ERCOT, where large amounts of wind resources are being installed at a rapid pace; the MISO, which is already seeing sizable amounts of wind energy and surplus generation in certain periods; Columbia Grid, which is investigating how to integrate intermittent resources and will likely be a seller of renewable energy to California; and the WECC, which has started its own initiatives regarding “variable generation” and is proposing to act as a clearinghouse for ideas developed by its members. We would also note that there is as much to learn from others’ mistakes as from their successes.

***In response to the IRRP High-Level Plan, the Market Initiatives Roadmap, and the storage White Paper, several parties have indicated a strong interest in market product development to address aspects of renewable integration. To assist IRRP in prioritizing and coordinating its role in market development, please indicate your perspective on***

- ***the effect of MRTU market design and planned enhancements (MAP) on renewable integration;***

WPTF believes market-based mechanisms provide the least-cost path for integrating renewable resources. Consequently, MRTU is a cornerstone of the CAISO’s initiative for integrating renewable resources. MRTU-related policy issues affect a number of decisions related to renewables, and policy decisions about how to integrate renewables ultimately affect MRTU design, implementation and market prices.

With respect to MAP, WPTF believes three of the six (including payment acceleration) have a direct impact on renewable integration. These include Convergence Bidding, which adds liquidity and depth to the CAISO markets and aids in price discovery; Dispatchable Demand Resources, which will be an important tool in the CAISO’s efforts to balance the grid around both supply- and demand uncertainty; and Scarcity Pricing, which will help guide the investment and operating decisions that must be made to integrate renewable resources.

- ***any changes to the Roadmap based on consideration of renewable integration;***

With respect to other medium and high priority enhancements the CAISO has discussed with

stakeholders in its Roadmap initiative, the 30-minute reserve product and the initiative to facilitate interchange transactions after the close of the Real-Time market will be important to the renewable integration effort. The CAISO should also ensure that market participants within California have the ability to sell renewable integration services to neighboring BAs. This will likely require the CAISO to raise the priority and accelerate development of its Roadmap activity to permit exports of ancillary services.

- ***which new market products, if any, are needed to stimulate needed capabilities;***

This question can only be answered definitively if the CAISO undertakes a properly structured approach that includes developing a methodology for determining the kinds and amounts of services it needs in order to integrate renewable resources. Some market participants are undertaking their own needs assessments, but these are likely to be limited in scope to a single LAP or utility service area and they could be biased in their findings.

WPTF feels very strongly that all renewable integration services required by the CAISO should be supported solely by market-based revenues and that the CAISO should not put itself in the position of choosing and/or subsidizing specific technologies.

- ***market aspects of interdependencies with other market and policy developments (e.g., once through cooling, long-term RA, greenhouse gas regulations); and***

All of these issues affect WPTF members to a greater or lesser extent, and the CAISO's approach to renewable integration will influence policy outcomes in each of these areas as well. One reason WPTF is urging the CAISO to define the kinds and amounts of integration services it needs is so that member companies, particularly those affected by greenhouse gas (GHG) and once-through cooling (OTC) policy can resolve at least one market uncertainty and make informed investment decisions.

With respect to Resource Adequacy (RA) policy, WPTF members are adamantly opposed to attaching specific requirements for attributes such as a) how quickly a resource can ramp up or down, b) how quickly a resource can start up or shut down, c) whether it should be capable of providing specific ancillary or other renewable integration services, and d) for resources that are capable of providing these services, how much they should be capable of providing.. Adding these kinds of performance attributes will fragment what is already a relatively small market, which will inhibit liquidity and trading of RA capacity. They will also add unnecessary complexity to an already complex product. .

- ***market design lessons being learned in other ISOs/RTOs or other countries that are relevant to the California market context.***

The CAISO should take careful note of choices made by both ERCOT and the MISO with respect to price floors, especially as more renewable generation begins operating over the next few years. MISO lowered its price floor from -\$35/MWh to -\$500/MWh in order to provide better price signals and stronger incentives for suppliers to reduce output and customers to increase consumption.

***In response to comments on the IRRP High-Level Plan, several parties supported the creation of working groups. The CAISO proposes to create the following working groups to act as technical forums to assist the CAISO: Storage, Forecasting and PIRP, Needs Assessment Studies and Research, and Market Products.***

- ***Please indicate whether you support the creation of such groups and whether your company would be willing to participate.***

WPTF supports the creation of the working groups proposed by the CAISO. WPTF will participate in the Market Products working group and either the Needs Assessment working

group, if it addresses a methodology for assessing product needs, or a separate working group dedicated to that task.

- ***Are there other working groups that should be created?***

If the CAISO does not assign development of a methodology and tools to determine the types and amounts of renewable integration services it needs to one of the working groups it proposed above, then a separate working group that specifically addresses this task and the related issues should be formed. The deliverable from this task is a CAISO forecast of the types and amounts of renewable integration services it needs. As with load forecasts that are published by the CAISO and others, market participants will use forecast of the requirements for integration services (and market prices for these services when they become available) to guide their investment and operating decisions. WPTF will participate in the effort to develop a methodology and forecasts.

- ***Should there be limits on participation to those with appropriate technical backgrounds?***

- ***Describe the role the working groups should play in the IRRP.***

WPTF's position is that the working groups should be focused on specific technical market and policy issues and that their charters should include arriving at a consensus position on the issues within their areas of responsibility. Stakeholders and the CAISO staff will be better served and the IRRP will run more smoothly if the CAISO is able to formulate operating procedures, tariff language, BPMs and stakeholder correspondence from consensus positions rather than first having to decide a whole host of technical and policy issues upon which stakeholders disagree.

***Other Comments:***

WPTF offers the following comments on some other important discussion points from the October 24 meeting:

The CAISO should not fund R&D projects using funds recovered through its Grid Management Charge. WPTF does not object to the CAISO's participation in collaborative R&D projects funded by the CPUC, the IOUs, the CEC, the US Department of Energy and others in which the CAISO contributes some expertise and the CAISO-controlled grid hosts the project. However, the CAISO's core mission is to provide non-discriminatory access to California's electric transmission grid, and all customer-supplied funds should be directed toward that activity. Where the CAISO does participate in R&D and pilot projects, there should be a clear purpose related to its core mission that is communicated to stakeholders, and the results of any research should similarly be communicated to stakeholders.

WPTF continues to stress that while storage may be an important technology for integrating renewable resources, it should not be afforded any special treatment. WPTF agrees with CalWEA and others that to the extent ambiguities and supply-centric provisions of the CAISO tariff impose barriers to the development of storage facilities, the tariff should be amended. However, storage should be compensated for the services it provides from market-based revenues just like any other competitive supply option. It should not be classified as an "advanced transmission facility," and the CAISO should oppose any attempts to so classify storage or any other supply or demand technology.