Comments of Pacific Gas and Electric Company
Bidding Rules Enhancements Straw Proposal 4/22/2015: FERC 809

Submitted by	Company	Date Submitted
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Pacific Gas and Electric Company (PG&E) offers the following recommendations on the California Independent System Operator's (CAISO) Bidding Rules Enhancements April 22nd Straw Proposal. As requested by CAISO, PG&E will focus these comments on the FERC Order 809 section of the proposal.

FERC issued Order 809 in April 2015, which maintained the current national Gas Day schedule, made several schedule changes to the gas nomination deadlines, and added a new intra-day gas nomination cycle.[1] The CAISO has requested feedback from stakeholders on any changes to the CAISO's Day Ahead (DA) electricity market schedules that are necessary to accommodate the FERC ordered change to the gas nomination deadlines. PG&E does not believe changes to the CAISO electricity market schedule is required to accommodate FERC Order 809, and as such supports Alternative 2 (Status Quo) in the Bidding Rules Enhancements Straw Proposal.

PG&E's main points are:

- PG&E supports CAISO's Alternative 2: maintaining the status quo DA market schedule that will maintain the current ability to obtain gas price certainty before the close of the DA market.
- PG&E does not support CAISO's Alternative 1: moving the DA market earlier in the day (closing at 7:00 a.m., publishing results at 10:00 a.m.).
- PG&E does not support CAISO's Alternative 3: moving the DA market later in the day (closing at 12:00 p.m., publishing results at 3:00 p.m.).

I. PG&E supports CAISO's Alternative 2: maintaining the status quo DA market schedule that will maintain the current ability to obtain gas price certainty before the close of the DA market.

PG&E does not expect the Timely Nomination Cycle deadline change required by FERC Order 809 to affect natural gas trading/purchasing timelines. We therefore support maintaining the status quo DA market schedule because it will ensure the opportunity for

[1] Federal Energy Regulatory Commission, Docket No. RM14-2-000; Order No. 809, April 16, 2015.

natural gas price certainty before the close of the DA market without any unintended consequences.

The gas scheduling deadlines are times gas must be nominated on the pipeline's electronic bulletin boards for physical flow. Trading can take place all the way up to the scheduling deadline. Currently, the majority of volumes traded for next-day gas take place before 9:00 a.m. on the Intercontinental Exchange (ICE), half an hour prior to the Cycle 1 Timely Nomination Scheduling deadline. However, gas can continue to trade after this time, bilaterally, between any two counterparties.

It is unclear whether moving of the Cycle 1 Timely Nomination Scheduling deadline from 9:30 a.m. to 11:00 a.m. will have any impact on gas trading liquidity. Given that physical and financial gas trades concurrently and the financial gas market trading times are not directly impacted by the scheduling change, PG&E expects the bulk of the gas trading will continue to take place at the same time as it does today, prior to 9:00 a.m.

Market participants will continue to use ICE trading as a gas price signal when developing their market bids. CAISO should confirm if the ICE price publishing schedule will change as a result of FERC 809. A change of the ICE price publishing schedule could warrant reconsideration of the CAISO's electric market schedules.

II. PG&E does not support CAISO's Alternative 1: moving the DA market earlier in the day (closing at 7:00 am, publishing results at 10:00 am).

The intended purpose of the CAISO's proposed Alternative 1 is to achieve gas volume certainty by establishing electricity market awards before gas trading occurs. PG&E does not believe that Alternative 1 would achieve this intended purpose of providing gas volume certainty because, as noted above, we expect gas trading activities to take place before 9:00 a.m. as they do today. Therefore, any dispatch instructions received at 10:00 a.m. would be received after the bulk of gas trading/purchasing is expected to have taken place.

Furthermore, PG&E does not believe gas volume certainty is a major concern in California. Unlike some ISOs in the East, there is sufficient pipeline capacity and storage in California which allows Local Distribution Companies (LDCs) to provide liberal balancing services. This in turn negates the benefits of volume certainty. PG&E believes gas price certainty should be a higher priority for CAISO market participants.

As PG&E indicated in the Gas-Electric Harmonization effort, we are concerned that buying gas after the electric market closes carries a bigger cost risk than purchasing as first as we do today. This is because using the "best guess" gas prices will impact a broad electric market (much of which is not gas fired) and the effects would be multiplied due to the market clearing price impacts. PG&E has estimated that a one cent ($0.01/mmBTU) increase in the "expected" gas price would result in a $20 million total impact for CAISO market load per year. PG&E does not support introducing this level of pricing risk into the CAISO market, as the benefits to gas volume certainty are negligible.

PG&E also has the following concerns about moving the DA market earlier in the day:

- Moving the DA market earlier in the day makes load and VER forecast uncertainties greater. Forecasts generally become more accurate the closer to the start of the Electric Day. CAISO's Alternative 1 would introduce an additional 3 hours of separation between the forecasts it uses in optimization and the actual market interval being forecasted.

- Moving the DA market earlier in the day may decrease the quality of price forecasts (for self-commitment) adversely impacting market efficiency. Bilateral energy trading happens in the morning; these bilateral prices inform market participant commitment/self-schedules. Moving the DA market earlier could compromise market participant understanding of bilateral prices.

- Moving the DA market earlier in the day may reduce bilateral trading volume. Bilateral market participants may choose not to trade ahead of the earlier DA market, possibly pushing trading into the afternoon for the day after next, rather than the next day. This could lead to more self-schedules in the DA market.

- The portfolio and resource optimization process may be less effective from a human performance perspective if such a process were to be conducted in the very early morning hours (necessary to support a 7:00 a.m. market close). Further, there could be a risk that such optimization processes would gravitate to the afternoon the day-before in order to reduce these human performance impacts, however this may in-turn reduce the accuracy of the optimization process.

III. PG&E does not support CAISO's Alternative 3: moving the DA market later in the day (closing at 12:00 p.m., publishing results at 3:00 p.m.).

The intended purpose of the CAISO's proposed Alternative 3 maintain price certainty by allowing gas trading to occur before resources receive day ahead awards, and addressing any fuel imbalances in the evening nomination cycle (at 4:00 p.m.). As described in our comments above, price certainty can already be achieved by maintaining the status quo

DA market schedule described in Alternative 2 without negatively impacting other operations. In addition, the longer PG&E has to wait to get DA awards, the less optionality we have to procure gas for Intraday (Cycle 4) and Evening Cycle (Cycle 2). PG&E is also concerned with the impact of a later DA market on the import/export tagging process, and the ability of CAISO to rely upon Demand Response (DR) programs.

Moving the DA market later in the day may adversely impact market participants' ability to tag import/exports between CAISO and other entities in the WECC. Currently, tagging occurs in the afternoon after the CAISO DA market results are released (approx. 1:00 p.m. Pacific) and before 3:00 p.m. Pacific. The current 3:00 p.m. Pacific deadline is synched up with other WECC entities.

If DA market results are not published until 3:00 p.m., this will not allow sufficient times for CAISO entities to tag their imports/exports and resolve any problems, and we would no longer be in alignment with the WECC tagging process. This could limit the ability of CAISO entities to transact bilaterally on the interties and could possibly reduce the willingness of participants to offer import/export bids in the CAISO's DA market. Given CAISO's reliance on import energy, reducing opportunities for market participants to trade on the interties could create reliability concerns.

Moving the DA market later in the day would also impact the CAISO's ability to call Demand Response programs. For example, some of PG&E's DR programs are designed for 2:00 pm to 3:00 pm notifications, in alignment with the current DA market schedule. Some of our current DR resources may not be available to the CAISO to call post 3:00 pm when the CAISO proposes to publish the DA market results.