

Stakeholder Comments

FERC Order 809 Comments, Stakeholder Call, May 15, 2015

Submitted by	Company	Date Submitted
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SDG&E appreciates the opportunity to comment on FERC Order 809 and provide supporting information as to why CAISO should file with FERC to keep the existing day-ahead market timeline. SDG&E believes the gas procurement and market operations are most reliable and efficient with the current day-ahead schedule.

FERC Order 809 directs ISOs and RTOs to, with reference to the new natural gas timely cycle timeline, “propose tariff revisions to coordinate its day-ahead market with the changes adopted herein or to show cause why its existing scheduling practices need not be changed.”¹ In the same paragraph, FERC states, “This Final Rule... is designed to better ensure the reliable and efficient operation of both the interstate natural gas pipeline and electricity systems.”²

SDG&E strongly believes the market closing time should remain as is, 10am, and is the best solution for the CAISO Integrated Forward Market (IFM) with respect to *reliability and efficient operations of the natural gas pipelines and electricity systems*. Our comments aim to provide CAISO supporting information and data to file with FERC detailing *why existing scheduling practices need not be changed*.

Reliability in interstate natural gas pipelines is already sufficient and does not improve with an earlier market

Reliability in day-ahead gas procurement and pipeline transportation is the FERC’s main driver for requiring an assessment of aligning the day-ahead market results with the closing of the timely cycle and is a very minor issue for CAISO. CAISO does not experience the same natural gas and pipeline capacity shortcomings seen in the east. FERC identifies the eastern regions at least twice in their Final Rule as the areas of greatest concern. Paragraph 3 and Paragraph 69 both state ISO-NE and PJM are ‘the two regions that appear to be of the most concern.’³ Data provided to the FERC, and

¹ Paragraph 2. Final Rule. 4/16/2015. RM14-2
² Paragraph 2. Final Rule. 4/16/2015. RM14-2
³ Paragraph 3 and 69. Final Rule. 4/16/2015 RM14-2

reported on in the Final Rule, detail the real incidents of de-rates due to running out of gas in ISO-NE, NYISO and PJM⁴.

On the other hand, CAISO also provided data to FERC and 'was not able to locate any record of a gas-fired generator de-rating a unit during the hours of 3:00am and 9:00am CCT due to the generator exhausting its daily nomination of natural gas transportation service prior to the end of the Gas Day.'⁵ As a result, SDG&E believes FERC Order 809 was compelled by the gas supply and pipeline issues arising on the east coast. CAISO has already started to make the case to FERC we do not experience the same reliability concerns in the CAISO system.

Efficient Operations in gas procurement and pipeline capacity stands to improve somewhat by an earlier market

CAISO stated on the last stakeholder call that the peaker generation units are a main consideration in the gas procurement discussion (SDG&E agrees. Please see SDG&E comments filed May 6, 2015 for details on Current Natural Gas Procurement). Overall, this is a relatively small portion of the current natural gas purchasing activity in CAISO. SDG&E agrees there is some benefit to peaker plants if they know their day ahead (DA) award prior to the close of the timely gas cycle. However, this benefit is hard to quantify due to illiquidity in the natural gas market from 10:00-11:00 am PT and the gas purchased based on DA awards might not be the gas needed based on the real time (RT) dispatch.

CAISO and numerous stakeholders have detailed gas trading is most liquid from 5:30am PT to 7:00am PT. If the IFM timeline moved to an earlier schedule, it is possible some trading follows in suit and liquidity improves after 7:00am PT. There is no way to really know how the gas market will respond with a shift in the IFM market timeline, but, in the past, attempts to move the trading time were not successful. Additionally, there is a further concern of possible unintended consequences. If gas marketers know there will be an extra captive market from 10-11am, an additional mark-up may be included at that time.

SDG&E finds the case to move the IFM earlier to ease gas purchasing issues for peakers as a weak argument. Intuition follows that peakers may purchase gas to meet their DA schedule before the close of the timely cycle. But, SDG&E finds DA peaker awards to be vastly different from RT dispatch. SDG&E pulled data from 2014 for our portfolio peaker units and compared DA awards and to RT instruction. SDG&E's peaker fleet was either incrementally or decrementally dispatched, on average, to 116% of DA awards in the fifteen minute market (FMM) and RT market. This means, if 1,000 MWhs are awarded in DA, an additional 1,160 MWhs are dispatched up or down in the FMM and RT markets. Of the instructed deviations from DA, just over 50% of the time were incremental instructions and just under 50% of the time were decremental

⁴ Paragraphs 53-60. Final Rule. 4/16/2015. RM14-2

⁵ Paragraph 50. Final Rule. 4/16/2015. RM14-2

instructions. Correspondingly, gas must be bought and sold to meet these instructions. As a result, DA gas procurement certainty provides minimal real benefit based on the variation of the RT needs.

2014 Peaker Dispatch DA to RT

	Percentage	Example (MWh)
DA Awards	100%	1000
RT incremental or decremental instruction deviation	116%	1160

Reliability of the electricity system is as good with the current IFM market close as it would be with an earlier market close

Reliability is paramount to CAISO. SDG&E does not see a change in this based on a change to market timing.

Resource Adequacy, a reliability construct, will soon have a replacement deadline of 8:00am PT for next day. This deadline gives scheduling coordinators (SCs) a chance to replace RA for the following day, a benefit to reliability and market efficiency. An earlier market close will necessitate an earlier replacement deadline making it much harder to replace for the next day. Efficiency will be lost with substantial process changes. This promises to bring added costs and logistical challenges.

Efficient operations of the electricity system is better, to a degree, under the current IFM market close than an earlier close

Load serving entities (LSEs), SCs and rate payers are estimated to suffer if the CAISO were to move the IFM market close to an earlier timeline. This is because there are many variables which contribute to the efficiency of the market: gas price certainty, load forecasting accuracy, renewable generation forecasting accuracy, imports and exports and gas procurement. All of these inputs are arguably more accurate with access to better information. And, all of these variables receive better information with a later closing market except marginal gas procurement (or the gas procured beyond base load gas) which was discussed earlier.

Certainty in natural gas prices is a big concern for market efficiency when considering moving the close of the IFM to an earlier time. An up-to-date gas price is a critical input for DA commitment costs and incremental energy bids for natural gas based generators. Basic financial theory dictates when there is increased uncertainty, there is an added risk premium. In this case, an earlier market close increases uncertainty of the closing daily gas price. Currently, the liquid gas trading time (5:30am-7:00am PT) is finished by the time SCs must submit DA bids, 10:00am PT. Therefore, SCs have good certainty of what gas prices will be in time to create and submit bids for the DA market. However, an earlier market close time will increase uncertainty of the natural gas price.

CAISO issued a report showing natural gas price volatility does not present a great risk. However, the report clearly shows there is some change day over day in gas prices. Thus, this is the foundation for increased uncertainty. And, theory follows, uncertainty implies an added risk premium. This added risk premium does not have to be much to make an impact on the CAISO DA market. A small risk premium in generation bids may very well result in upward pressure of all DA settling prices. This stands to create additional cost shouldered by Load. This is not good for market efficiency.

Degradation of forecasting information is another concern for market efficiency. Some examples are Load forecasting and VER forecasting. LSEs must collect weather information to forecast Load needs for DA procurement. And, with FERC 764, VERs can now more actively bid in the DA market. But, these DA bids are based on VER forecasts. If there is any perceived VER forecast degradation, SCs will hold VER bids to the RT market so as not to be exposed to any large imbalances. At the Market Pricing and Planning (MPP) Forum, the ISO continues to ponder why SC do not bid the full forecast of VERs in the DA market. It is estimated this issue will not improve with an earlier market and uncertainty of VER forecasting. In fact, this then becomes a greater issue possibly affecting the RT market. If VERs are conservatively bidding DA, the RT market will have to absorb a proportionally larger amount of VER generation (and the DA market may likely be blind to this generation). RT prices will respond accordingly.

The amount of degradation in both cases is hard to quantify in such a short commenting period. Over the past week, we did collect a sample of Load forecasts from 5:30am PT and the update at 9:30am PT. San Diego had a very mild week so there was not a notable change. But, on peak hot days, the update in the 9 o'clock hour can make an important increase in accuracy.

Overall, the CAISO must consider the net benefit of possibly a small improvement in gas procurement for peaking units in the day-ahead timeframe while increasing risk for gas prices used in energy bid creation and possible degradation of forecasting data used in load procurement and variable energy resource (VER) forecasting. SDG&E believes the uncertainty imposed by moving the IFM earlier will result in a less efficient market and added costs.