

## **Environmental Sector's Comments to the PAC 6-24-20 Meeting**

### **MISO FEEDBACK REQUEST #1: Proposed process for economic evaluation of GI Projects.**

Executive Summary: The Environmental Sector objects to MISO's proposal on the economic evaluation of Generation Interconnection Projects (GIPs). It may provide a small amount of relief for GI Customers, but it fails to address the problems identified by MISO and stakeholders. Waiting until interconnection customers have signed Generator Interconnection Agreements (GIAs) before evaluating the GIPs for market-efficiency project (MEP) status would impose unacceptable risk to generator developers and essentially leave them with the same choice as today: drop out of the Interconnection Queue (IQ) after Definitive Planning Phase 2 (DPP2) or commit to financing the build out of the regional transmission backbone - a cost that should not be borne solely by interconnection customers but should be shared according to both the principles of cost causation and beneficiary pays.

The Environmental Sector proposes that any proposed process to evaluate whether a GIP meets the definition of a MEP must achieve the following three goals:

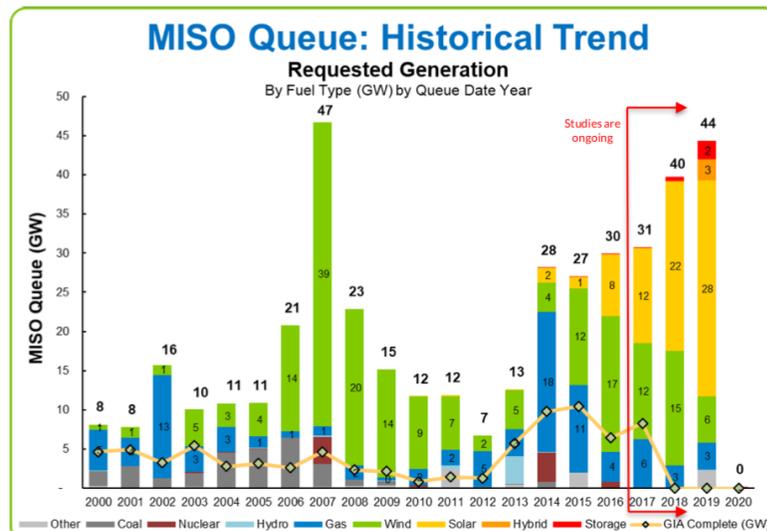
1. Facilitates the interconnection of generation needed to meet state and utility-specified goals that, among other things, requires timely studies;
2. Studies the additional benefits that certain GIPs will bring to the regional grid and, when appropriate, allocates costs beyond the GI Customers. Specifically, when the DPP assigns network upgrades (NUs) providing substantial regional benefits, then MISO's process should allocate costs not only to the GI Customers but also to the other beneficiaries of those regional upgrades. While the current tariff includes a provision aiming towards this goal, the threshold has never been met, suggesting a failure of the process and methodology; and
3. Continues to provide price signals in the DPP to ensure that GI Customers and utilities are incentivized to look for the most cost-effective locations for their interconnections to the grid.

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MISO is witnessing an unprecedented change in its generation portfolio and the carbon and clean energy goals of MISO states, utilities, and end-use consumers will only accelerate and intensify this portfolio transformation. To meet these

goals<sup>1</sup>, large amounts of renewable energy will need to be connected to the MISO grid.

We are now beginning to see the results of that demand in MISO’s interconnection queue. The following is a historical look at MISO’s IQ:



Source: <https://cdn.misoenergy.org/GIQ%20Web%20Overview272899.pdf>

Looking ahead, the recent EGEAS results of the MTEP21 Futures, showed the need for capacity additions between 69 and 151 GW of wind, solar or hybrid resources by 2039. All of these proposed generators must go through MISO’s IQ, which unfortunately is not functioning well on several levels and is ultimately proving to be a significant hurdle towards meeting the demand for new generation resources of MISO members and states.

MISO and its stakeholders largely agree that meeting ongoing demand for renewable energy is going to necessitate significant transmission system investments. We also agree that generators seeking to interconnect to MISO’s system should be responsible for reasonable costs associated with that interconnection. Unfortunately, some of the NUs that are now being assigned wholly to generators through the DPP process are not reasonable. Recently, we have seen generators proposing to interconnect at many locations being asked to build the backbone of the regional grid, including 345-kV lines.

As a result of the exorbitant costs being required for them to interconnect, these generators typically drop out of the IQ at the end of the DPP2. The unrecoverable costs of proceeding to DPP3 and the risks of being assessed the overly burdensome interconnection costs are too high for project developers to proceed to DPP3. While it is not unusual for a few generators to drop out of the

<sup>1</sup><https://cdn.misoenergy.org/20200427%20MTEP%20Futures%20Item%20003%20Siting%20Presentation443507.pdf>

queue even when functioning properly, to have all or most of them drop out, including projects with signed Power Purchase Agreements, is unprecedented and is a clear signal that MISO's transmission planning processes (including the IQ process) are broken and in need of reevaluation to ensure transmission planning is meeting the future needs of the system.

While generators and utilities must absolutely receive and respond to price signals on where interconnections would be most economic and GI Customers should be responsible for reasonable interconnection costs, they should not be asked to bear the full cost of bolstering the regional grid, which ultimately provides significant benefits across the system - benefits that flow to other MISO members who are currently not being asked to bear their share of the costs.

#### MISO's Proposed Solution Does Not Solve the Problem:

MISO proposes to evaluate GIPs that have completed all three phases of the DPP and have signed a GIA. In other words, only after a GIA is signed will MISO tell generators whether other parties will be required to help pay for the NUs assigned to that generator. The price signal and relief is given too late. As noted above, generators will decide at the end of DPP2 whether to proceed or not. The financial risks of withdrawal penalties are too high for project developers to proceed to DPP3 or to a signed GIA in order to find out if their required upgrades might meet the MEP criteria and thus their assigned costs be relieved. Hence, waiting for a signed GIA will not prevent generators from dropping out of the queue when faced with unreasonable network upgrade requirements and new resources will be denied market access even as demand for these new resources continues to grow. Interconnection network upgrades that provide significant additional beneficiaries must be evaluated and identified prior to the point where GI Customers are assigned those costs.

#### Developing Other Possible Solutions:

During the PAC discussion, MISO stated that it designed the three phases of the DPP without considering how GIPs could be evaluated for other benefits under the tariff and, therefore, cost-sharing. In its PAC presentation, MISO stated that conducting an "[e]conomic evaluation during a GI cycle is not as straightforward and will introduce further complications" because of the following four reasons:

1. GI DPP2 Timeline is only 80 days;
2. Continuous changes in generator projects between DPP Phases;
3. Multiple cycles for different GI regions running in parallel;
4. Interrupts ongoing MCPS/MTEP cycle.

(Slide 11).

MISO also noted that Robustness Testing at the end of the MTEP process could change MEP evaluations of GIPs if such evaluation was completed earlier to meet the DPP2 timeline.

Unfortunately, we have no silver-bullet solution that would both accomplish the three goals set forth above while simultaneously addressing MISO's concerns. However, we believe there is broad stakeholder support for exploring and identifying solutions to MISO's concerns and achieving the goals we've set out above. To further this discussion, we suggest the following venues for investigation:

- Providing preliminary conclusions about MEP evaluation results and possible other beneficiaries for NUs at the end of DPP2 with the understanding that if those conclusions change materially due to Robustness Testing, that the penalties for withdrawal at the end of DPP3 would be eliminated or less severe. Under this option, MISO would conduct the economic evaluation during DPP2 and DPP3.
- DPP candidate projects for MEPs could be studied out of cycle using the latest PROMOD model. Additionally, there could be an off-ramp in the GIP for consideration of GIP and associated GI Customers unable to proceed past DPP2 so that evaluation of these projects as MEPs does not impact other GI Customers that are proceeding in the cluster study.

MISO should consider creating a task team to develop and explore additional ideas on how to meet the goals of this PAC process. The task team would then bring back recommendations to the PAC.

**MISO FEEDBACK REQUEST # 2: Should MISO consider changing the MTEP model-building timeline? If yes, what changes are practically feasible without significant tradeoff on data freshness and review period? Will changes to model building timeline also require changing to project submission deadline (Sep 15)?**

The Environmental Sector supports whatever steps are needed to accomplish the "comprehensive review of all issues to identify cost effective solutions" as shown on Slide 18. Indeed, we urge MISO itself to:

- conduct that review in partnership with-- but not dependent on--stakeholders; and
- actively develop cost effective solutions, in addition to "reviewing" them.

The timeline presented on Slide 20 appears to be a good short-term solution for coordinating MISO's various planning processes, but does not achieve consolidated planning as envisioned in the Integrated Roadmap (IR) issue #90 and as we discuss further below. However, with respect to MISO's proposal to better coordinate its planning processes, we would like more information, including the following:

- What activities will be occurring between SPM1 and SPM2;
- Will MISO identify its own solutions;
- When and how can stakeholders suggest alternatives;
- How will MISO rely on stakeholders input;
- What is the difference between the MCPS and economic flowgate analysis in MTEP future scenario planning?

### **The Environmental Sectors' Unsolicited Comments on Other Issues Presented at the June 24, 2020 PAC Meeting:**

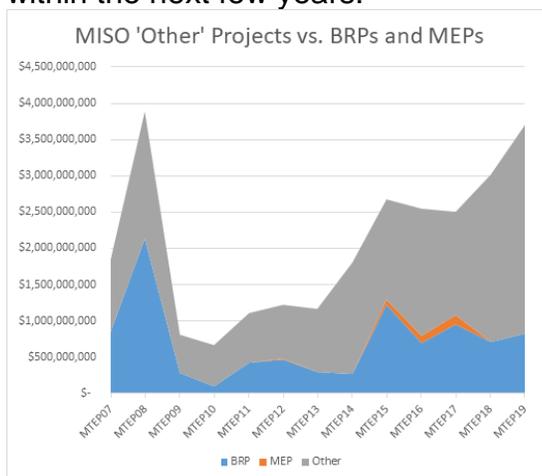
- A. Slide 12 - Non-Members' Access to MISO Models - We appreciate MISO's verbal commitment that it will work with non-members (who have signed the UNDA and have access to CEIII) to obtain MISO's models. As recently as the morning of the June PAC meeting, Clean Grid Alliance's modeling consultant was denied access to the MTEP models due to CGA being a "Stakeholder Group" and not a member or market participant. Non-members cannot meaningfully evaluate and propose alternatives without access to the MISO models.
- B. Slides 6, 11 and 18 - Coordinated vs. Consolidated Planning - We recognize that the CPPTT used the phrase "coordinated planning" while IR 0090 used the phrase "consolidated planning." We would ask that MISO differentiate between "coordinated" and "consolidated" planning. It is unclear from the following slides whether MISO is using the phrases interchangeably:
- On Slide 6, MISO agreed, " a robust coordinated planning process would be more effective to identify longer term system needs."
  - On Slide 11, MISO stated, "Discussion on economic evaluation during the GI cycle will continue to be part of consolidated planning process efforts."
  - Slide 18 is entitled "Consolidation of Reliability, Economic and GI Issues" which describes a "comprehensive review of all planning issues" and is carried through on slide 21.

The Environmental Sector suggests that "coordinated" planning should be used when discussing aligning the various planning timelines and

comparing their results, i.e. the six planning silos remain in place.<sup>2</sup> In contrast, “consolidated” planning would refer to a breaking down of the silos and a combination of one or more of the six existing planning processes. The Environmental Sector welcomes a coordination of planning efforts in the short term but believes that an actual consolidation of some or all of the silos may be required to ensure comparable treatment of alternatives during modeling.

- C. Slide 21 - Timing of Need - MISO consistently divides its planning studies into two time horizons: projects that are needed within three-to-five years (from the bottom-up planning) and those that are needed beyond five years. Having only two planning-horizon categories prevents MISO from effectively combining smaller projects into larger projects as is required under Attachment FF Section I. D.

For example, in recent years MISO has witnessed a very large increase in “Other” projects that reflect, in part, the need to replace aging assets within the next few years:



Source: LS Power.

This is not surprising given that there was a large transmission build in the 1960s and 1970s, with some of those projects coming to the end of their useful lives. However, because those projects are proposed to MISO within the three-to-five year category, MISO does not have time to evaluate whether those projects could be cost-effectively subsumed within other longer-term and larger projects. Instead, these aging assets are being replaced with like-kind projects in the short-term. The inability to evaluate more cost-effective solutions that would right-size the system over a longer term hurts ratepayers and TO’s alike.

<sup>2</sup> Reliability, Economic, Generation Interconnection, Transmission Service Requests (TSR), Retirements and Annual Deliverability/NRIS.

To capture these cost-efficiencies, the Environmental Sector strongly urges MISO to consider the following:

1. Create a Third Planning Horizon - create an intermediate planning horizon, say between years five-to-ten or five-to-fifteen. This new category of projects would likely, among other things, allow transmission owners to provide MISO with their capital replacement plans that could then be used to evaluate consolidated projects as required under Attachment FF Section I. D;
2. Include MTEP Appendix B projects in long-term planning: proposed transmission upgrades with sufficient lead times are included in Appendix B for further review in future planning cycles. Appendix B projects have been reviewed by MISO staff and have a documented need. Because Appendix B projects are not needed within the 3-5 year planning horizon, they can be incorporated into MISO's longer-term planning. Specifically, MISO could evaluate whether Appendix B projects are able to be combined with other projects to address multiple needs through a more cost-effective solution.
3. Consider Reconstituting Some Version of MTEP Appendix C Projects: While we do not know why the category of Appendix C projects was eliminated, we question whether MISO should resurrect this MTEP Report category. Appendix C was defined as follows:

*Appendix C may contain projects still in the early stages of the Transmission Owner planning process or have just entered the MTEP study process and have not been reviewed. Like those projects in Appendix B, they are not evaluated for cost sharing. There are also some long-term conceptual projects in Appendix C which will require significant planning before they are ready to go through the MTEP process and move into Appendix B or Appendix A. Appendix C may also contain project alternatives to the best alternative in Appendix B. Therefore, a project could revert from B to C if a better alternative is determined and the Transmission Owner is not ready to withdraw the previous best alternative. Appendix C projects are not included in the MTEP initial power flow models used to perform baseline reliability studies.<sup>3</sup>*

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<sup>3</sup> Retrieved from [http://fieldpost.org/StarkEnergy/Studies/MISO\\_TransmissionExpansionPlan\\_11\\_MTEP11\\_Draft\\_Report\\_Dec2011.pdf](http://fieldpost.org/StarkEnergy/Studies/MISO_TransmissionExpansionPlan_11_MTEP11_Draft_Report_Dec2011.pdf).

MTEP11's Appendix C had about four times the amount of projects (in cost) vs. Appendix A.

Region	Appendix A	Appendix B	Appendix C
Central	\$2,265,830,000	\$219,152,000	\$8,996,773,000
East	\$1,537,876,000	\$148,701,000	\$6,872,277,000
West	\$6,415,878,000	\$233,899,000	\$27,929,197,000
Total	\$10,219,584,000	\$601,752,000	\$43,798,247,000

Moving such a large bucket of projects to MISO's long-term planning process creates significant potential in identifying cost-effective combinations of projects that address multiple needs.

- D. Cost-Allocation Tariff: the issue of evaluating GIP projects for MEP status raises the specter of cost allocation. As noted above, the Environmental Sector fully endorses appropriate price signals to GI Customers while simultaneously wanting to ensure that obligations to build the regional grid are fairly shared among the beneficiaries of those NUs, which would include the GI Customers benefiting from those NUs. The Environmental Sector questions whether the current cost-allocation tariff provides the proper tools to allocate those costs appropriately.