

**Commitment Costs and Default Energy Bid Enhancements
March 30 and April 20 Working Groups**

Submitted by	Company	Date Submitted
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Environmental Defense Fund (“EDF”) appreciates the opportunity to offer comments relating to questions raised during the March 30 and April 20 Commitment Costs and Default Energy Bid Enhancements working group meetings.

1. General Questions:

- a. We are seeking feedback on whether the Issue Paper and working group discussions regarding the bidding flexibility, market power mitigation methods, and mitigated price or maximum allowable commitment cost level determination concerns was inclusive of the issues held by stakeholders.

EDF appreciates CAISO’s efforts to identify all issues relevant to the CCDEBE process. We offer the following suggestions on the CCDEBE process and topics for discussion in upcoming working group meetings as ways to facilitate stakeholder consensus and allow CAISO to come up with a concrete proposal as efficiently as possible consistent with FERC’s guidance from 2014:¹

- While EDF appreciates CAISO’s efforts to consider and draw on approaches adopted by other RTOs/ISOs (whether in the context of bidding flexibility, market power mitigation or other issues under discussion), it is important to consider how well each approach has worked in practice. CAISO must identify and examine challenges faced by other RTOs/ISOs in implementing a particular approach and open this up for discussion among stakeholders. Identifying the resource commitments and the implementation process put in place by other ISOs/RTOs in adopting a particular approach will allow for more informed discussions as part of the CCDEBE stakeholder process. To the extent that other RTOs/ISOs have faced significant challenges or unanticipated negative fallouts in implementing a particular approach, this must be considered by CAISO and its stakeholders in examining the feasibility and net benefits of that approach. As one suggestion, CAISO could invite market participants who are active in other markets to detail their experiences in these other markets and explain which market rules best facilitate price formation. It would also

¹ *Cal. Indep. Sys. Operator Corp.*, 149 FERC ¶ 61,284 at p. 32 (2014) (“we expect CAISO to abide by its commitment to consider longer-term market design changes for commitment cost bids....”).

be helpful to hear from market monitors and staff at other RTOs/ISOs about their perspectives on these rules.

- One issue that hasn't yet been discussed in any detail in prior working group meetings is implementation challenges. A key objective for upcoming CCDEBE workshops should be to identify and discuss implementation challenges relating to proposals that are currently being considered by CAISO and working group participants. If significant implementation challenges are identified, the emphasis may need to shift to incremental changes as a starting point, even as CAISO develops a timeline and strategy to initiate more substantive and much needed market design reform. It would also be helpful for CAISO to provide specific information around implementation issues so that stakeholders have a clearer sense of these issues and the implementation timeline implications. Finally, one of the goals of the CCDEBE stakeholder process should be to generate a concrete implementation timeline, with key milestones, in order to make it possible to track progress and foster transparency around implementation of the preferred design path.
 - Identifying areas in which stakeholder consensus has already been developed as part of the CCDEBE stakeholder process will allow for future working group meetings to focus on only those issues on which alignment is yet to be reached, and to take on progressively narrow questions for stakeholder discussion, with a view to developing a concrete proposal as efficiently and rapidly as possible.
- b. The High-Level Design Paths Handout contains a decision tree with four design paths. What are stakeholder views of the preferred path on the decisions trees? Are there more than four design paths that should be considered to evaluate for a preferred path?

Consistent with EDF's stance in our written comments and at the March 30 CCDEBE stakeholder workshop, we strongly support Path 2 as the most beneficial path forward, representing much needed substantive market design reform. However, there is merit in making permanent some of the beneficial changes that have already been implemented by CAISO in the wake of the Aliso Canyon incident. DMM's CCDEBE proposal on short term changes that can be most easily implemented should be considered more closely, especially if significant challenges are identified with respect to the implementation of Path 2. This will allow CAISO to make incremental progress in the right direction even as Path 2 implementation and timeline issues are being worked out.

- c. What items would you like to briefly discuss in the next workshop on May 23?

As noted in the response to Q (1)(a) above, some important topics are yet to be discussed. Considering how various approaches (e.g. with respect to validation of cost-based offers) have worked in practice in other RTOs/ISOs is especially important to consider, whether during the May 23 workshop or in subsequent working group meetings.

2. Supply Offer Structure with Market Based and Cost Based Offers

- a. Should the California ISO enhance its bid structure to support suppliers' submitting market based offers for the commitment cost components? If done, the California ISO would need to determine an appropriate "circuit breaker" offer cap and mitigation test to identify conditions where mitigation is needed. (E.G. Bid Structure and Bidding Rule Design Option Handout 3b)

Yes, CAISO's bid structure should be enhanced to allow suppliers to submit market based offers for commitment cost components, reflecting their risk tolerance and valuation of their generation asset, subject to a "circuit breaker" offer cap, and a mitigation test to identify uncompetitive conditions under which mitigation is needed, such that mitigated prices reasonably reflect suppliers' cost expectations.

- b. If the ISO does not propose to introduce market based offers subject to mitigation, would stakeholders prefer the ISO to evaluate increasing the level of the commitment cost bid cap used to ex ante validate these cost based offers fall within a reasonable range of expected costs or to continue to focus in re-designing the cost based framework? To illustrate, what are the preferences based on trade-offs between either (1) making no changes to the gas and non-gas unit processes for estimating costs but increasing the scalar used in both the maximum allowable commitment cost levels and default energy bid calculations to e.g. 150% versus bid-in cost based offers or reference level adjustments?

The fundamental problem with the commitment cost bid cap structure is that it assumes the existence of market power under all circumstances, including competitive market conditions, thereby unreasonably limiting bidding flexibility even where market forces would operate to avoid adverse market impacts. Therefore, simply raising the level of the commitment cost bid cap is not sufficient. CAISO should continue to focus on more fundamental changes and broader design issues relating to the cost based framework.

3. Market Based Commitment Cost Offers Subject to Market Power Mitigation

- a. Assuming the California ISO proposes to support market based offers for commitment cost components, please respond to the following:
 - i. Is the current method used to cap commitment costs resulting in over-mitigation of units and/or regularly limiting suppliers' ability to submit prices based on their willingness to sell when there is unlikely to be market power concerns? If so, please explain.

As previously noted, generators should be allowed to recover costs, including under unusual circumstances (e.g., gas curtailment or price volatility events). In a recent order, FERC found that "[p]roperly functioning markets should allow natural gas generators to recover actually incurred costs without regular

intervention by the Commission and should incent the development of sufficient generation and storage resources to ensure the reliability of CAISO's system."²

It has been noted that there are a small number of instances where the current bidding headroom in the CAISO market may not cover upward gas price variability.³ It is precisely in these few instances, reflecting illiquid gas market conditions, that the bidding rules should accommodate gas price variability. The absence of bidding flexibility in such instances prevents tight gas market conditions from being reflected in the electricity market, thereby hindering price formation, ultimately affecting overall market efficiency in a detrimental way.

In previous working group meetings, data showing that currently available commitment cost bidding headroom is not being used by suppliers has been presented.⁴ Deeper analysis is needed to better understand the underlying dynamics. For instance, a generator's perception that market rules result in excessive mitigation may lead it to routinely offer in a manner that avoids mitigation but is not necessarily reflective of its cost expectations.⁵

As noted earlier, the need for CAISO to re-examine the current commitment cost bid cap structure derives primarily from the more fundamental issue that it assumes uncompetitive market conditions under all circumstances, and does not test for market impact. Suppliers should be able to submit offers that reflect their own valuation of generating assets unless demonstrable potential to exercise market power exists. Under competitive conditions, market forces provide incentives to limit adverse market impacts, making it unreasonable to restrict bidding flexibility, as under the current commitment cost bid cap structure. This is problematic in and of itself, regardless of whether generators are currently experiencing frequent over-mitigation due to this structure. Even if the bid cap only comes into play infrequently, this will nonetheless undermine market efficiency in the long-term. A more robust and lasting alternative is necessary.

- ii. Would a dynamic assessment performed in tandem with the energy mitigation be preferable to stakeholders similar to that described in the March Market Working Group slides 50?

Yes.

² *California Independent System Operator Corporation*, 155 FERC ¶ 61, 224 (Docket ER16-1649-000), at p. 34.

³ DMM Comments on CAISO's Commitment Costs and Default Energy Bid Enhancements Issue Paper, November 29, 2016.

⁴ DMM Presentation, Commitment Costs and DEB Enhancements Working Group #2, April 20, 2017.

⁵ FERC, "Price Formation in Organized Wholesale Electricity Markets", Docket No. AD14-14-000", Staff Analysis of Energy Offer Mitigation in RTO and ISO Markets, October 2014, available at <https://www.ferc.gov/legal/staff-reports/2014/AD14-14-mitigation-rto-iso-markets.pdf>, at p. 2.

- iii. Would stakeholders support considering a static competitive path assessment for commitment cost mitigation if a dynamic one is not feasible? A static competitive path assessment might take the form of a structural test (pivotal supplier test) that identifies paths likely to be uncompetitive based on assumed or representative historical conditions.

It would be helpful if CAISO could elaborate on the circumstances under which a dynamic assessment may not be feasible. As far back as 2014, CAISO noted its intent to institute a more dynamic market power mitigation mechanism than the existing commitment cost bid cap structure:

“Thus, setting the cap at 125 percent strikes an appropriate balance between providing resources a reasonable opportunity to recover their fuel costs and protecting against the potential exercise of market power until such the (sic) time as *a more dynamic market power mitigation mechanism can be developed and implemented explicitly for commitment cost.*” (emphasis added)⁶

The current CCDEBE stakeholder process is an opportunity for CAISO to institute a dynamic market power mitigation mechanism specifically for commitment costs, as previously expressed.

On the question of static competitive path assessment, further specifics around the parameters of such a test and further stakeholder discussion is needed to determine whether this may be a feasible alternative. In general, structural market power mitigation approaches such as the pivotal supplier test are too restrictive in that they assume that a supplier with the ability to exercise market power has the incentive to do so, regardless of whether there has been any market power abuse.⁷

- iv. Provide feedback on the California ISO’s conceptual proposal to introduce a dynamic market power mitigation test for commitment cost offers (March Market Working Group slides 45-50).

EDF supports further consideration of a dynamic market power mitigation test as part of the ongoing stakeholder process. As CAISO noted in its presentation at the March working group meeting⁸, both the conduct and impact test and the pivotal supplier test have drawbacks. One alternative is a blended approach

⁶ CAISO Comments, Docket No. ER15- 15-000, (October 1, 2014), at p. 15.

⁷ The Brattle Group, “Review of PJM’s Market Power Mitigation Practices in Comparison to Other Organized Electricity Markets”, 2007, available at http://www.brattle.com/system/publications/pdfs/000/004/868/original/Review_of_PJM_Market_Power_Mit_Sep_14_2007_Final.pdf, at p. 9.

⁸ CAISO Presentation, “Commitment Costs and DEB Enhancements Working Group #1, March 20, 2017, slides 45-49.

incorporating elements of structural tests as well as conduct and impact tests. As noted in a report by the Brattle Group⁹:

“Structural screens can benefit from an added conduct-and-impact assessment that avoids mitigation actions if market behavior does not suggest that significant market power is being exercised. Similarly, a conduct-and-impact screen can benefit from the inclusion of an additional structural screen that can identify market conditions or geographic regions where significant market power concerns exist. Applying a fully integrated approach using both conduct-and-impact and structural screens also allows the RTO to more easily engage in self-assessments of the effectiveness of the market monitoring process. For example, if the conduct-and-impact screen finds many instances where there is no significant exercise of market power occurring when a particular structural screen indicates cause for concern, then the RTO may choose to consider alternative structural screens. Similarly, by examining the structural conditions under which market power mitigation is warranted under a conduct-and-impact approach, the RTO can develop an appropriate “early warning” structural screen to identify conditions that raise cause for concern. This will increase the effectiveness of mitigation and reduce the costs imposed by the mitigation process.”

4. Cost Based Framework and Validation Deterring False or Misleading Submissions

- a. In lieu of bid-in cost based offers should the California ISO consider introducing fuel price adjustments to its reference level calculations to reduce the risks that suppliers’ will not have mitigated prices that reasonable reflect their cost expectations? Such a process would closely resemble those performed by the Eastern RTO/ISOs such as NYISO’s examined at the April Market Working Group meeting.

As noted in EDF’s earlier comments, allowing suppliers to submit bid-in cost based offers is the most beneficial way forward from the perspective of advancing price formation. To the extent that CAISO ultimately decides to retain the use of administratively calculated reference levels, at a very minimum, generators must be granted the opportunity to seek fuel price adjustments in order to reduce the risk that mitigated prices will not reasonably reflect suppliers’ cost expectations. As CAISO acknowledged in its Issue Paper, all other organized markets that mitigate to reference levels grant suppliers the opportunity to request a fuel price adjustment in the reference level calculation, and approve requests to revise gas commodity prices in reference levels if the default gas commodity price used does not fully reflect prevailing gas market prices or actual costs to the supplier.

- b. In its Issue Paper, the California ISO asked, “What is a reasonable approach to valuing expected production costs that results in an efficient market solution and cost recovery?” To develop the dialogue around this question, stakeholders brainstormed

⁹ *Supra* note 7, at p. 107.

cost components during the April Market Working Group meeting. Provide feedback on whether the California ISO rules should support cost based offers that contain the following cost items (from April Market Working Group discussion) or not? Specifically respond to the following:

- i. For each portion with a fuel cost component (incremental energy, minimum load energy, and start up/transition), please provide feedback on whether the fuel cost policy should be clarified to include either or both fuel replacement costs (e.g. foregone revenues as result of reducing consumption of demand response resources) and risk margin for risk of non-compliance with gas transport rules (e.g. risk of non-compliance with an OFO, SOC, or COC)?

CAISO market rules should allow market participants to recover all gas costs incurred in following CAISO dispatch instructions and market awards, even under unusual market conditions (e.g. illiquid gas market conditions under which OFOs may be called, creating the risk of OFO penalties for generators) and should allow for gas market realities to be taken into account. The ongoing limited operability of Aliso Canyon has increased the likelihood of OFO situations and the imposition of OFO penalties. This amplifies the need for CAISO to adjust its commitment cost bidding policies so that the market reflects the cost of avoiding gas curtailment, and generates accurate price signals, prompting the appropriate market responses, ultimately leading to overall market efficiency.

- c. What validation method would Stakeholders prefer for bid-in cost based offers (\$/MWH, \$/run hour, \$/start, \$/transition open to any technology type) or reference level adjustments (\$/MMBtu applicable only to gas based reference levels)?

In both PJM and SPP, market participants are responsible for developing their cost-based offers in accordance with their respective fuel cost policies, and submitting such offers into the market. EDF proposes a PJM/SPP style approach with an automated ex-ante screen to catch anomalous bids.

- i. What should ex ante verification include and should the approach differ between the two options given one is a cost based supply offer where the other is a natural gas market price value?

An automated ex ante screen to catch anomalous bids prior to the market run may be structured to create a tolerance band or “reasonableness range” for a supplier’s cost-based offer for a resource. This range may be estimated based on various inputs (e.g. bid/ask spread), and can be designed in a number of ways, some of which are being considered by other RTOs/ISOs, and offer helpful guidance on

this issue in the context of CCDEBE stakeholder discussions.¹⁰ This screen would not be a substitute for the supplier following its approved fuel cost policy nor for a potential ex-post review as part of which the supplier may be required to provide additional documentation. While the specifics may vary, for consistency, the same market design principles should be applied to ex ante verification, whether in the case of cost based supply offers or natural gas market price value.

- ii. What should ex post verification include and should the approach differ between the two options given one is an energy offer where the other is a natural gas market price value?

The SPP style approach, as detailed in CAISO's Issue Paper, strikes an appropriate balance. Under such an approach, ex-post verification would include:

- (a) submission of cost data by the supplier consistent with its previously agreed fuel cost policy;
- (b) review of costs to verify compliance with the parameters established in the supplier's fuel cost policy, and
- (c) evaluation of the bid against replicated bids generated by the market monitor using the supplier's fuel cost policy.

As noted above, while the specifics may vary, for consistency, the same market design principles should be applied to ex post verification, whether in the case of cost based supply offers or natural gas market price value.

- iii. Seeking feedback on the types of supporting documentation used today in other RTO/ISO for both approaches discussed at the April Market Working Group meeting, which includes in order of relevance as a function of liquidity (earlier items more relevant during highly liquid conditions, lower items more relevant during highly illiquid or strained conditions):

- Invoices
- Index publisher information (consummated low-mid-high values)
- Electronic platforms (consummated/unconsummated bid-ask spreads)
- Broker quotes (text, emails, squawk box)
- Current line pack levels
- Notice of Fuel Transport Flow Orders (e.g. SOC/COC/OFO/EFO)
- Fuel scarcity conditions (e.g. "can't find counterparty", Feb 2014)

Balancing the need to offer suppliers a degree of flexibility in submitting supporting documentation with the need to ensure that such documentation meets certain key criteria is critical. One such balanced approach is currently being employed by NYISO. NYISO has put in place an illustrative, non-exhaustive list of supporting documentation that would be acceptable.¹¹

¹⁰ Joint Comments of PJM Interconnection, L.L.C. and Southwest Power Pool, Inc., Docket No. RM16-5-000, April 4, 2016, at p. 16-17.

¹¹ NYISO Reference Level Manual at 6-3.

NYISO specifically notes that other types of supporting documentation evidencing gas costs that are temporarily above the reference level will also be considered.¹²

For clarity, it would be helpful for CAISO to propose a broad set of criteria that would need to be met in order for documentation falling outside the illustrative list to be accepted. A highly prescriptive approach should be avoided, keeping in mind commercial market realities. This principle was recently emphasized by FERC in a different context - Fuel Cost Policies in the PJM market - in an order issued earlier this year.¹³ FERC rejected the argument that Fuel Cost Policies should be “algorithmic under all circumstances” because this ignores situations “when natural gas markets are illiquid such that a pure ‘algorithmic’ approach tied to an index or that is otherwise ‘reproducible’ ignores the commercial realities of how natural gas markets operate during stressed conditions.”

¹² *Id.*

¹³ *PJM Interconnection, L.L.C.*, 158 FERC ¶ 61,133, at p. 23.