Submitted By	Company	Date Submitted
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NRG greatly appreciated the Commitment Cost Enhancements Initiative stakeholder process in earlier 2014. The market disruptions and settlements disasters created by the CAISO's existing commitment cost bidding rules during the gas events in December 2013 and February 2014 significantly affected NRG. The CAISO's proposal to allow for daily commitment cost bidding up to 125% of a unit's proxy cost values, coupled with the process to switch to the daily ICE index in the event of a day-to-day change of 25% or more in the gas index price, should help mitigate the risk of future similar events.

However, the CAISO's Commitment Cost Enhancement 1 modifications, while creative and reasonably effective, do not mitigate all of the risks a supplier faces. Nor have they been approved by FERC, and FERC's recent deficiency letter in ER15-15 creates the risk that market participants will have to operate under the CAISO's existing rules well into the winter of 2014-2015 – a winter already marked by an early "polar vortex" event sweeping through the Midwest. As the February 2014 event shows, California gas supplies can be disrupted by weather events on the other side of the United States.

NRG appreciated and supported the first 2014 Commitment Cost initiative. However, NRG has two fundamental concerns about the direction the CAISO is heading with its Commitment Cost Enhancements 2 (CCE2) initiative.

• First, NRG is greatly concerned by the timing and order of this initiative relative to taking up other initiatives that address the gas supply issues that remain to be addressed. While the CAISO has launched CCE2, the CAISO has not yet launched the Bidding Rules Initiative. This initiative was scheduled to begin in Q3 2014 in the March 4, 2014 Stakeholder Initiatives Catalog.

As NRG understands, the CAISO will not implement any change that comes out of the Bidding Rules initiative – until after the implementation of modifications that come out of CCE2. As NRG interprets the chart from the CCE2 Straw Proposal below, any modifications to come out of the Bidding Rules process would not be implemented until *late 2016* – two years from now. The idea that there would be no additional modifications to the CAISO's bidding rules for two years is unacceptable to NRG.

Initiative	Description	Policy start	Status
Commitment Cost Enhancements Phase 1	Interim solution to address natural gas price spikes. Proxy cap increased to 125% and only use-limited on registered.	Q2 2014	Policy complete. Targeted December 1 implementation
Commitment Cost Enhancements Phase 2	Develop opportunity cost adders for use- limited resources and additional clarifications.	Q4 2014	Policy, coordinate implementation with Reliability Services
Reliability Services	Phase 1 focuses on resource adequacy rules and will develop more stringent must offer obligations for use-limited resources.	Q1 2014	Policy, targeted Q1 2016 implementation
Bidding Rules	Longer-term changes to energy and commitment cost bidding.	Q4 2014	Policy

Even with the modifications coming out of the CCE1 process, market participants remain exposed to being unable to recover their gas costs, and it remains difficult to present generating units, especially complex multi-stage generating units. Market participants should not be put in the position of being able to recover their gas costs *most* of the time; the CAISO should provide a structure that allows market participants to recover their gas costs incurred from participating in the CAISO's markets and following CAISO dispatch instructions and market awards *all* of the time. NRG has strongly advocated for modifications to the CAISO's bidding rules that would allow market participants to submit and justify bids above cap levels under volatile gas supply conditions – a structure used by Eastern ISO markets. The CAISO's proposed timing for the CCE2 process relative to the Reliability Services Initiative and other stakeholder initiatives will leave in place a market system in which market participants are exposed to incurring gas costs for following CAISO dispatch instructions and market awards that they cannot recover through the CAISO's current bidding and settlement rules.

- Second, NRG does not support the CAISO's proposed methodology for developing opportunity cost adders. NRG's objections touch on these things.
  - The proposed process for developing opportunity costs adders will be a non-transparent black box to the resource owner. NRG would strongly prefer that the resource owner be permitted to develop the adders themselves, subject to review by the independent entity (Potomac Economics).
  - The use of historical prices to develop future prices is flawed. Future prices should be based on futures information (e.g., ICE forward curves).
  - Given the nascent state of the 15-minute market and the mismatches observed between day-ahead, 15-minute and 5-minute prices, NRG does not support the use of 15-minute prices in the model. We are not convinced that 15-minute prices are yet reliably stable or that 15-minute prices best indicate unit commitment decisions.

In sum, NRG is greatly concerned both about the timing of this initiative relative to other processes that NRG sees as higher priorities and about the process the CAISO proposes to determine opportunity costs.