

**Comments of CalPeak Power, LLC and Malaga Power, LLC on CAISO's
Bidding Rules Enhancements Straw Proposal, dated April 22, 2015
Comments Only on Questions Relating to FERC Order 809**

Submitted May 6, 2015

CalPeak Power, LLC ("CalPeak") and its affiliate Malaga Power, LLC ("Malaga Power") (hereinafter collectively "CalPeak Affiliates") appreciate this opportunity to provide comments on the CAISO's *Bidding Rules Enhancements Straw Proposal*, dated April 22, 2015, ("*Straw Proposal*") with respect to questions relating to implementation of FERC Order 809.

A. Background

CalPeak's subsidiaries, CalPeak Power – Border LLC, CalPeak Power – Enterprise LLC, CalPeak Power – Panoche LLC and CalPeak Power – Vaca Dixon LLC (CalPeak and its four subsidiaries are collectively referred to herein as the "CalPeak Companies"), operate four substantially identical peaker plants. Two of them, CalPeak Power Border Unit 1 ("Border") and CalPeak Power Enterprise Unit 1 ("Enterprise"), are located in SDG&E's electric and gas service territories. The other two, CalPeak Power Panoche Unit 1 ("Panoche") and CalPeak Power Vaca Dixon Unit 1 ("Vaca Dixon" and collectively with Border, Enterprise and Panoche, the "CalPeak Units"), are in PG&E's electric and gas service territories. All four utilize Pratt & Whitney, Model FT8-2 TWINPAC. The Pratt & Whitney, Model FT8-2 TWINPAC utilizes a Dry Low NOx combustor technology that can achieve lower emissions without using water or steam to reduce combustion temperature. Each TWINPAC is comprised of two combustion turbines ("CT") that, singly or together (a multi-stage generator or MSG), turn a single Brush Synchronous Machine, Model BDAX7-290ER, rated at 71,176 kVA, 3,600 RPM, 13.8-kV, and 2,977.8 Amps. In a 2-on-1 configuration, *i.e.*, with both CTs operating at each unit, the minimum generation ("PMin") in this configuration for each power plant is 44 MW and the maximum generation ("PMax") values range between 48 and 52 megawatts ("MW"), depending on the unit. In a 1-on-1 configuration, *i.e.*, with one CTs operating at each unit, the PMin in this configuration for each power plant is 44 MW and the PMax values range between 48 and 52 MW, depending on the unit. The CalPeak Units have heat rates, in the range of 10,588-12,370, again depending on the unit's MSG configuration.

In addition to their real power generating capability, each TWINPAC is designed as a dual-mode capable generator /synchronous condenser. Each resource is nominally rated at 50 MW real power generating, 60 megavar reactive power producing ("MVAR") and 19.5 MVAR reactive power absorbing. The TWINPAC's industrial aeroderivative combustion turbine generator packages enable them to be used not only as generators, but also as synchronous condensers to provide voltage support (including reactive power and active power control). It needs to be pointed out that no fuel or water is consumed by these resources while they are operating in synchronous condenser mode.¹

¹ See CalPeak's comments in the CAISO's Reactive Power for Asynchronous Resources Issue Paper and Straw Proposal, available at http://www.caiso.com/Documents/CalPeakPowerComments_ReactivePowerRequirements_AsynchronousResources_IssuePaper_StrawProposal.pdf

Name of Facility (Including Unit Number)	CAISO Resource ID	Generator Mode Net Qualifying Capacity MW	Generator Mode Overexcited (Lagging) "+" MVAR Capability @ 15 deg C	Generator Mode Underexcited (Leading) "-" MVAR Capability @ 15 deg C	Synchronous Condenser Mode Overexcited (Lagging) "+" MVAR Capability @ 15 deg C	Synchronous Condenser Mode Underexcited (Leading) "-" MVAR Capability @ 15 deg C
CalPeak Power Border Unit 1	BORDER_6_UNITA1	48	16	-16	60.5	-19.5
CalPeak Power Enterprise Unit 1	ESCNDO_6_UNITB1	48	16	-16	63.5	-19.5
CalPeak Power Panoche Unit 1	PNOCHE_1_UNITA1	48	16	-16	60.5	-19.5
CalPeak Power Vaca Dixon Unit 1	VACADX_1_UNITA1	48	16	-16	60.5	-19.5

CalPeak’s affiliate, Malaga Power, LLC, acquired title to the Malaga Power Plant on April 14, 2015. This is a 98 MW peaker located near Fresno, California, in PG&E’s service territory. This power plant was previously owned by Kings River Conservation District and operated under contract with the Department of Water Resources. The power plant is now a merchant participating generator in the CAISO.

Because the CalPeak Affiliates only operate peakers, the natural gas used to run its power plants is generally purchased only after its peakers are selected by the CAISO to run. If units are selected to run in the day-ahead market, arrangements to ensure an adequate of natural gas are generally made the day before the unit is to run. If the units are not selected to run in the CAISO day-ahead market, but are committed in the fifteen-minute market or real-time market, natural gas is often purchased for same-day delivery. Since the CalPeak units are all relatively dispersed small to moderate-sized peakers, natural gas is purchased for each peaker separately - the CalPeak Affiliates have little to no capability to aggregate natural gas procurement and it is not typically possible to resell or reallocate natural gas to an affiliate. Due to the inherent variability of the schedule on which peakers run, it is not feasible to hedge natural gas price risks.

B. General Comments

CalPeak believes that major changes are needed to the CAISO’s bidding practices and is encouraged that the CAISO has opened this proceeding to consider major changes. The CAISO must make changes to its bidding practices to ensure that generators like the CalPeak Affiliates will receive adequate compensation for generating energy at their power plants. As the CAISO knows, peakers are essential for maintaining reliability. As more intermittent renewable resources are added to the system, it will become increasingly important for the CAISO to be able to call on peakers to help balance the grid. And, in light of the unprecedented drought we are all experiencing here in California, CalPeak’s somewhat unique Dry Low NOx combustor technology units are able to operate within emission compliance limits without the use of scarce water resources.

C. Response to Questions Regarding Implementation of FERC Order 809

1. (a) *How much gas do you procure through the Timely market?*

A: Due to the CAISO’s current timeline for publishing day-ahead market results of 1:00 p.m. PCT (Pacific Clock Time), the “Timely” natural gas market nomination deadline of 11:30 a.m. CCT (Central Clock Time), which is only 9:30 a.m. PCT, and given the above average marginal heat rates of its peakers, the CalPeak Affiliates are effectively unable to plan unit commitments, procure, and then schedule natural gas in the “Timely” gas market cycle.

(b) *How would that change with the new nomination deadline?*

A: If, under FERC Order 809, the new “Timely market” nomination deadline, is moved from 11:30 a.m. CCT (Central Clock Time) to 1:00 p.m. CCT, or 11:00 a.m. PCT, nothing would change for the CalPeak Affiliates. However, if CAISO’s market timeline were moved up for publishing day-ahead market results to at least an hour or more before 1:00 p.m. CCT / 11:00 a.m. PCT, the CalPeak Affiliates would be able to plan for their day-ahead market unit commitments and procure and schedule natural gas in the “Timely” gas market cycle. This would be a significant improvement over the current situation.

(c) *Does the deadline impact operations (e.g., leads to more self-scheduling or less economic bidding in the real-time)?*

A: An earlier CAISO deadline will improve operation of the CalPeak Affiliates’ peakers by allowing more time to plan for day-ahead unit commitments and to procure and schedule natural gas in the “Timely” gas market cycle. The CalPeak Affiliates do not believe that moving up the deadline necessarily leads to more self-scheduling or less economic bidding in the real-time market. As merchant resources, the CalPeak Affiliates will continue to do economic bidding in the fifteen minute and real-time markets during periods they are not already committed in the day-ahead market. If the units don’t run, they do not earn any revenue. Changing the deadline will not increase or decrease participation in the market, rather, it simply reduces some of the uncertainty and risk around gas procurement. This should lead to lower costs for market participants and translate into a more efficient market overall.

The current market timelines offer a competitive advantage only to the largest market participants who have large and diverse asset portfolios and can leverage gas procurement in the Timely cycle. For the smaller market participants, better alignment of the markets will enable them to be more competitive and participate on a more equal footing. Therefore, the CalPeak Affiliates support moving up CAISO publishing day-ahead market results to at least an hour or more before 1:00 p.m. CCT / 11:00 a.m. PCT.

2. *Are the 3 alternatives appropriate and viable for market participants? Are there more alternatives?*

A. The CalPeak Affiliates believe that the CAISO has only put forward one appropriate and viable alternative, which is its Alternative 1, changing the hours the day-ahead market runs to earlier in the day such that the day-ahead schedules are available before the Timely Nomination deadline. *See Straw Proposal* at 15. The CalPeak Affiliates need the day-ahead results to know how much natural gas to procure before the Timely Nomination deadline. The CalPeak Affiliates believe the only real question is exactly when the CAISO market should begin and end to provide generators adequate time to line up natural gas supplies. The CAISO’s *Straw Proposal* suggests the CAISO market would run from 7:00 a.m. to 10 a.m. Pacific time, which CalPeak supports. This should provide adequate time to secure natural gas supply. To reiterate, the CalPeak Affiliates support moving up CAISO publishing day-ahead market results to at least an hour or more before 1:00 p.m. CCT / 11:00 a.m. PCT.

3. *What are the benefits and concerns for each alternative? Please be explicit and describe both operational and financial impacts.*

A. As indicated in response to the question above, the CalPeak Affiliates believe that Alternative 1 is only appropriate and viable alternative. When FERC issued the order which requires the CAISO to respond shortly, it made it clear that FERC thought there was good cause for having electricity markets close before the Timely Nomination deadline. *See “Order Initiating Investigation into RTO and ISO Scheduling Practices and Establishing Paper Hearing Procedures,”* 146 FERC ¶ 61,202 (2014) (“Show Cause Order”). For instance, FERC stated:

ISOs and RTOs noted in the technical conferences held in Docket No. AD12-12-000 that the misalignment between their day-ahead schedules and those of the natural gas industry can create difficulties in ensuring reliable service to their customers, might result in less cost-effective and efficient scheduling of gas-fired electric generators, and might result in less cost-effective use of resources.

Show Cause Order at ¶ 14. Moreover, FERC made it clear that it understood that in markets like the CAISO's where day-ahead scheduling is not completed before the Timely Nomination deadline, generators were being forced to take risks. As FERC stated:

Under the current scheduling timelines, a gas-fired generator in an ISO or RTO market that completes its scheduling after the Timely Nomination Cycle must decide whether (a) to line-up supply and nominate interstate natural gas pipeline transportation during the Timely Nomination Cycle without knowing whether the gas-fired generator's electric energy bid will subsequently clear the energy market; or (b) to wait to see whether its bid clears the energy market, and then line-up fuel supply and natural gas pipeline transportation in a later nomination cycle. If a generator acquires natural gas and transportation prior to learning whether it is dispatched, it runs the risk of having to dispose of its natural gas supply and interstate natural gas pipeline transportation capacity during the less liquid Evening or Intra-Day nomination periods. However, if the generator first waits to see if its bid clears the day-ahead market, it must try to acquire natural gas and transportation during the less liquid Evening or intra-day gas transportation nomination cycles. In this event, the generator runs the risk of potentially not being able to find transportation capacity if the pipeline is fully scheduled.

Show Cause Order at ¶ 15 (footnotes omitted). Because of the benefits of having the market close before the Timely Nomination deadline, FERC required ISOs to propose modifications to their tariffs to have the market end before the Timely Nomination deadline or show cause why their existing scheduling practices should not be changed. Show Cause Order at ¶ 14.

It appears, nonetheless, that the CAISO is pre-disposed to reject Alternative 1 since it does not reflect the status quo in the CAISO. The Straw Proposal indicates that "The ISO's current process philosophy is in contrast to other RTO's and FERC's Order 809's intent to provide generators with an understanding of their electric dispatch obligations before the day-ahead timely nomination cycle for gas scheduling." *Straw Proposal* 15. In the FERC rulemaking docket leading up to FERC Order 809, the CAISO recently defended the CAISO's status quo. In particular, in response to a question posed by FERC, the CAISO explained:

The CAISO's day-ahead market closes at 10:00 a.m. Pacific Time the day prior to the operating day. This timing occurs after the natural gas timely nomination cycle by design, so market participants have the opportunity to purchase the bulk of their gas prior to submitting bids into the CAISO market thereby allowing for greater price certainty when scheduling coordinators for natural gas-fired generators submit day-ahead energy bids. When the CAISO issues day-ahead market awards, participants can purchase any incremental natural gas in the evening nomination cycle since CAISO issues day-ahead market results in between these two cycle timings. The CAISO clears the vast majority of its real-time energy needs through the day-ahead market and generally has predictable forecasts of electric load. As a result, natural-gas fired generators generally have a clear understanding of their fuel needs across the entire operating day, including the morning electric ramp. This visibility provides

an opportunity for natural gas-fired generators to balance their transportation service over the gas day.

See Comments of the CAISO in FERC No. RM-14-2, dated January 14, 2015, at 6-7. The CalPeak Affiliates do not believe that what the CAISO told FERC is correct with respect to its peakers. In particular, the statements in italics below are incorrect, for the reasons given:

1. *“[M]arket participants have the opportunity to purchase the bulk of their gas prior to submitting bids into the CAISO market thereby allowing for greater price certainty.”*

The CAISO’s comments ignore the reality that while market participants may have an opportunity to purchase gas in advance of bidding, for peakers this does not happen in actual practice for smaller market participants. Since the CalPeak Affiliates only operate their peakers when called upon by the CAISO, it is highly desirable for the CalPeak Affiliates to know that their peakers have been called upon in the day-ahead market before committing to buy natural gas in the day-ahead market. Moreover, CalPeak has often found that on days when it did not receive an award in the day-ahead market, it is called upon to run in the real-time market, necessitating last minute purchases of natural gas and being exposed to physical supply and price risks.

2. *“When the CAISO issues day-ahead market awards, participants can purchase any incremental natural gas in the evening nomination cycle since CAISO issues day-ahead market results in between these two cycle timings.”*

The CalPeak Affiliates have found that in practice it is easier and less expensive to procure natural gas before the Timely Nomination deadline. As FERC has correctly observed, this is the time at which the market is most liquid. Show Cause Order at ¶¶ 9, 12. As a practical matter, the CalPeak Affiliates have found that after 2:00 p.m. to 3:00 p.m. Pacific time, which is 4:00 p.m. - 5:00 p.m. CCT, it is very difficult, and is often impossible, to obtain natural gas supplies for next day or same day delivery. Thus, it is not desirable to put participants in a position where they must purchase incremental natural gas in the evening nomination cycle, which ends at 6:00 p.m. CCT. Any gas procured during these late cycles, if it can be purchased and actually scheduled, comes at a “Spot” market price. Sellers of any goods or services can testify to the fact that last minute buyers that must have a certain product delivered today or tomorrow effectively are price takers and have little room to negotiate. Small market participants are at a significant disadvantage under these circumstances and are subject to paying gas prices that do not align with CAISO’s proxy gas price assumptions. Simply put, the status quo only serves the interests of the largest market participants who can leverage a large and diverse portfolio.

3. *“Natural-gas fired generators generally have a clear understanding of their fuel needs across the entire operating day, including the morning electric ramp.”*

The CalPeak Affiliates do not and cannot have a clear understanding of their fuel needs across the entire operating day. The CalPeak Affiliates have found that when they get day-ahead awards they often are not called upon and when they are not called upon in the day-ahead market they are called upon in the real-time market.

Rather than agreeing with the CAISO, the CalPeak Affiliates agree with FERC and the ISOs and RTO’s like the New England ISO which have moved up the close of their electricity markets to help ensure the availability of natural gas supplies. See, e.g., *ISO New England*, 143 FERC ¶ 61,065 (order accepting NEPOOL’s proposal to move the close of the day-ahead market earlier in the day).

While FERC has not required the CAISO to move up the close of its day-ahead market, the CAISO should do so. Moving up the CAISO market is consistent with FERC's Show Cause Order and its decision in Order 809 to move the Timely Nomination deadline from 11:30 a.m. CCT to 1:00 p.m. CCT. By changing the Timely Nomination deadline, FERC has given the CAISO sufficient time to run its day-ahead market in the morning before generators must purchase natural gas supplies.²

4. Is CAISO differently situated than other organized markets? How so?

It appears that Order 809 was motivated largely by electric and natural gas coordination issues in the East that have become acute at times because of inadequate natural gas pipeline capacity. While natural gas pipeline capacity problems may not be as acute in California as they have been in the East in recent years, such problems do exist. For example, there are natural gas capacity supply constraints in the San Diego area.

As the CAISO is well aware, natural gas capacity constraints can cause natural gas price spikes. Such natural gas price spikes have occurred in organized markets in the East as well as in the West, so all organized markets have a need to appropriately address natural gas price spikes.

Overall, it does not appear that the situation in the CAISO differs significantly from the situation in other organized markets.

² The Straw Proposal suggests that an additional problem with Alternative 1 is that it "would likely make the manual process developed to update day-ahead gas prices on the day of a gas price spike infeasible." *Straw Proposal* at 15. The CalPeak Affiliates do not believe this is an adverse impact of Alternative 1. As the CalPeak Affiliates will explain in comments to be filed by May 13, changes should be made to the bidding practices which make this manual process unnecessary.