

## **Stakeholder Comments**

### **Bidding Rules Enhancements (BRE) FERC Order 809 May 15 Stakeholder Call**

<b>Submitted by</b>	<b>Company</b>	<b>Date Submitted</b>
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The following are Southern California Edison’s (SCE) comments on the California Independent System Operator’s (CAISO) May 15 Stakeholder Call and request for further comments<sup>1</sup>.

SCE questions the CAISO’s approach, asking stakeholders for exhaustive empirical analysis of conceptual support against moving the Day Ahead Market (DAM). Moving the DAM can only imply increased costs coupled with no increase in reliability. If any reliability or cost benefits exist in moving the DAM the onus of demonstrating these benefits is on the supporters of moving the DAM.

Opponents of moving the DAM have provided clear, substantive arguments against moving the DAM, highlighting key differences between the east and west coast situations. SCE does not believe the Federal Energy Regulatory Commission (FERC) asked for a detailed, data-driven case against moving the DAM. Thus, SCE does not understand the CAISO’s motivation toward providing a level of analysis that was not asked for by the FERC.

#### **The FERC Order 809 addresses East Coast system reliability problems**

The FERC issued a 206 Order that “requires each ISO and RTO to adjust the time at which the results of its day-ahead energy market and reliability unit commitment process (or equivalent) are posted to a time that is sufficiently in advance of the Timely and Evening Nomination Cycles, respectively, to allow gas-fired generators to procure natural gas supply and pipeline

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<sup>1</sup> [http://www.caiso.com/Documents/Agenda\\_Presentation\\_FERCOrderNo809.pdf](http://www.caiso.com/Documents/Agenda_Presentation_FERCOrderNo809.pdf)

transportation capacity to serve their obligations, or show cause why such changes are not necessary”<sup>2</sup>. Further, the FERC provided the clarifying example that “RTOs and ISOs could consider the potential benefits, cost, and operational burdens of adjusting the timing of their operating day.”<sup>3</sup> The FERC is clearly interested in considering opportunities to take advantage of the changes from FERC Order 809, if changes would improve gas-fired generator operations but it also intended for RTOs and ISOs to consider the impacts on costs and operational burdens of making those changes.

SCE supports the CAISO’s 2015 Fuel Assurance report to the FERC which concluded, “The Commission should forbear from imposing a new uniform fuel assurance strategy across all organized markets. The Commission should instead continue to assess best practices in each region as well as regional differences and coordinate review and approval of market rule changes and other practices developed to address fuel assurance issues in each region.”<sup>4</sup>

**No reliability problem exists in California and the problems Order 809 is designed to address do not occur here**

The FERC Order 809, and two 206 Orders “were designed to better ensure the reliable and efficient operation of both the interstate natural gas pipeline and electricity systems.”<sup>5</sup> It is clear that FERC places a high value on gas reliability and SCE agrees that gas reliability is crucial to electric grid reliability. However, California has not experienced a gas system reliability issue resulting from a lack of gas transmission capacity. As the CAISO stated in its report to the FERC, “Based a reasonable search and diligent inquiry, the CAISO has not located any record of a natural gas-fired generator notifying the CAISO that the generator had to de-rate a unit during the hours of 3:00 a.m. and 9:00 a.m. Central Time because the generator exhausted its daily nomination of natural gas transportation service prior to the end of the gas day.”<sup>6</sup> The gas system that serves California generators has different characteristics than gas systems in other parts of

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<sup>2</sup> Paragraph 70. Final rule. 4/16/2015. RM14-2.

<http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13842921>

<sup>3</sup> Ibid. Footnote 130.

<sup>4</sup> CAISO’s 2015 FERC Fuel Assurance Report, Docket No. AD13-7, Docket No AD14-8-000, pg 23-24

<sup>5</sup> Ibid. Paragraph 16.

<sup>6</sup> Page 4. Response of the California Independent System Operator Corporation to Data Request on 1/14/2015 in Docket RM14-2. <http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=13736570>

the country because California has built and maintained adequate gas transmission and storage capacity to serve its electric generation resources.

One fundamental difference in California is that most generators are served by gas local distribution companies (LDCs) regulated by the California Public Utilities Commission (CPUC). CPUC regulated pipelines maintain adequate capacity to serve core and noncore gas customers and recover asset costs mostly through volumetric rates. As a result, adequate gas transmission capacity exists to serve peakers and other low load factor customers. The CAISO agreed in its 2015 Fuel Assurance Report, “This provides natural gas-fired resources additional flexibility backed by a robust natural gas transportation and storage system.”<sup>7</sup>

In addition, gas fired generation has been on the margin in California for many years. The 2014 California Gas Report forecasts that California currently has enough gas transmission and storage capability to meet its forecast gas requirements until at least 2035, even in a cold winter, low hydro scenario<sup>8</sup>.

**Since there is no reliability problem, any change in DAM timeline solely concerns financial risk and any change in timing will have other, negative consequences**

In the submitted comments, not a single stakeholder cited inadequate natural gas capacity as a reason to move the DAM earlier. As stated above, the FERC has stated an interest in improving the volume certainty of generators by moving the DAM results earlier so that generators will know their DAM awards in time to make gas market nominations in the gas timely cycle at 11:00 AM PCT.

A careful review of the initial comments shows that parties are not certain that moving the DAM 3 to 4 hours earlier would have the effect of appreciably improving gas volume certainty for generators. Comments from SCE, PG&E, and SDG&E argue that moving the DAM bids earlier would have a detrimental effect on load forecast accuracy. If the load accuracy is reduced, the real time volatility increases. Thus, a gas volume number may be available before the gas timely nomination cycle but if that number is more inclined to change in the Real Time market because

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<sup>7</sup> CAISO’s 2015 FERC Fuel Assurance Report, Docket No. AD13-7, Docket No AD14-8-000, pg 7

<sup>8</sup> Pages 14-24. 2014 California Gas Report.

of less accurate forecasts, then gas volume uncertainty in total may actually increase. The importance of demand and renewable forecast accuracy on fuel predictability was highlighted by the CAISO in its 2015 Fuel Assurance Report.<sup>9</sup>

Some generators have argued that that knowing the DAM awards before the gas timely nomination cycle would improve gas volume certainty. SCE understands the difficulties in procuring gas for peaking units. SCE is the Scheduling Coordinator for over 1,760 MW of fast-start generation. DAM market results are currently issued much before the gas evening nominations cycle are due. Although there may be some reduced liquidity, gas is available to purchase into California in the evening cycle and in two more intraday cycles<sup>10</sup>. In addition, since most of the fast-start generation is actually committed by the RT dispatch, very little if any volume certainty is gained by moving the DAM timeline. CAISO should not change the DAM timeline to accommodate the limited needs of a few generators at the expense of the larger CAISO market.

Currently SCE's operations begin at 5 AM PCT to prepare for 10 AM PCT bid submission. These processes include, but are not limited to: load forecasting and demand bid creation, bilateral power trading, bidding, and tagging, gas trading and scheduling, unit dispatch and fuel burn forecasting, and bid creation and validation for 200+ generating resources and 60+ demand response resources. SCE runs optimization models to forecast the dispatch and fuel burn of its portfolio. By moving the bid submission deadline to 7 AM PCT, most of these processes will also need to be shifted back to accommodate the new timelines. For a number of operational reasons, SCE cannot simply move everything three hours earlier and begin operations at 2 AM PCT, so most of the work will be done the previous afternoon. The impact on forecasting and bid creation will not necessarily be a three hour difference, in reality the difference will be closer to fifteen hours.

SCE finds this impact on the load forecast to be 0.50% mean absolute percentage error (MAPE) additional forecasting error for the summer months super peak period, a 10% increase over current forecast errors. While that appears to be a small difference, on 45,000 MW of peak load

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<sup>9</sup> CAISO's 2015 FERC Fuel Assurance Report, Docket No. AD13-7, Docket No AD14-8-000, pg 9

<sup>10</sup> Response of the California Independent System Operator Corporation to Data Request on 1/14/2015 in Docket RM14-2.

that works out to an average error of 225 MW, or about five 45 MW peakers. SCE's study has found that this results in an expected additional procurement cost of \$3.9M per year to SCE customers for the summer months without considering the additional year-round impact of gas risk premiums on bids, discussed below. In turn, this increases the expected magnitude of changes made in the real time market because load forecasts are less accurate.

Moving the DAM bids earlier would not achieve FERC's primary objective of improving gas reliability or gas volume certainty but it would have an impact on electricity prices.

The DMM report concludes that gas price changes are greater than 10% from one day to the next only 1.6 % of the time. SCE recognizes that on a market level, these price changes may not appear to be significant. However from a generation and load-serving perspective, small gas price movements are very material. As a Scheduling Coordinator for over 9,800 MW of gas-fired generation, even a \$0.01/MMBtu change in gas price is reflected in SCE's bids. Cost pressures affect generators such that they are likely to include a premium for the gas price uncertainty that would be inherent if the CAISO were to move its timeline 3-4 hours earlier into their bids. The premium is not known at this time but a \$0.05/MMBtu risk premium isn't unreasonable to expect. Assuming a marginal heat rate of 7,000 and applied to CAISO's load (~233,000,000 MWh), this represents a cost increase of approximately \$81 million per year to CAISO customers. This is a considerable price for CAISO load to absorb to address a non-existent gas reliability problem.

**Gas price and gas volume certainty will not benefit from moving the DAM earlier and the FERC Order 809 goal will not be realized – there is no reason to move the DAM**

Based on the comments of the parties, SCE believes that moving the DAM will not achieve FERC's primary objective in Order 809, to improve gas reliability to generators. In addition, SCE believes that moving the DAM to 7:00 AM PCT will also not achieve FERC's secondary objective of improving gas volume certainty before the gas timely nomination cycle because it would increase load forecast uncertainty and because many market participants will choose to purchase gas before submitting bids to the DAM rather than wait until the DAM awards are known. Finally, SCE believes that moving the DAM earlier will likely increase power costs and not improve electric reliability.

SCE reiterates its recommendations below:

- 1.** No reliability problem exists in California that will be solved by moving the DAM. California's natural gas infrastructure adequately handles gas volume risk. The primary concern for California consumers is managing price risk, which Alternative 1 makes worse.
- 2.** It is not clear that gas volume certainty will improve. Gas volume certainty is a byproduct of load certainty through the DAM process, and moving the DAM timeline earlier will degrade the accuracy of forecasting load, renewable generation, and hydro generation which will likely increase the changes made in the real time market which would have an adverse impact on volume certainty.
- 3.** The timeline under Alternative 1 will not provide sufficient time to procure and schedule natural gas.
- 4.** California is heavily reliant on power imports to meet its needs. Requiring DAM bids as early as 6:00AM or 7:00AM will significantly impact the CAISO market's participants' ability to procure and bid these imports. Fewer imports can only imply higher clearing prices.