Stakeholder Comments Template

Subject: Exceptional Dispatch White Paper and Meeting

Submitted by	Company	Date Submitted
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This template has been created to help stakeholders submit written comments on topics related to the December 2, 2009 Exceptional Dispatch White Paper and December 9, 2009 Exceptional Dispatch Stakeholder Meeting. Please submit comments (in MS Word) to kjohnson@caiso.com no later than the close of business on December 30, 2009.

Please share your views on the topics listed below.

1. Single Biggest Issue

If you have an issue or issues with exceptional dispatch, what is your single biggest issue? Do your see this issue as persistent, or does it come and go? Do you have a proposed solution for this issue?

Dynegy's "biggest" issues with exceptional dispatch are:

- Market impact. A key selling point for the CAISO's new MRTU market was that nodal pricing, unlike the previous zonal congestion management system, would be able to accurately price all of the CAISO's operational constraints. However, MRTU's inability to reflect capacity-based constraints, generation contingencies, and other kinds of real operating constraints the CAISO faces every day calls the prices produced by the CAISO's markets into question. These limitations, coupled with apparently frequent actions taken by CAISO operators to account for the fact that the MRTU network model does not produce results consistent with actual results, do not engender either transparency or market participant confidence. Dynegy appreciates the CAISO's recent efforts to reflect additional constraints in its network model and urges the CAISO to continue its efforts in this regard.
- New product development. The CAISO's unwillingness to begin development of new products without additional operating data is frustrating. On page 27 of the white paper, the CAISO acknowledges that the majority of ED volumes in

October 2009 were due to (1) SP26 capacity requirements and (2) ramp rate requirements (e.g., moving units to their dispatchable operating ranges.) Market participants have pressed the CAISO to begin developing a 30-minute ancillary service product to address these two problems for years, yet the CAISO insists on acquiring more data before beginning this development effort. The CAISO's data supports moving this process forward now. Moreover, additional near-term data will not be useful in determining how new products can be used to assist in the integration of renewable resources.

Moreover, it seems clear that FERC expected the CAISO to be further along in the stakeholder process for developing new products, as it indicated in its September 2, 2009 order (cited by the CAISO in its white paper at page 35) that it expected that "stakeholder processes will be well underway by the time of the next update [due October 20, 2009] and will be working to identify and develop any appropriate market products and/or modeling or software solutions that could limit the need for Exceptional Dispatch going forward." The CAISO's unwillingness to begin this stakeholder process until Q2 2010 cannot be reconciled with this expectation.

Dynegy urges the CAISO to begin exploring the development of these products now, so that they can be developed and deployed in a reasonable time frame.

2. Product Attributes

In your view, what constitutes a product? What factors or circumstances are necessary for a product to exist?

A product is a service with unique, differentiable characteristics (e.g., location, speed of response, ability to sustain response) that meets a specific CAISO operational need.

3. Shortcomings of Existing Products

To the extent that you believe that a new product (or products) is needed, to what degree do existing products such as Resource Adequacy capacity and Interim Capacity Procurement Mechanism capacity already cover the need, and, if not, what is not covered?

- The white paper noted that transmission maintenance gave rise to the need for ED (white paper at 5, 17-21). Resource Adequacy capacity requirements do not specify amounts of capacity needed to support transmission maintenance requirements. Moreover, exceptionally dispatching RA units still fails to set energy and ancillary service prices that reflect the CAISO's operating requirements.
- While it could resort to regional (i.e., SP26-specific) ancillary services procurement and use ten-minute spinning and non-spinning reserve products to cover the 20-minute PDCI contingency, the CAISO has steadfastly refused to either to do so or to accelerate the development of a longer time frame (20- or 30-minute) reserve product, choosing instead to use ED for these needs.

4. Visibility of Exceptional Dispatch

What are your thoughts on incorporating more constraints and other operational elements into the operational software, such as the Minimum Online Capacity Constraint versus continuing to perform exceptional dispatch that may provide a different level of visibility than exceptional dispatch?

The CAISO should strive to incorporate ALL constraints to which it must operate in its market software, so that the costs of operating to these constraints – as reflected either in out-of-merit energy dispatch or ancillary service (including local capacity) requirements – are transparently identified. These costs must be identified if the CAISO's markets are to provide price signals to target transmission or generation infrastructure investment. Moreover, these costs should be identified if the CAISO's market prices are to ensure feasible least-cost dispatch. If the CAISO's market prices are not intended to help target generation or transmission investment, or provide feasible least-cost dispatch, their value must be questioned.

5. Other Comments

Are there additional comments that you would like to provide?

- On Page 13, in Item 9, the CAISO notes that "...resource commitment status does not track with schedule or actual telemetry." However, the CAISO does not disclose the reason for the discrepancy, the frequency, magnitude and effect of this problem, or what the CAISO is doing to correct this problem.
- The discussion in Section 4.1 on page 15 stirs memories of the fundamental problem of the CAISO's initial congestion management methodology that "local" constraints are not modeled (and therefore assumed to have no impact on market results) because doing so would adversely affect software performance, and because it would be "unreasonable" to model every situation in which the loss of a line or generating unit would cause another line to overload. It seems reasonable that the CAISO would not model every such situation, unless the contingency would case an element to exceed its emergency rating, which is not permitted. But the failure to model such contingencies means that the CAISO's nodal prices and ancillary services prices will not reflect the true operating needs of that local area, and therefore are of dubious value as signals for investment.
- Why does the CAISO not account for the impacts of generation contingencies? (White Paper, Page 15.) Is it simply because the software does not allow for this? Do other ISOs include generation contingencies in their contingency analysis? What are the market price implications of not accounting for generation contingencies? Does it also mean that the price of ancillary services does not reflect the need for unloaded but dispatchable capacity in some local areas?

- In regards to the acknowledgement that the CAISO's market software does not consider the reactive power needed to maintain voltage stability (white paper at 15-16), Dynegy reminds the CAISO that FERC directed the CAISO to begin working towards the competitive procurement of voltage support and black start services in 2005.¹ Dynegy urges the CAISO to re-engage that long-dormant stakeholder process to explore the issues regarding reactive power procurement and the limitations of the CAISO's market systems.
- Dynegy appreciates the CAISO's deployment of additional EDE codes to capture the different kinds of ED. However, it appears the CAISO uses the code "NONTMOD" to log several very different kinds of ED, from ED needed to "bridge schedules" to Delta Dispatch to software modifications. The CAISO should implement other EDE codes to allow the reasons for the ED to be accurately logged. As the CAISO is well aware (e.g., from the Amendment 60 proceeding) the failure to accurately log and account for extra-market reliability dispatches undermines both proper allocation of these costs and efforts to identify problems that give rise to the need for ED and to enact solutions that reduce the CAISO's reliance on ED.
- On page 23 of the white paper, in Section 4.2.3, the CAISO notes "The defined generation requirements protect the area from the potential voltage stability and thermal constraint problems faced by smaller regions, as discussed in the previous subsections. The CAISO should retain online generation capacity sufficient to avoid a system-wide voltage collapse. System Capacity is only used in practice for ensuring there is enough online capacity in California to meet demand in the event of a series of worst-case scenarios simultaneously occurring."

This description is confusing and does not shed any meaningful light on what the CAISO uses "system capacity" for. Is system capacity truly to meet demand? Could it not also be thought of as capacity needed to prevent local problems from cascading into larger events? Don't "system-wide" voltage collapses first begin within a local area, rather than at multiple locations simultaneously? If so, why does the CAISO still believe that it is reasonable to set subregional scarcity prices at a fraction of system-wide scarcity prices?

• On Page 24, the CAISO notes that the market software "sometimes" dispatches resources in violation of their operating characteristics. Does the CAISO know why the software does this? What is the CAISO doing to address this software deficiency?

Dynegy appreciates the opportunity to submit these comments. Dynegy encourages the CAISO to continue to improve its network models so that its market prices truly reflect the CAISO's operational needs.

¹ 112 FERC **¶**61,350 at P 21.