NRG Energy, Inc. Comments on the Commitment Cost Revised Straw Proposal

| Submitted By | Company | Date Submitted |
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In the June 10, 2014 Revised Straw Proposal ("RSP") the CAISO:

- Clarified that it will implement the manual process to default to the single ICE index and hold the DA market open to allow this index to be included when gas prices increase by 25% or more from day to day;

- Proposed to include an opportunity cost adder to help ration the use of use-limited resources;

- Modified the schedule for the stakeholder process to allow for additional discussion, primarily on the opportunity cost adder. The additional process makes December 1, 2014 the earliest date the CAISO can implement any changes for the upcoming winter gas season; and

- Deferred consideration of intra-day gas costs and breaking up the three-day weekend gas package into smaller Friday-Saturday and Sunday-Monday package to the bidding rules stakeholder process, slated to begin in Q3 2014. To NRG, this deferral effectively means that the CAISO expects it cannot implement any changes with regards to recovery of intra-day gas costs prior to the coming winter gas season.

NRG offers these comments on the RSP:

- The CAISO should defer consideration of the opportunity cost adder to the bidding rules stakeholder process and implement the proposed changes to commitment cost bidding rules no later than November 1, 2014. Because of the potential for early winter season weather events to disrupt gas supplies (as they did in early December 2013 and February 2014) in November, and the additional complications posed by scheduling gas over the five day Thanksgiving weekend, the CAISO should not wait until December 1, 2014 to modify its commitment cost rules.

- Deferring any consideration of intra-day gas cost recovery to the bidding rules process implies that the CAISO will take no actions to reduce suppliers' exposure to these intra-day gas costs prior to the coming winter gas season. While NRG supports the CAISO's proposal to allow for daily bidding for start-up and minimum load costs up to 125% of proxy cost, NRG remains greatly concerned about exposing suppliers to intra-day gas costs, in particular during cold-weather shortage events, with no opportunity to recover those costs. NRG urges the CAISO to provide some means for suppliers to recover intra-day gas costs for the upcoming winter gas season.

- NRG urges the CAISO to address market participants' ability to seek recovery of costs incurred during Operational Flow Order ("OFO") conditions or pipeline declared emergencies as part of this commitment cost stakeholder process rather than waiting until the CAISO begins to develop tariff language for the commitment cost initiative to address this issue.

- The implementation of mandatory MSG registration increases the need for the CAISO to modify its commitment cost bidding rules as soon as possible, as it introduces additional minimum load points into a unit's operating characteristics. Being able to bid up to 125% of a unit's proxy cost on a daily basis would help manage the risks around these additional minimum load points.

NRG will elaborate some of these points below.

- **Deferring consideration of the opportunity cost adder.** While NRG supports consideration of an opportunity cost adder to help ensure that use-limited resources are not "used up" prematurely, NRG does not support adding an additional process to consider implementing this opportunity cost adder prior to the winter gas season to the commitment cost stakeholder process, for these reasons:

  - NRG is greatly concerned that the additional stakeholder discussion needed around the proposed process for determining opportunity cost adders will prevent the CAISO from implementing the commitment cost revisions comfortably ahead of the winter gas season (i.e., no later than November 1).

  - The analysis needed to determine opportunity cost adders is complex and data-intensive. Given that the CAISO proposes to conduct this analysis itself, the CAISO also needs to ensure there is adequate opportunity for market participants to review and, if necessary, seek amendment of the proposed opportunity cost adders, prior to those adders being put into service.

  - Not all use-limited resources lend themselves to being handled through a simple opportunity cost adder. The use of NRG's Pittsburg Generating Station is limited by Delta dispatch regulations. This use limit, however, cannot be easily translated into a simple MWH, hour or start-up cost adder. While the exceptions always take as much or more time to consider than those resources that fit within the proposed rule, this complication will add to the time needed to translate use-limit plans into actionable adders and further threatens to delay implementation of the opportunity cost adders.

  - NRG also provides responses to the questions regarding intra-day procurement of gas presented on page 27 of the RSP.

**<u>Responses to questions regarding intra-day gas procurement from page 27 of the RSP.</u>**

Q. What were the intra-day gas prices and costs incurred by units that had a real-time-related commitment (e.g., real-time only commitment to minimum load or real-time exceptional dispatch) versus the gas price index? Note the ISO is seeking actual costs incurred versus simply the intra-day gas prices. We prefer the data to be provided for at least a year to analyze trends and overall impact to the resource.

A. *NRG has not yet pulled together the kind of analysis the CAISO is seeking. NRG is examining what information it may be able to provide at a later date.*

*Market participants do not know their CAISO DA awards by the time the timely nomination process closes. Depending on their fleet, and the reasons why their units are operating (e.g., in merit order for economics or out of merit order for local area reliability), some market participants may be better able to reasonably project their gas burns and procure gas in the timely nomination cycle, while others may not. In either case, market participants bid their units into the CAISO's DA market based on their expectation of CAISO dispatch and their expectations of where and how they will acquire gas to support that dispatch.*

*Under un-stressed gas supply conditions (e.g., where there are no supply restrictions early in a balancing period), there may be opportunities for market participants to recover the costs of gas that was not procured in the timely nomination cycle. However, there is no guarantee that gas prices will decline to the level seen in any particular timely nomination cycle over the course of the remainder of a balancing period. So while there are better opportunities to recover intra-day procurement costs over a longer balancing period, there is no guarantee that intra-day costs can be recovered over the course of a balancing period.*

*However, under stressed conditions (e.g., daily balancing or operational flow order conditions) there may be no additional opportunities to procure gas at timely nomination cycle prices to support burns that could not have been reasonably anticipated in order to transact that gas in the timely cycle. Under highly stressed conditions, it may be difficult or impossible to procure gas outside of the timely nomination cycle.*

*Furthermore, over the course of a balancing period, it can be very difficult to re-create all of the transactions that were necessitated by an unexpected burn – or an unexpected failure to burn - on a given day. Such events create imbalances that a market participant may have to work over days or even weeks to re-balance in an economic way.*

*However, as noted above, it is unreasonable to think that market participants will always have opportunities to recover balancing costs, especially under daily balancing conditions. To that end, NRG believes the CAISO should provide some opportunity to invoice the CAISO for balancing costs incurred, typically under stressed conditions. The December 2013 and February 2014 events clearly demonstrated that a system that allows suppliers to recover their gas costs under "most" but not "all" conditions is not reasonable when suppliers incur huge costs to follow CAISO dispatch and curtailment instructions under stressed conditions.*

Q. How would the increased bid cap be considered with out-of-market intra-day gas cost recovery? For example, should the proxy cap be reduced to 100% for any resource that also receives this type of cost recovery? The ISO would also propose that the costs be considered in bid cost recovery.

A. *NRG would not object to intra-day gas cost recovery being included in bid cost recovery. NRG also does not envision seeking recovery of* ***all*** *intra-day gas costs incurred under all circumstances. Where* *intra-day gas costs are not widely different from the gas price used in the proxy cost calculation, NRG expects to be able to manage its intra-day risk through its bids, where possible. The situation in which NRG would seek to recover intra-day costs through some extraordinary mechanism is the one in which the intra-day gas costs are much higher than the daily gas prices indices and NRG has been forced to procure gas in those intra-day markets (likely because it had no way to reasonably predict its burn prior to the timely nomination cycle).*

Q. What happens when natural gas prices are lower in the intra-day than day-ahead?

A. *This question dismisses the potentially catastrophic problem associated with having to procure gas to support unexpected burns in the intra-day markets.*

*If a supplier can accurately predict its gas burn and can reliably procure gas in either the timely nomination cycle or the intra-day markets because of relaxed balancing conditions, and it chooses to defer its procurement of gas to the intra-day markets, it stands to make additional profit. It stands to make additional procurement because it has assessed and voluntarily assumed the risks of deferring gas procurement to the intra-day market. Given that the intra-day markets are less liquid, however, NRG does not expect that suppliers would make a habit of deferring procurement to the intra-day gas markets, though it is theoretically possible that suppliers could do so, if they reasonably believed the price of gas in the intra-day markets would be lower there than in the timely nomination cycle. NRG notes that, unless that particular supplier that deferred their gas procurement to the intra-day market is marginal, there is no additional cost to load from the supplier deferring his gas procurement to the intra-day market. In that case, the supplier has voluntarily assumed a risk to try to earn a reward.*

*But if the supplier is forced to the intra-day markets by CAISO market awards or dispatch instructions, or forced to wait until pipeline restrictions (e.g., OFOs) are lifted and gas can be procured in subsequent next day markets, because it cannot predict its gas burn and secure that gas in the timely nomination cycle, the supplier is almost certainly exposed to gas costs it cannot recover. As evidenced by this past winter, rules that provide gas cost recovery under "most" conditions still leave suppliers exposed to catastrophic losses under unusual conditions – losses that cannot be presumed to simply be made up over time.*

*The RSP includes this at pages 27-28: "At this point, we have some evidence that intra-day costs can be higher than during the timely and evening nomination cycles but we do not know the extent to which this impacts stakeholders over time."*

*As Keynes noted: in the long run, we are all dead. Averages ("over time") can be deceiving. The average current a single lightning strike delivers over the course of a year is not fatal. However, a single lightning strike is instantly fatal at that moment, if you happen to be the unlucky target. In the same way, the CAISO should not assume that market participants need only an opportunity to recover gas costs over an undefined but extended period of time. To ensure a reliable supply system, the CAISO must provide market participants with an opportunity to recover extraordinary costs from a single catastrophic event, such as the two gas supply events experienced in the 2013-2014 winter gas season.*

Q. Who would be responsible for validating out-of-market intra-day gas costs? Aside from real-time-related commitments, when else would recovery of out-of-market intra-day gas costs be allowed or under what specific conditions?

A. *The CAISO would ultimately be responsible for validating out-of-market intra-day gas costs. To facilitate this review, perhaps the CAISO could require suppliers to submit the information in a specified format and provide back-up information that identifies and explains the nature of the intra-day gas costs.*

Q. Would recovery of out-of-market intra-day gas costs discourage hedging (either financial or physical)?

A. *Market participants are not likely to be in the intra-day market except to the extent that they cannot predict their gas burn. The CAISO's goal should not be to promote or force market participants into hedging markets to manage their risk. In NRG's experience, intra-day markets are not liquid enough for a market participant to cover its gas risk on a consistent basis. Out-of-merit / out-of-cycle dispatches are usually covered with a combination of same day gas and subsequent next-day purchases depending on pipeline restrictions in place at the time.*

Q. Would the overall FERC effort to align the electric and natural gas days help to alleviate the stakeholder concerns about intra-day gas price volatility and illiquidity?

A. *As NRG understands one current gas-electric coordination process (the NAESB process), the timely nomination cycle would close before CAISO market participants had been notified of their DA awards. This still leaves suppliers exposed to the intra-day market. Again, gas index prices represent a survey of what was transacted in the timely nomination cycle. Suppliers have no guarantee that they can procure gas in the less-liquid intra-day markets at the daily index price. Intra-day prices in both the December 2013 and February 2014 gas supply events were several times, even ten or more times, the associated daily index prices. It is not reasonable to construct a cost recovery system that allows suppliers to recover extraordinary gas costs only through a long period of successful participation in "ordinary" markets.*