Stakeholder Comments Template

Variable Operations and Maintenance Cost Review

This template has been created for submission of stakeholder comments on the Variable Operations and Maintenance Cost Review revised straw proposal. The proposal, stakeholder call presentation, and other information related to this initiative may be found on the initiative webpage at: http://www.caiso.com/StakeholderProcesses/Variable-operations-maintenance-cost-review.

Upon completion of this template, please submit it to initiativecomments@caiso.com. Submissions are requested by close of business on May 26, 2020.

<table>
<thead>
<tr>
<th>Submitted by</th>
<th>Organization</th>
<th>Date Submitted</th>
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<tbody>
<tr>
<td>Brian Theaker</td>
<td>Middle River Power, LLC (“MRP”)</td>
<td>May 26, 2020</td>
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</tbody>
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Please provide your organization’s overall position on the Variable Operations and Maintenance Cost Review revised straw proposal:

☐ Support
☐ Support w/ caveats
☐ Oppose
☒ Oppose w/ caveats
☐ No position

While MRP does not oppose the CAISO’s efforts to bifurcate the current VO&M adders into separate VO and VM adders, MRP has two primary concerns about the CAISO’s proposal. First, MRP is concerned that the proposed VO adder for CCGT resources does not reflect costs associated with wet cooling towers that have zero liquid discharge systems without evaporation ponds and is significantly understated. Second, MRP would like the CAISO to clearly state that, while the CAISO is trying to develop adders that reduce the number of separately-negotiated adders, market participants will still have the ability to negotiate their VO and VOM adders with the CAISO without condition or restriction.

Please provide your organization’s comments on the following issues and questions.
1. **Proposal Component A: Establish definitions for the O&M cost components**

   Please provide your organization’s feedback on establishing definitions for the O&M cost components as described in section 4 (page 7). Please explain your rationale and include examples if applicable.

   Please provide your organization’s position on establishing definitions for the O&M cost components as described in section 4 (page 7). (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

   MRP supports the proposed definitions.

2. **Proposal Component B: Refine Variable Operations Adders**

   Please provide your organization’s feedback on the ISO’s proposal to refine variable operations adders as described in section 4 (page 12). Please explain your rationale and include examples if applicable.

   MRP comments on two aspects of the CAISO’s proposal in this section – first, the philosophy underlying default adders, and second, the proposed Combined Cycle Gas Turbine VO adder.

   **Default Adder Philosophy**

   The CAISO observes on RSP page 22 (MRP’s emphasis):

   *A key principle affecting the CAISO’s estimates is that the estimates need to be sufficiently conservative while also still attractive for use in lieu of negotiated values.* Ensuring our estimates are conservative is important for a few reasons. These values are used in local market power mitigation to ensure that resources with the ability to exercise local market power cannot bid above their costs. Proxy cost estimates greater than resources’ costs introduce a potential inefficiency into the market if these proxy costs clear the market. Second, once the values are in place, only resources with costs higher than the defaults will approach the CAISO to negotiate their adders. If the default values are too high, the CAISO will have no visibility into whether resources’ actual costs exceed our estimates. *However, the concept of default MA is being introduced for the purpose of lowering the administrative burden of processing many resource-specific negotiations for both market participants and the CAISO.*

   Any precise default VO or VM adder will be “right” only for those generating units for which that adder precisely reflects their VO or VM costs. For all other generating units, the adder will either be “too generous” (i.e., provide cost recovery beyond what the unit requires, assuming the generating unit runs as expected) or “too stingy” (i.e., not allow a generating unit to recover its variable operating or maintenance costs).

   For that reason, while MRP does not oppose the CAISO engaging in complex mathematical gyrations to develop suitable “default” VO and VM adders, in the end
MRP expects that, as the CAISO tries to balance the competing interests around these adders, a significant number of generating resource owners still will have to negotiate their resources’ VO and VM adders with the CAISO.

MRP reviewed informational filings the CAISO made with the Federal Energy Regulatory Commission regarding negotiated default energy bids, variable O&M adders, and opportunity cost adders, from February 2017 through May 2020 (covering the months January 2017 through April 2020). The reports yield these total values for new, revised or terminated adders over that 40-month period:

<table>
<thead>
<tr>
<th></th>
<th>New</th>
<th>Revised</th>
<th>Terminated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Maintenance</td>
<td>267</td>
<td>378</td>
<td>79</td>
</tr>
<tr>
<td>Default Energy Bid</td>
<td>34</td>
<td>33</td>
<td>27</td>
</tr>
<tr>
<td>Operations and Maintenance</td>
<td>25</td>
<td>41</td>
<td>2</td>
</tr>
<tr>
<td>Opportunity Cost</td>
<td>263</td>
<td>0</td>
<td>30</td>
</tr>
</tbody>
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Unless the CAISO adopts significantly higher adder values as a result of this initiative, it is reasonable to expect that the CAISO will have to negotiate at least similar numbers of adders, or potentially more if the adopted adders do not provide the same level of cost recovery currently provided.

To that end, MRP respectfully requests that the CAISO confirm that market participants will have the same ability to negotiate these adders after the adoption of the new adders that they currently have. While MRP assumes this will be the case, some language in the RSP could be read to call this assumption into question. For example, the CAISO provides on RSP Page 25.

For Option 1, the only incremental change that the CAISO proposes in the Revised Straw Proposal is that the CAISO proposes to change how the components of the maintenance adder can be negotiated. Market participants will have two options for negotiations for CT and CCGT resources: full negotiations (i.e. negotiating the final adder value) or streamlined negotiations where they can negotiate only the allocation percentages between $/run-hour and $/start adders. The latter option will allow market participants who believe that the default adder type is inadequate to request a change between adder types. This results in shorter negotiations than full negotiations, easing some administrative burden. Only CT and CCGT resources can utilize this streamlined negotiation process because, in the relevant external source documentation, these are the only technology types with clearly defined $/cycle data and both run-hour/cycle
and start/cycle conversion factors. The CAISO no longer proposes that the other components (e.g. the estimated annual variable maintenance costs) be negotiable individually.

For Option 2, the CAISO does not propose any partial or streamlined negotiations. This is an implication of averaging multiple sources together: an integral input into the negotiations, $/cycle data, is missing under Option 2.

MRP interprets the CAISO’s proposal to not allow “streamlined negotiations” under Option 2 to mean that the CAISO will still engage in “full” adder negotiations with market participants under Option 2. MRP respectfully requests the CAISO expressly confirm or refute this understanding.

**Combined Cycle Gas Turbine VO Adder**

While the RSP asserts that it used different water costs – which increased the proposed CCGT VO adder from $0.26/MWh to $0.59/MWh – MRP finds that the updated costs still fail to reflect the VO cost for CCGT plants with wet cooling towers that have significant wastewater remediation costs. The proposed $0.59/MWh value is likely suitable, if not generous, for CCGTs that use dry cooling, but is dramatically understated for CCGTs that use wet cooling towers. Again, this reflects MRP’s comment above – that derived default VO and VM adders will be too generous for some resources and not generous enough for others.

Please provide your organization’s position on the ISO’s proposal to refine variable operations adders as described in section 4 (page 12). (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

None of the options adequately describes MRP’s position on the RSP. While MRP finds the proposed CCGT VO adder to be too low, MRP expects it will be permitted to negotiate a suitable VO adder after new proposed VO adders are adopted. To that end, MRP does not object to the CAISO’s proposal, if MRP’s understanding that it will still be able to negotiate a higher value is correct. If MRP’s understanding is incorrect, and it would not be permitted to negotiate a higher value for its facilities that have higher costs, then MRP opposes the CAISO’s proposal. At a minimum, if negotiations are restricted or not permitted, additional technology analysis will be required to provide a fair and equitable solution to accommodate all generators.

**3. Proposal Component C: Calculate Default Maintenance Adders**

Please provide your organization’s feedback on calculating default maintenance adders as described in section 4 (page 15) as well as in the supporting calculations posted as a separate file. Please explain your rationale and include examples if applicable.

Please see the section above, which describes MRP’s thoughts regarding the use of default adders, whether for variable operations or variable maintenance costs.
Please indicate your organization’s preference for Option 1 versus Option 2. The ISO particularly wants to understand stakeholders’ preferences regarding the balance between making assumptions about unit conversions versus the number of technology groups covered by default maintenance adders. If a different option is preferable, please indicate in detail your organization’s preferred option.

If your organization has additional sources of maintenance cost data that it would like the ISO to consider, please provide these sources.

Please provide your organization’s position on calculating default maintenance adders as described in section 4 (page 15) as well as in the supporting calculations posted as a separate file. (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

4. Implementation of Proposal

Please provide your organization’s feedback on the suggested implementation details described in section 4 (page 24). Please explain your rationale and include examples if applicable.

For resources with negotiated VO&M adders, the CAISO proposes (RSP page 24):

“Upon implementation, the CAISO proposes to set these resources’ VOM adders to the new default VO adder values. The CAISO will not allow resources to keep their negotiated VOM values because the old VOM adder has both the VO and variable minor maintenance cost components. The variable minor maintenance cost component will now be represented in the resource-specific maintenance adder value resulting in double-counting between the two adders.”

The CAISO’s rationale for not wanting negotiated VO&M adders to retain both operations and maintenance adders when it transitions to separate VO and VM adders is clear but raises concerns. Specifically, MRP is concerned that the CAISO will force units that currently have negotiated VO&M adders to accept default VO and VM values for some period of time until new VO and VOM adders can be negotiated. MRP urges the CAISO to provide sufficient “runway” in implementing its proposal so that generating units will not be forced to operate with default adders that do not cover their costs for any period of time.

Please provide your organization’s position on the suggested implementation details described in section 4 (page 24). (Please indicate Support, Support with caveats, Oppose, or Oppose with caveats)

Support with caveats (noted above).

Additional comments
Please offer any other feedback your organization would like to provide on the Variable Operations and Maintenance Cost Review revised straw proposal.

Page 7 of the RSP includes this sentence: “Consistent with a marginal pricing approach, only variable costs can be recovered in the CAISO’s spot energy markets.” MRP strongly disagrees with this statement. The clearing price design of the CAISO’s spot energy markets is intended to allow generators to recover fixed costs through the CAISO’s energy markets. The CAISO has long held the position that bid prices should reflect only marginal costs, and MRP will not discuss or debate that philosophy here. It is not correct, however, to say that generators should only recover variable costs in the CAISO’s energy markets.