



Aliso Canyon Gas Electric Coordination

Submitted by	Company	Date Submitted
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Background

PG&E applauds the CAISO's effort to quickly and creatively develop solutions to the challenges associated with limited Aliso Canyon storage. PG&E believes that stakeholder involvement is critical to design and implement a path toward summer reliability under constrained circumstances.

As Aliso Canyon operational constraints and gas balancing limitations will likely reduce real time commitment and dispatch flexibility in southern California, PG&E anticipates greater dependence on northern California generators to meet real time needs. As a result of diminished predictability, northern California generators will face more gas schedule changes in late intraday cycles, higher volatility in PG&E Citygate prices, and greater potential for imbalances. There is greater storage capacity in northern California than in southern, but flexibility on PG&E's system is not unlimited. PG&E is concerned that it may need to call OFOs (or even EFOs) more frequently, and that gas-fired generators in northern California would then be subject to the associated non-compliance charges.

PG&E appreciates the opportunity to work with the CAISO staff on this important issue, and offers the following comments to inform the next steps in the stakeholder initiative. At this stage, PG&E offers comments in two parts: first, an underlying approach and second, items for further consideration.

Comments

Underlying approach

PG&E has outlined a three-prong foundation on which specific proposals can be developed and considered. PG&E strongly encourages the CAISO to keep these guideposts front-and-center while evaluating potential changes, as they reflect the most important attributes of any approach to meeting summer reliability needs in a constrained environment.



1. *Market Timing: The day-ahead market window in place now is still the most effective, and does not require reevaluation.*¹

PG&E does not believe changes to timelines would effectively ameliorate the issues presented by Aliso Canyon limitations; issues related to market times can and should be addressed more effectively within the existing schedule. During the CAISO's Bidding Rules Enhancements Initiative, PG&E's analysis concluded that an earlier Day Ahead market would decrease market efficiency, and result in a risk premium on gas-based bids while providing questionable volume certainty to gas peaking units.²

2. *Geographic Scope: Any proposal to address issues in Southern California will likely impact the broader market.*

Market impacts resulting from Aliso Canyon inoperability and a daily balancing requirement will reach beyond southern California and create new challenges for parties in northern California. Broader market implications, with a focus on real time flexibility across the system, should be carefully evaluated before any change is undertaken to ease the situation in southern California. CAISO analysis of potential changes should also consider whether additional rule modifications are needed in northern California to capture the spill-over effects.

3. *Effective Coordination: Increased coordination between the CAISO, SoCalGas, SCE, and PG&E is essential- before and throughout the summer.*

PG&E must be able to anticipate and react to real-time changes in the constrained market in order to support reliability and market efficiency throughout the summer. PG&E expects situations to arise during which the CAISO needs PG&E generation to supplement southern California demand; advanced warning will help PG&E effectively respond to this need.

For further consideration

PG&E suggests further exploration and/or adoption of several concepts raised by the CAISO in the March 17 Issue Paper and March 23 Stakeholder Call. PG&E urges the CAISO to dedicate additional analysis to these concepts, and looks forward to collaborating as details are developed.

¹ As suggested in Issue Paper page 7: "In light of reduced access to storage due to limited operations of Aliso Canyon, the most effective day-ahead market timeline design might require reevaluation."

² PG&E Comments. Bidding Rules Enhancements Initiative.

https://www.aiso.com/Documents/PGEComments_FERCOrderNo809.pdf



- **Cost Recovery:** PG&E suggests that the CAISO offer cost recovery mechanisms to generators penalized due to a dispatch order occurring after 4:00pm and before midnight (one hour prior to the close of the Intraday 3 gas scheduling cycle³ and the end of the gas usage day). Cost recovery is not necessary or advisable outside of this window, as generators have time to make nominations in accordance with existing tariffs and should have a cost interest in doing so. During that post-Intraday 3 window, however, generators are unable to make adjustments and should be eligible for compensation.
- **Price Flexibility:** PG&E recommends that the CAISO consider allowing generators to adjust their bids in real time to address changes to gas prices intraday. PG&E anticipates significant deviation between intraday and day-ahead prices, and is concerned about market inefficiencies as bids become less aligned with real market gas prices throughout the day. PG&E encourages the CAISO to utilize available tools to more accurately reflect the volatility in the market, as such an approach will help facilitate more efficient dispatch. The CAISO's Department of Market Monitoring (DMM) should evaluate such bids, however, for potential gaming or exercises of market power.
- **Ancillary Service Requirements:** PG&E requests further analysis and simulation testing prior to adjusting the minimum ancillary service requirement limit and/or allocation to other ancillary service regions than SP 15. Though an interesting proposal, one concern with re-allocating the ancillary service requirement to other regions is that, if not modeled properly, transmission constraints could prevent the ancillary service from being delivered. Stranded ancillary services neither benefit resources, which are trying to provide ancillary services to the system, nor solve ancillary service shortages for the CAISO.
- **Virtual Bidding Suspension:** PG&E supports the proposed suspension of virtual bidding in the affected Aliso Canyon area as a temporary mitigation effort. With higher uncertainty in prices for intraday trades, in large part due to non-compliance charges for not meeting requirements, there could be larger deviation between day ahead and real time; this increases PG&E's concern regarding possible manipulation of virtual bids. If such a course of action is taken, PG&E requests that the CAISO and DMM assess the impact of the limited suspension and whether there is analysis indicating a need to expand the suspension of virtual bidding beyond the affected area.
- **Must offer obligations:** PG&E urges the CAISO to clarify how current Resource Adequacy (RA) Must Offer Obligations will align with any proposed changes intended to support electric system reliability in real time. The CAISO's suggestion to "enforce DAM

³ Intraday 3 deadline is 5:00pm beginning April 1, 2016.



commitments for all resource types as binding in real time”⁴ concerns PG&E, as it may conflict with existing must offer obligation rules requiring RA resources to offer into the Residual Unit Commitment (RUC) and Real Time (RT) markets. PG&E also seeks clarification from the CAISO on what action will be taken if resources committed in the DAM are no longer needed if they are binding in the RTM. Additionally, PG&E requests clarification as to what the CAISO means by “limiting RTM instruction to exceptional dispatches”⁵.

- *Potential Reliability Benefits from Imports*: In light of an increased reliance on imports and a newly developed Energy Imbalance Market, PG&E recommends that the CAISO analyze the potential benefits imports could provide to the reliability needs in the Aliso Canyon region.

⁴ March 23 Stakeholder Call presentation, slide 15

⁵ March 23 Stakeholder Call presentation, slide 15