

Decision on Aliso Canyon gaselectric coordination proposal

Board of Governors Meeting General Session Teleconference May 4, 2016

Greg Cook Director, Market & Infrastructure Policy Management initiated an expedited stakeholder process to address operational impacts of loss of Aliso Canyon storage facility on gas fired generators in southern California.

- Gas system expected to be stressed this summer when scheduled gas flows does not match actual gas demand.
- Curtailment of significant amounts of gas to electric generators could occur leading to electric service interruptions.
- Management proposes temporary operational tools and market mechanisms to mitigate the risks to natural gas and electric operations.



Proposed operational tools will provide ISO operators with flexibility to address gas system issues through limiting electric dispatches in the affected area.

- Implement a constraint as needed into the ISO market processes to limit the affected areas gas burn
 - Constraint would be set based on coordination with gas company
 - Applied in day-ahead and/or real-time market
 - Maximum or minimum limit
- Reserve internal transfer capability to respond to realtime load fluctuations or provide contingency reserve into southern California



Proposal includes adjustments to market cost estimates to align market dispatches with gas system conditions in southern California

- Limit real-time commitment of southern California generators to local needs
 - Initially increase commitment cost gas price by 75 percent, capped at OFO balancing penalty price (approximately 300 percent)
 - Account for systematic differences between day-ahead and same day gas prices
 - Improve ability of generators to manage gas usage within gas balancing rules
- Provide additional room to recover gas costs in default energy bids
 - Initially increase default energy bid cost gas price by 25 percent, capped at 100 percent.
 - Direct more incremental energy dispatches to Kern River generators when local market power mitigation occurs
- Future adjustments based on observed gas prices, dispatches to respond to system needs, or other market signals



Other proposed market mechanisms to ensure markets aligned with gas system limitations

- Enable rebidding of commitment costs in the real-time market
- Establish day-ahead gas price index using day-of ICE data in the day-ahead market
- Provide two day-ahead advisory schedules to market participants
- Allow market participants to file with the Federal Energy Regulatory Commission to recover fuel costs.



Proposal also includes additional provisions to mitigate against inefficient market outcomes

- New ISO authority to deem selected transmission constraints uncompetitive due to gas usage constraints in southern California.
- Authority to suspend convergence bidding if ISO identifies market inefficiencies in connection with proposed measures.



Stakeholders support Management's objective to quickly implement new provisions to address the constrained supply conditions this summer

- Stakeholders would like to see further details on the how elements of the proposal will be implemented and used.
 - The proposal includes significant flexibility due to uncertainty of impact of the gas limitations on the southern California electric system
- Some stakeholders concerned that the market provisions only apply to generators in the affected areas of southern California
 - Provisions targeted to southern California to limit real-time dispatches in the area
- Stakeholders request management commit to replacing the proposed short-term provisions with more market based solutions.



Management recommends the Board approve the Aliso Canyon gas-electric coordination proposal

- Proposal provides important functionality to mitigate the reliability impacts of the limited operability of the Aliso Canyon natural gas storage facility.
- Proposal includes flexibility that allows the ISO to adjust the use of the new tools to align with market and reliability needs.
- Proposal includes a sunset date of November 30, 2016 due to need for expedited consideration and implementation.

