



MARKETS IMPLEMENTATION COMMITTEE PROPOSAL ALTERNATIVES REPORT

11/29/2012

CONSISTENCY OF ENERGY RELATED OPPORTUNITY COST CALCULATIONS

The alternative proposals described below are recommended by this stakeholder group to its parent Standing Committee for selection of a single proposal to resolve this issue. More than one proposal was identified for consideration using the Tier 2 decision-making method of the PJM stakeholder process. They are listed in order of those achieving the highest support meeting the threshold of at least three Voting Members from at least two different sectors. Appendix I list proposals that did not pass the threshold. This report was developed in accordance with procedures documented in Section 7 of the PJM Stakeholder Process Manual (M-34).

1. ALTERNATE 1 PROPOSAL

Alternate Proposal 1 is a package that consists of changes to the schedule used to calculate the lost opportunity cost. This package was identified as Package 3 during the voting process. The package proposed that the schedule used to calculate the incremental offer rate is the cost based schedule when the units output is reduced to provide the ancillary service and the operating offer when the units output is raised to provide the ancillary service.

Package 3 received 94 votes in favor, 49 opposed, 1 abstention getting 65.7% in favor.

2. ALTERNATE 2 PROPOSAL

Alternate Proposal 2 was essentially the status quo package i.e. to continue the LOC calculations as they are being calculated today. This package was identified as Package 0 during the voting process. **NOTE: An informal poll on the status quo package was taken.**

Package 0 received 96 in favor, 36 opposed, 7 abstentions getting 72.7% in favor.

3. COMPARATIVE SUMMARY

The above proposals received the highest support meeting the threshold of at least three Voting Members from at least two different sectors from possible alternatives elicited from this stakeholder group. See Appendix II to review the design criteria matrix used to identify the proposal "packages". A comparative narrative summary of the proposals is provided here for understanding of their merits and shortfalls.

Energy-related Opportunity Cost is revenue not earned by dispatchable resources because their energy output was reduced at the direction of PJM dispatch. As PJM Markets have evolved, Opportunity Cost is calculated differently when utilized for different purposes in various parts of the Tariff and Manuals. Since the beginning of the discussion, PJM staff recommended that stakeholders should consider unifying the energy-related Opportunity



Cost calculations throughout the PJM market rules such that it is calculated consistently across its various purposes.

Alternate Proposal 1 proposed changes include using different schedules depending on if the resource was raised or lowered to provide ancillary services. While this change may have the potential to increase generator revenue, it would not create a design where the calculations are consistent across markets and market scenarios. Alternate Proposal 2 was included in the vote as a way to gauge support for the current market rules.

4. STAKEHOLDER PROCESS SUMMARY

This issue has been vetted thoroughly in the PJM stakeholder process. A capsule summary is provided here. Also, see Appendix I for a list of links to supplemental stakeholder documents accompanying this report.

This problem statement was put forward for review as a joint recommendation from MA and PJM staff at the MIC on 2/17/2012 and approved by the committee. This issue was charged by the Market Implementation and discussions took place at meetings of the committee. A task force was not formed to develop this issue. During the meetings, PJM staff reviewed the current LOC calculations across all markets and reviewed them over two education sessions at the MIC. During the interest identification, two main issues were identified as design components:

- Schedule used to calculate LOC
- Start up and no load costs for CT's committed in DA but not called on in RT

A Solution Matrix that included 4 packages for stakeholder consideration was presented at MIC in August for vote. The committee decided that a special session should be held to discuss the matrix in more detail. In the first session, the LOC calculations were reviewed again. The IMM also presented data from the SOM report that quantified the impacts of the proposed changes. GENON presented their concerns that the using the committed schedule for all scenarios will not make the resource indifferent to the lost energy revenue, which the current rules did. A second special session was requested to continue the discussion.

In the second session, GENON presented Package 3 (Alternate Proposal 1) and reviewed the changes as part of this proposal. PJM reviewed Package 2, which consisted of the one change to use the committed schedule for LOC calculations. It was decided that the issue of use of start up and no load costs for CT's committed in DA but not called on in RT would be discussed in another forum going forward.

After the two special sessions, a final [Solution Matrix](#) was presented at the November 7, 2012 MIC for stakeholder consideration. A vote was taken at the November, 2012 MIC meeting. Based on the request, an informational poll on the status quo was taken in addition to the votes on Packages 2 and 3. Of the two packages that were voted on, only Package 3 received majority support and will therefore be forwarded to the MRC as the main motion.



5. APPENDIX I: PROPOSALS NOT MEETING THE THRESHOLD

Alternate proposals considered other than the consensus proposal are listed below.

Package 2 was the other proposal voted on. Package 2 proposed that for all energy related LOC calculations, the schedule used to calculate LOC should be the schedule that the resource is committed on.

Package 2 received 40 in favor, 93 opposed, 10 abstentions getting 30.1% in favor.

At stakeholder request, this proposal is being submitted as an alternate motion for consideration at the MRC.

6. APPENDIX II: SUPPLEMENTAL DOCUMENTS

Links to other important documents accompanying this report are provided here for reference:

- [LOC Issue charge](#)
- [LOC Education paper](#)
- [Opportunity Cost Matrix \(11/07/2012\)](#)
- [GENON presentation](#)
- [MA LOC Topic Examples](#)
- [MA LOC Proposal](#)

7. APPENDIX III: STAKEHOLDER PARTICIPATION

This issue was vetted by stakeholders of the Market Implementation Committee. Committee participation is contained within the meeting minutes for each meeting and posted on [pjm.com](#) at the [Market Implementation Committee website](#).

8. APPENDIX IV: ISSUE TRACKING

Complete history of this issue can be found on the Issue Tracking website at [Issue Tracking Consistency of Energy-Related Opportunity Cost Calculations](#):

Author: B. Keshavamurthy