

Comments on Commitment Cost and Default Energy Bid Enhancements Straw Proposal

Department of Market Monitoring

July 21, 2017

The Department of Market Monitoring (DMM) appreciates this opportunity to comment on the ISO's proposed enhancements to Commitment Cost bidding and Default Energy Bids. Many of the items in this straw proposal are clear improvements over the policy ISO staff described during the working group meetings earlier this year. However, many details remain unclear. DMM strongly recommends that the ISO work out these details in the policy development process prior to seeking approval from the Board or FERC. In particular, DMM has concerns on the following aspects of the proposal.

1. General comments

As an initial matter, DMM continues to recommend the ISO consider a staged approach to this initiative, in which the first stage is focused on developing the capability to update gas prices used to calculate real-time commitment cost bid caps and default energy bids used to cap energy bids when local market power mitigation is triggered. DMM has provided a detailed proposal for this approach.

Analysis by DMM shows that implementing the first stage of this approach virtually eliminates the chance that prices for gas procured in the same day market are such that a generator cannot recover their costs without bidding above the 25 percent headroom normally included in caps used to limit commitment cost bids.¹

Figure 1 shows same day trades compared to an average of the same day trades at the SoCal Citygate taken at 8:30 a.m over the period of June through October 2016. This chart highlights the low variability when same day trades are compared to an average taken at 8:30 a.m.

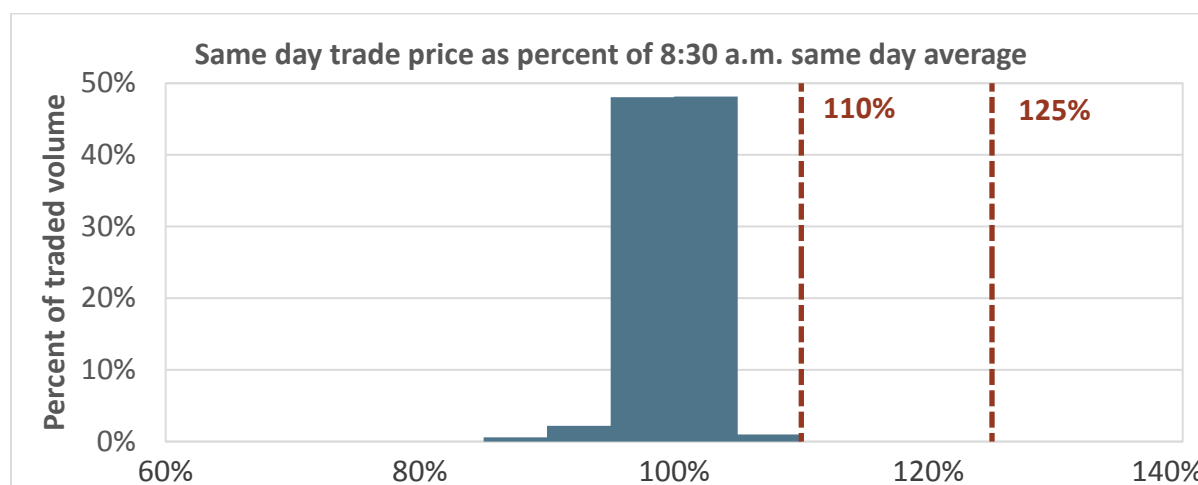
If the ISO is concerned that DMM's approach would not be approved by FERC because it involves calculating a gas "index," based on ICE prices, DMM's proposal can be easily modified so that it is clear that this approach simply allows the ISO to utilize available market information to develop its own estimate of what gas price should be used in pre-validating any commitment cost bids or cost-based energy bids submitted by participants that exceed the caps currently calculated using next day price indices. This approach is the same as that used by other ISO market monitors to validate bids used in mitigation, and should clearly be approved by FERC.

¹ Memorandum to ISO Board of Governors, Eric Hildebrandt, July 19, 2017.

http://www.caiso.com/Documents/Department_MarketMonitoringUpdate-Memo-Jul2017.pdf

² For more information, see: <http://www.caiso.com/Documents/DMMComments-CommitmentCostsandDefaultEnergyBidEnhancementsIssuePaper.pdf>

Figure 1: Same day trade price as percent of 8:30 a.m. same day average²



2. Bidding and mitigation of commitment costs

DMM supports efforts to allow more flexibility for bidding of commitment costs. The level of flexibility allowed should correspond to the level of confidence in the proposed mitigation system to limit the exercise of market power or the creation of excessive bid cost recovery payments with bids that significantly exceed actual commitment costs.

The ISO has provided very little detail on how it plans to implement commitment cost mitigation. The ISO has only provided a broad description of its intended design in two paragraphs on pages 34-35. This limited description indicates that the ISO's intended design relies on a significant misunderstanding of constraint shadow prices, as discussed in the following paragraph. This type of fundamental technical flaw in what the ISO has proposed causes DMM concern about the numerous other details the ISO would need to develop in order to complete an effective design for mitigating commitment cost bids.

The ISO's discussion and proposals for mitigation of commitment costs do not include any details on key mechanics of the Dynamic Competitive Path Assessment (DCPA) and Local Market Power Mitigation (LMPM). The very limited detail in the proposal reveals that the ISO's plan for mitigating commitment costs depends on non-binding constraints exhibiting positive shadow prices. Mathematically, non-binding constraints will always have shadow prices of zero. Thus, the proposed mitigation could not detect market power being exercised on non-binding constraints. In its current form, the ISO's proposal does not appear to be fully worked out.

Development of the details of how commitment cost mitigation will work is a fundamental aspect of this policy initiative. Therefore, DMM will not support approval of a proposal to substantially raise commitment cost bidding caps unless the proposal much more clearly defines the formulas that will be

² For more information, see: <http://www.caiso.com/Documents/DMMComments-CommitmentCostsandDefaultEnergyBidEnhancementsIssuePaper.pdf>

used to implement commitment cost mitigation. Even after such policy development, due to the complexity of this issue and potential for unexpected interactions between different software features and inputs, DMM believes it will likely be necessary to test the effectiveness of market design changes as they are implemented in the market software.

Constraints other than transmission constraints that create commitment cost market power

Many types of constraints besides transmission constraints will need to be measured for competitiveness and to be able to signal a need for bid mitigation. DMM has commented on this issue in past rounds of this initiative,³ but has not seen any movement on the issue from the ISO.

The timing of the DCPA and the timing and length of bid mitigation are other issues that DMM believes should be addressed in policy development. The ISO's proposal does not describe how often the special commitment cost related DCPA would be run, when it would be run in relation to binding market runs, and whether or not it would apply to all advisory intervals in a given market run or just to the binding interval or to something in between. In the ISO's proposal, a resource that is determined to have market power will be mitigated for up to one hour. However, many resources have minimum run times that are longer than one hour, and may need to be mitigated at least for their minimum run time.

In addition to the issues identified above, DMM believes that the ISO should encourage stakeholder input to identify other scenarios in which a resource can be switched on or 'stuck' on in a way that would allow high bids to pass through the market without real competition.

Treatment of net buyers in commitment cost mitigation

Moreover, the ISO's proposal does not contemplate the need to broaden the scope of entities that can be categorized as potentially pivotal suppliers in order to adequately assess market power related to commitment costs. In energy bid mitigation in the ISO's markets, entities who are net buyers of energy are not considered to be potentially pivotal suppliers. The theory behind this treatment is based on the assumption that these entities generally pay out more money for energy consumption than they receive for sales. Therefore, they do not prefer higher prices and do not have the incentive to try to raise prices.

Even if a net buyer of energy is one of the three largest suppliers of counterflow to a constraint, it is appropriate to still include that net buyer's supply of counterflow in the calculation of competitive counterflow energy for each constraint. This reflects the fact that net buyers can essentially self-supply some of the counterflow needed to meet demand.

This logic does not extend to the exercise of market power through inflated commitment costs. Entities with market power related to commitment costs realize the profits from inflating their commitment costs through bid cost recovery payments. If a net buyer of energy, such as a major investor owned utility, receives \$1 of bid cost recovery payments, other load serving entities are obligated to cover the cost of more than half of that payment. Therefore, even the largest current load serving entity in the ISO will receive more than a 100 percent profit from each dollar of extra bid cost recovery payments that it could generate for itself through the exercise of commitment cost based market power.

³ For example, see:

http://www.caiso.com/Documents/AdditionalDMMComments_CommitmentCosts_DefaultEnergyBidEnhancements_IssuePaper.pdf.

Net buyers of energy that can exercise market power related to commitment costs may also have the incentive to exercise this market power in order to suppress energy prices. If a net buyer of energy has market power, it could get its generation units committed despite unmitigated and excessively large commitment cost bids. The net buyer could submit artificially low energy bids for the rest of the output of these units and contribute to suppressing energy prices. These low energy bids can also help get a unit committed despite high commitment cost bids. The net buyer of energy could rely on bid cost recovery payments from its inflated commitment costs to help it recover its total operational costs despite energy prices significantly below the costs of the unit operating above its minimum output level.

Net buyers of energy have clear incentives to exercise market power related to commitment costs. Therefore, in any pivotal supplier test designed to mitigate the exercise of commitment cost based market power, net buyers of energy must be considered along with all other companies as potentially pivotal suppliers. This will be a significant change from the incremental energy market. In the energy market, the incentives of net buyers, in conjunction with the sizable share of supply they control, has contributed to a generally competitive system. The market for resource commitments is subject to different incentives and is likely less competitive. Opportunities to exercise market power, and therefore bid mitigation, will likely be much more common for commitment costs than for marginal energy bids.

Supply and demand for counterflow

The ISO's proposal should also define how it plans to calculate supply and demand for counterflow to non-binding constraints. These are critical aspects of the DCPA. Using the same method to calculate the supply and demand for counterflow for both binding and non-binding constraints could often result in the automated DCPA process deeming non-binding competitive constraints as non-competitive or non-binding non-competitive constraints as competitive. Depending on the details of how this is done, resource bids could be mitigated much more or less often than necessary.

Raising commitment cost bid cap to 300 percent

In the straw proposal, the ISO suggests that the new bid cap for commitment costs should be set at 300 percent of estimated costs. DMM conceptually agrees that the cap should be raised when an effective market power mitigation system has been designed, implemented, tested and shown to be effective. The degree to which the cap should be raised will depend on the expected accuracy of the dynamic mitigation systems that are developed by the ISO. With little detail currently available about the mitigation system, increasing the cap to 300 percent is unreasonable.

2. Negotiated Commitment Costs

Allowing resource specific fuel prices for some resources may be appropriate. However, the policy process should identify all cost components that can be considered appropriate for inclusion in a resource's commitment costs, so that the ISO, stakeholders, and DMM can vet them. The proposal states that a justification for negotiated commitment costs would be, "additional cost components not included in the generic reference level formula." This is inappropriately vague and highlights a gap in the current proposal that needs to be stakeholdered. The ISO has already made changes to allow for all cost components that have been raised by participants (MMAs, opportunity costs, GHG). The ISO should cite specific examples for any other cost components proposed to be eligible, and how these would be quantified for purposes of inclusion in commitment cost reference levels or bid caps and default energy bids.

3. Ex-ante verification of supplier reference level adjustments

DMM conceptually supports the ISO's proposal to require *ex-ante* verification of supplier submitted reference level adjustments if the ISO ultimately decides to support supplier submitted reference levels. However, the ISO has still not specified many of the important details specifying how this would work. The ISO has stated that the ex-ante verification would rely on a 'reasonableness threshold' but has not given details on how they propose to calculate that threshold. The proposal suggests that the reasonableness threshold might be based on statistical values of past realizations of same day and next day gas prices. More detailed descriptions of how reasonableness thresholds will be calculated would allow for valuable stakeholder feedback.

In earlier comments on this initiative, DMM proposed a method that could be adapted to calculate the reasonableness threshold. We recommend that the ISO explicitly adopt this framework. DMM recommends that the ISO update default energy bids and bid caps applied to commitment costs in both the day-ahead and real-time markets based on gas price data that are available at about 8:30 a.m. each morning, rather than calculating caps based on gas prices available the night prior to each operating day. Analysis by DMM shows that these modifications would almost always be sufficient to cover gas costs procured at prevailing market prices.⁴

The ISO's proposal suggests that the threshold the ISO calculates will be a secret parameter that they will not share with market participants. From the proposal it is not clear if this would be something that was never published, or something that would be kept confidential for some time but available for participant review with some lag. DMM's experience suggests that participants will want significant transparency into the methodology and results of reference level calculations. Clear rules and expectations should be defined as part of this policy process. The basic approach suggested by DMM for using ICE data provides a clear framework for a general approach that could be used for each participant.

⁴ *Comments on the Commitment Costs and Default Energy Bid Enhancements – Issue Paper*, Department of Market Monitoring, November 29, 2016: <http://www.caiso.com/Documents/DMMComments-CommitmentCostsandDefaultEnergyBidEnhancementsIssuePaper.pdf>.

4. Hourly minimum load bidding

The ISO has proposed to allow resources to submit bids for minimum load cost with hourly granularity. The current system restricts minimum load bids to a daily value. DMM is supportive of this idea, as long as appropriate rules and guidelines for the use of this flexibility are carefully designed and implemented. Varying commitment costs over the day is very similar to tactics employed in the past to manipulate the ISO markets, so DMM strongly believes that development of clear rules that stem the possibility of gaming and manipulation will be a necessary step before introducing this kind of flexibility. The rule currently proposed by the ISO is susceptible to manipulation.

In the straw proposal, the ISO suggests locking the minimum load bids when a resource with a minimum run time is committed by the real time market. Specifically, the ISO suggests using the value from the last hour in the market run outlook that produces the commitment decision. However, any single value in a multi-interval outlook can be manipulated. By submitting one or more zero bids for minimum load cost in earlier hours, the participant can inflate their bid in the last hour and therefore set a high cap for future hours that have not been considered by the market outlook at the time of commitment. Fixing this issue may be as simple as using an average of the values in the market outlook, instead of a single observation, for a cap.

5. Treatment of reliability “externalities”

The ISO’s straw proposal suggests that costs that “reflect risks of negative reliability externalities” should be accepted as components of reference levels in some scenarios.⁵ The proposal does not provide sufficient detail on what those scenarios are. Risks of incurring gas system penalties are almost never valid costs for use in spot market commitment and dispatch when a unit has been deemed to have market power and is therefore subject to mitigation. DMM continues to request that the ISO specify the precise scenarios when it is appropriate to incorporate gas penalties into reference levels, rather than using vague language to discuss appropriateness of including gas system penalties in reference levels. DMM and stakeholders can then discuss the appropriateness of the specified scenarios.

During potential gas/electric supply issues associated with periodic but relatively rare gas shortages, there are more reliable tools that can and will be used to deal directly with these reliability issues (e.g. gas nomograms, etc.). Therefore, DMM does not support the inclusion of those costs into reference levels that can lead to setting prices based on penalties from other markets.

6. Conclusion

DMM appreciates that this straw proposal has advanced considerably from the ideas that ISO staff appeared to support in the earlier stages of the initiative. However, the current proposal lacks many crucial details that are necessary for thorough evaluation. DMM is hopeful that all of these details can be developed and brought forth in a thoughtful manner in the near future through a robust stakeholder process. DMM’s support of this proposal will be dependent on the ISO working out important details before the ISO seeks board approval of this policy.

⁵ See italicized paragraphs on pp. 26-27 of the Straw Proposal.