Phase 2 Straw Proposal

Changes to Restrictions on Bidding
Start-Up and Minimum Load

July 23, 2009
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Start-Up and Minimum Load

Prepared for Discussion in the Stakeholder Conference Call – July 30, 2009

1 Introduction

The new market launched by the California Independent System Operator (ISO) in April 2009 commits generating units based on their Start-Up (SU) and Minimum Load (ML) bids. Many market participants have brought up the issue that they are being committed based on their SU and ML costs, being held at minimum operating levels and then de-committed. Participants observe that this causes extra wear and tear on their generating units, uses up fixed numbers of unit starts and emissions allocations, and makes it difficult for unit owners to recoup their operating costs. Through this second phase of this initiative, the ISO aims to alleviate these issues.

Generation owners can choose either a cost-based option or a registered-cost option. The cost-based option is linked to the price of natural gas, and thus provides generation owners who choose this option with protection from fuel-price risk. The registered-cost option enables generation owners to submit a bid for SU and ML so long as that bid-in value is less than or equal to 400%\(^1\) of heat-rate based generic SU and ML costs.

Many generation owners have chosen the fuel-cost based SU and ML cost option so that they would be protected against fuel price risk. However, given that the new market software commits units based on SU and ML, the lower values of SU and ML that come from the cost-based calculation are leading to frequent commitment of the units to minimum operating levels. Again, this is leading to wear and tear on the generating units, depletion of allowable starts and emissions, and to trouble recouping costs. With the benefit of hindsight, generation owners would rather have opted for the Registered Cost option. This would enable them to submit SU and ML costs that more accurately reflect how their units are being dispatched in the new ISO markets.

At the start of the new ISO markets, the Tariff restricted generators from changing their election from the cost-based option to the registered-cost option to once every six months. This restriction was designed to serve as a deterrent to registering very high SU and ML costs, because generation owners would thereby price their units out of the market for this relatively long period of time. As an outcome of the first phase of this stakeholder initiative, the frequency with which generation owners can change their SU and ML costs was increased to once every thirty days. This change was accompanied by a decrease in the SU and ML bid cap for units outside of locally constrained areas from 400% of the cost-based option to 200% of that value. This is directly related to the fact that owners of these units will now need to hedge against only 30 days of fuel price risk rather than 180 days.

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\(^1\) Note that if the generating unit is within a locally constrained area (LCA) then its registered cost, if that option is chosen, must be within 200% of the heat-rate based generic SU and ML values.
In this second phase of the proposed solution, the ISO seeks to develop a longer-term solution that more completely incorporates stakeholder feedback. The criteria for evaluating potential solutions, the stakeholder process timeline, and the ISO’s recommended approach are outlined below.

2 Criteria for Evaluating Potential Solutions

- Changes should be mindful of the costs of implementation, both for stakeholders and for the ISO. The benefits and costs of market changes should be weighed along with other, competing enhancements to market systems.
- The strategy for changing the way SU and ML costs are bid into the ISO markets should include some form of short-term mitigation of the problems at hand for the summer of 2009.
- The strategy for changing the way SU and ML costs are bid into the ISO markets should also include a longer-term solution to enable participants to accurately reflect their SU and ML costs in their market bids given the way the new ISO markets commit units.

3 Elements of the Phase 2 Proposal

The ISO’s proposal for the second phase of the stakeholder initiative to revise the restrictions on bidding start-up and minimum load costs involves adding a cost component, and enabling more frequent bidding. The ISO proposes to enable daily bidding of SU and ML costs, and also allow the registration of an operations and maintenance (O&M) cost component which will be fixed in the master file for six months. The elements of the straw proposal are described in more detail below.

3.1 Fixed Operations & Maintenance Component of SU and ML Costs

Based on feedback from stakeholders and from the Market Surveillance Committee (MSC), the ISO proposes to enable an adder for O&M costs that will be static in the master file for 6 months. The O&M component can include costs associated with wear and tear on generating units that occurs as units are cycled on and off. It can also include the scheduling coordinator’s assessment of a unit’s opportunity costs, such as those of having a fixed number of starts per year, or a cap on allowable emissions.

_The ISO requests that stakeholders provide feedback on what other sources of O&M costs they find relevant to their generating units, and also on the expected magnitude of O&M costs for those units._ Information specific to individual market participants or generating units will be kept entirely confidential. The ISO may, however, aggregate and summarize the results and share those with all market participants to explain the rationale for any impact those data may have on the final proposal.

The ISO does not currently propose to include an explicit cap on O&M costs, but rather intends to rely on the restriction that the O&M component can be changed only once every 6 months. The rationale for fixing this component of start-up and minimum load costs for 6 months is to deter market participants from submitting unduly high O&M costs since doing so would likely price them out of the market for this relatively long period of time.
3.2 Bidding and Mitigation of Start-Up and Minimum Load Costs

The ISO proposes to modify SIBR to enable daily bidding of SU and ML costs. The daily bid is to cover costs other than those encompassed in the O&M costs. There will not be caps placed on the values that a participant can submit for the daily SU and ML bids. However, in the event that a unit is subject to LMPM, a proxy SU and ML bid be inserted in place of the bid-in value. If subject to LMPM, a unit with O&M costs would have its bid mitigated down to the proxy bid plus potentially some portion of O&M costs. Response to the survey described in the section above is critical for determining how default energy bids (DEBs) might be calculated to consider some portion of O&M costs.

Regardless of whether or not O&M costs are specified, a market participant will still submit either its election to the cost-based option or a registered-cost value for SU and ML costs to the master file. These values will be used as the default SU and ML costs in the event that the participant does not bid SU and ML costs in for the day. The ISO proposes that the ability to change between the cost-based option and the registered cost option, or to revise the registered cost will be limited to once every 6 months. Since there will not be caps placed on the registered cost values, the rationale for the reversion back to a 6 month restriction is made to deter unduly high registered costs, and to ease the administrative burden of more frequent changes to master file data. In addition, it is presumed that the need for a 30-day option to change master file entries is obviated given that SU and ML costs can be bid in daily.

4 Process and Timetable

The following timetable describes the process by which the ISO will further develop the proposal, present it to stakeholders for comments, and take it to the Board of Governors for approval.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>June 17, 2009</td>
<td>Presentation to stakeholders and the MSC</td>
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<tr>
<td>June 26, 2009</td>
<td>Stakeholder comments due *</td>
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<tr>
<td>July 20-21, 2009</td>
<td>Short-term proposal to BOG for approval</td>
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<tr>
<td>July 23, 2009</td>
<td>Revised proposal including stakeholder and MSC comments posted</td>
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<tr>
<td>July 30, 2009</td>
<td>Conference call</td>
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<tr>
<td>August 6, 2009</td>
<td>Stakeholder comments due *</td>
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<tr>
<td>August 13, 2009</td>
<td>Final proposal posted</td>
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<tr>
<td>September 10-11, 2009</td>
<td>Longer-term proposal to BOG for approval</td>
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* Please submit comments to Gillian Biedler at gbiedler@caiso.com.

The ISO anticipates that the required changes to SIBR can be made in the release of that software that is planned for the spring 2010 timeframe. The required changes to master file processes to accommodate the O&M cost component will be made concurrently. Thus, it is planned that the ISO can have the changes described in this proposal implemented before the summer of 2010.
5 Conclusion

These changes to the restrictions and functionality of bidding SU, ML and O&M costs are proposed as a direct result of feedback from stakeholders and the MSC. The ISO appreciates that collaboration, and is eager to put these changes in place. A conference call to discuss the proposal is planned for July 30, 2009. Although comments or questions on this proposal are welcome and encouraged at any time, formal written comments are due within one week of that call. We additionally request that stakeholders provide information on the magnitudes of the O&M costs they would plan on registering upon implementation of this proposal concurrently with the formal written comments. Again, the planned O&M costs will not be shared until aggregated to obscure any particular unit’s or participant’s information.

With questions, comments, or concerns, please contact Gillian Biedler at (916) 608-7203 or via e-mail at gbiedler@caiso.com.