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?

The ISO's continued heavy reliance on the Exceptional Dispatch mechanism is creating severe gas management issues for units that are the frequent targets of Exceptional Dispatch. Gas management issues need to be addressed on an accelerated basis, while the CAISO works on reducing its overall reliance on the Exceptional Dispatch mechanism. For example, NRG's El Segundo facility receives the overwhelming majority of its total run time through Exceptional Dispatch.

While NRG maintains the need for Exceptional Dispatch is an indication of a poorly functioning day-ahead market, we will limit our comments in this document to the more immediate concerns of the difficulties Exceptional Dispatch presents in trying to manage a unit's natural gas exposure.

Many of the Exceptional Dispatches received come very late in the afternoon, long after a generator has the ability to procure gas to support the dispatch. What further complicates matters is that our day-ahead bids for El Segundo are almost always mitigated. This means that even when we attempt to fold in the market risk surrounding Exceptional Dispatch, the ISO essentially throws out our self-imposed risk premium. Instead, the unit is mitigated to its default energy curve, which provides the unit with 10% of margin above the ISO's calculation of its cost.

Obviously, the single largest component of any generating unit's cost is the commodity cost of fuel. Like most thermal units in California, NRG's resources are fueled with natural gas. In the ISO's calculation of fuel cost, which is based on the previous day's index for specific points in the state (for NRG this is SoCal Citygate), there is no consideration for the risk assumed by generators who are dispatched out of merit (i.e. RUC or Exceptional Dispatch) during weekends or holidays when it is next to impossible for a party to find gas to support its schedule. What is worse for unit like El Segundo, the ISO will routinely issue an Exceptional Dispatch for the unit's PMin, but frequently orders the unit to produce at levels far above the PMin. Managing gas exposure during weekends and holidays is especially problematic, especially since these are the time periods when pipelines are most likely to issue Operational Flow Orders which restrict the ability to pull or leave gas on the system, depending on the circumstances which exist on the pipeline at the time. There have been multiple instances where NRG was forced to buy gas at prices over twice what the ISO calculates as an index price – typically over weekends or holidays.

To help mitigate this issue, NRG suggests the ISO adopt a fixed adder to the gas index for units run out of merit during weekend and holiday time periods under the following guidelines:

- A fixed 5% adder to the weekend / holiday index, during normal pipeline operating conditions;

- A fixed 10% adder to the weekend / holiday index, during weekend / holidays when the pipeline has issued an operational flow order; and

- An adder to all gas indexes for any City Gate taxes imposed by a municipality.

These items should be addressed on an expedited basis.

2. **Product Attributes**
   In your view, what constitutes a product? What factors or circumstances are necessary for a product to exist?

The ISO should immediately put into place the three fixes identified above while it continues to minimize its overall reliance on exceptional dispatch. In addition, the ISO should expedite development of new ancillary services or locational capacity products. The ISO has repeatedly recognized that many Exceptional Dispatches are issued because there is a shortage of capacity in a localized area. However, there is currently no product that recognizes the locational value of these resources.

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?

It is NRG's position that the current construct of the Interim Capacity Procurement Mechanism is deeply flawed. When the ISO provides a unit with an ICPM designation, it does so for only the number of MWs Exceptionally Dispatched. NRG's experience is that only a unit's PMin is Exceptionally Dispatched. In reality the ISO is making use of the entire unit (i.e. PMin to PMax), and that unit should be compensated for all of its unsold capacity. For instance, the units at NRG's El Segundo facility have always received Exceptional Dispatches at PMin (20 MW), with the unit either being picked up in the real-time or day-ahead markets above its PMin. It is clear in an instance where the unit has no RA sold against it, the market is gaining the use of *all* of the generators capacity, and not merely its PMin.

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 need for exceptional dispatch is due to the divergence between the specifications of the CAISO's financial optimization algorithms and the actual physical characteristics of the grid that include both temporal and spatial constraints. In addition, the CAISO financial models must successfully integrate all the engineering and financial contingencies considered by the CAISO operators during the exceptional dispatch process. One of the purposes of MRTU was to address the ongoing divergence between the financial model and the contingency adjusted realities of the physical system. However, as the CAISO acknowledges, there remains much work to be done to meet this policy objective.

5. **Other Comments**
   Are there additional comments that you would like to provide?

A necessary condition for the CAISO to meet its 'stated' policy objective of economic efficiency is to design a natural gas settlement scheme whereby the marginal revenue paid to the dispatched generator in all circumstances reflects the true marginal cost of procured natural gas. Any deviation between the marginal payment for natural gas and the true marginal cost of gas distorts the generation dispatch and investment signal, leading to an economically inefficient dispatch and investment for the State of California. This inefficient dispatch and investment invariably result in higher customer costs. This present state of affairs is highly inconsistent with, and significantly undermines, the CAISO and CPUC's policy objectives of economic efficiency through the use of LMP and real-time pricing for end-use customers.

NRG looks forward to working with the ISO to address the gas compensation issues discussed above, and to reduce reliance on Exceptional Dispatch going forward.