



Appendix 1 - Issue Submission Form

Templates and forms are available from Stakeholder Relations

Issue Submission Form

This form is to recommend new issues not yet in the stakeholder process or modifications to previously assigned issues. To complete an entry, click on the field and insert your response. Please direct any questions to StakeholderRelations@misoenergy.org.

Instructions and Process:

1. All fields must be answered completely. Incomplete forms will be returned to the requestor.
2. Submit completed form to StakeholderRelations@misoenergy.org.
3. Receipt of submission will be acknowledged via email.
4. MISO will work with the requestor to ensure the issue is sufficiently explained and well understood
5. The requestor will be notified when the issue is added to a Steering Committee agenda. The request will be reviewed and, if necessary, assigned to a Main Parent Entity by the Steering Committee.
6. If assigned by the SC the issue will be reviewed at the appropriate Main Parent Entity and will be entered into the issue tracking tool on the public website. If the issue is rejected by the Steering Committee or the Main Parent Entity, the issue will be entered in the issue tracking tool and marked closed.

Submitter Information

Submitter Name: Garry Levasseur

Submitter Title: Technical Officer

Company: Manitoba Hydro

Transmission Owner

Email Address: glevasseur@hydro.mb.ca

Phone: 204-299-7203

Issue Profile

Submission Date: Sept 27, 2021

Is this a new or modified issue? If modified, what is the issue tracking ID? New

Is there a specific deadline for issue resolution? No

Background Information

Issue Description/Problem Statement

Manitoba Hydro (MHEB) and Miso utilize a External Asynchronous Resource (EAR) to provide MISO Market with 5 minute energy. Under certain system configurations, EAR is prevented from participating in the MISO Energy and Ancillary Services Market due to transmission network topology issues. With recent upgrades to our transmission capabilities (a second 500KV line) we want to remove any interlocking/limitation that prevents EAR from being offered. However due to a software limitation in Miso



market application it will currently disable EAR if our original 500KV line is out of service. This limitation needs to be removed so regardless of transmission topology nad system conditions EAR will be offered.

Issue Relationship and Dependencies

Issue Impact

Does this issue have an impact on Reliability?

No *If yes, please describe:*

Does this issue have an impact on Planning and/or Cost Allocation?

Yes *If yes, please describe:* Both Marketing and Operations are forced to needlessly plan/coordinate to have EAR unavailable during outages.

Does this issue have an impact on Resource Adequacy?

No *If yes, please describe: (Insert description)*

Does this issue have an impact on Markets?

Yes *If yes, please describe:* Disruptions to EAR result in the MISO market losing a dependable, non-carbon emitting supplier of energy and ancillary services in its northern region which may result in higher costs to MISO Load Serving Entities.



Is there any other information that should be taken into account with the consideration of this issue?

Juan Li (MISO) looked into a possible solution to this issue using the existing modeling tools but unfortunately was unable to find one and recommended a customization of the program.

Proposed Solution(s)

The current market dispatch application requires EAR to be tied to a physical node so it acts more like a generator. This is currently tied to D602F 500KV line node. So, when this line is out of service EAR is unavailable. In order to allow EAR to be available all the time a customization (software enhancement) to the market dispatch application needs to be designed and implemented to allow EAR to be offered regardless of node status. The details of this enhancement will need to be provided by MISO.