



Reconfiguration for Congestion Cost Task Team Update

Reliability Subcommittee

June 23, 2022

Purpose & Key Takeaways



Purpose: To review changes to the process document and request feedback.

Key Takeaways:

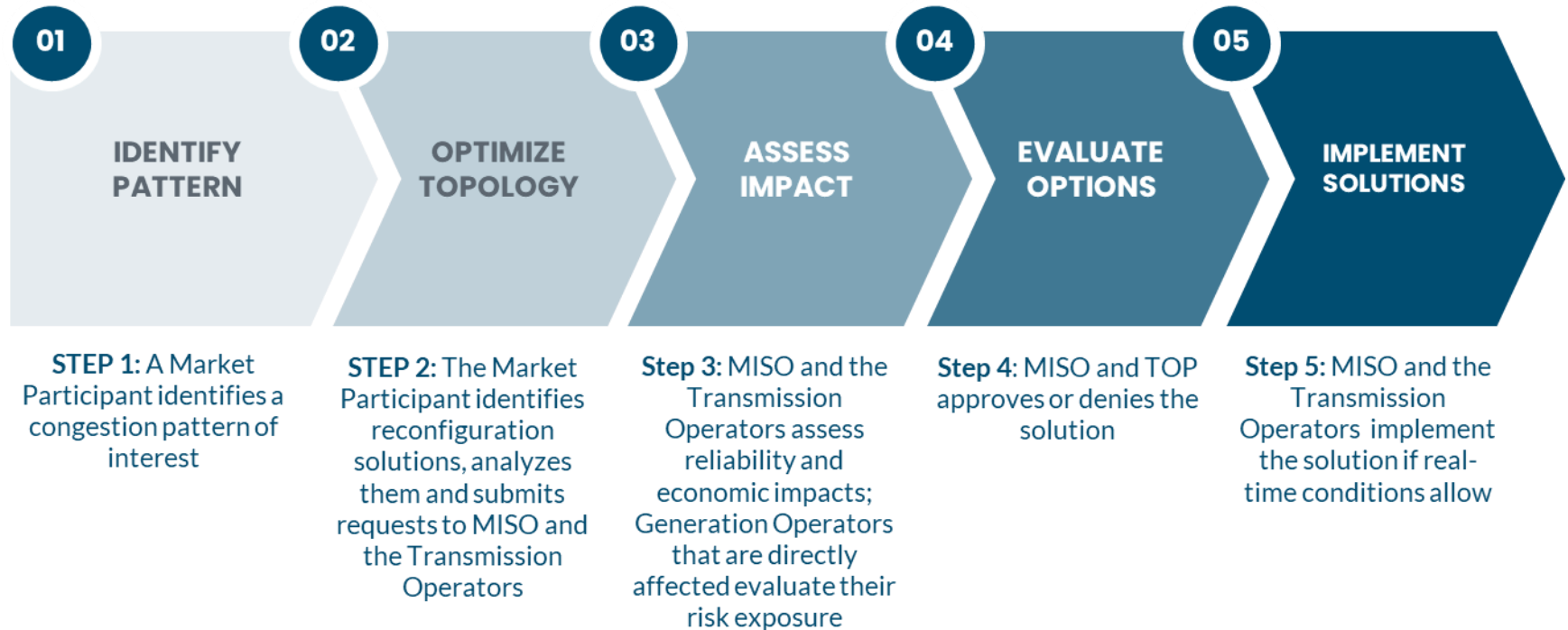
- Received comments from April RSC presentation.
- RCCTT reviewed comments and made changes to the process document.
- Stakeholder feedback requested.

Review of proposed process

- Two possible paths for reconfiguration solutions
 - Coming into MISO and the TOPs (Ad-Hoc)
 - MISO is also considering a monthly list of top economically impacted constraints
- All requests must be submitted to MISO through Client Relations. Requests may also simultaneously be submitted to the TOPs
- Ad-Hoc Process will have 4 phases; Initial Screening, Evaluation, Implementation and Exit
- Added language stating expected average time from submission to evaluation completion of 10 business days.*
- Added language requesting submissions for future planned outages be submitted with as much advanced notice as possible.

*Language in red throughout the presentation indicates altered or added language from previous version of document.

Proposed Process Schematic



Exit

If an economic reconfigure is no longer effective or reliable due to changes in system conditions, or fails one of the initial screening criteria, MISO and the TOP will exit the congestion cost reconfiguration.

Initial Screening Phase

- The process will outline what needs to accompany a request:
 - Company submitting request, including on behalf if applicable
 - Target constraint/s for relief
 - Operational action specification
 - Conditions under which the actions are requested for implementation
 - Requested duration
 - Expected flow relief on target constraint/s
 - Any potential risks identified
 - Load radialized by the requested actions, if any
 - Generation radialized by the requested actions, if any
 - Power flow cases used in the assessment
 - Expected cost savings
 - Notes

Initial Screening Phase

- The process will outline conditions that requests must pass:
 - It must not result in changing the definition of a M2M FG with SPP into including a generation facility within the contingency.*
 - It must not result in radial load **unless addressed or approved by all impacted TOPs/LSEs.**
 - If it does not resolve the constraint completely, it must at a minimum provide **5%** of **loading** relief on the ~~congestion~~ **constraint** it is meant to relieve.
 - ~~Any impacts to stability conditions, including but not limited to those addressed in operating guides, must be resolved prior to evaluation by MISO.~~ **It must not have failed during previous study with no major changes to system configuration or evaluation criteria.**
 - It ~~cannot~~ **must not** result in delaying or cancelling a planned outage, **unless agreed upon by the impacted TOP.**

* MISO and SPP are currently evaluating options

Initial Screening Phase (cont)

- The process will outline conditions that requests must pass:
 - ~~Units in testing cannot be considered for this process. It must not involve units in testing.~~
 - ~~The reconfiguration must not be in an area where the following conditions/statuses are true: Moved to Implementation Phase~~
 - ~~Conservative Operations~~
 - ~~Extreme weather events~~
 - ~~LTE/TSE~~
 - ~~Any switching must be accomplished through remote switching.~~
 - ~~Any limits within GIAs must be respected.~~
 - ~~If the request had previously been studied by MISO or the TOP, with no major changes in system configuration, and failed evaluation. It must not have failed during previous study with no major changes to system configuration or evaluation criteria.~~

Evaluation Phase

- The request(s) will be analyzed by each of the relevant TOPs for operational feasibility and any reliability impacts, by GOPs for any specific operational risk imposed on power plants, and by MISO for regional reliability impacts and market impacts.
- Refer to list of criteria for requests in Screening Phase above, same conditions apply throughout the Evaluation Phase.
- The assessment criteria may vary depending on the TOP, to account for TOP practices and local system characteristics.
- In any case, the assessments ~~and criteria~~ will be consistent with, and no less stringent than, the assessments conducted by the same organization when implementing the same actions for reasons other than the request (e.g., reconfiguration for Reliability purposes).

Evaluation Phase

- Risk identification: Determine if a single ended line trip will adversely impact the objective of the reconfiguration by introducing the potential for N-1 overloads. The TOP and RC can either accept this risk or mitigate it.
- The result of each reliability assessment by each TOP shall be either “acceptable” or “unacceptable” reliability risk.
- Upon a reliability assessment of “acceptable” by all TOPs and MISO, the request may proceed to the market assessment.
- Upon an “unacceptable” reliability assessment by any one TOP or MISO, the request is immediately returned to the submitter.
- In such case, the organization deeming the request as posing an unacceptable reliability risk shall provide details about the results of the evaluation to justify the decision.

Evaluation Phase

- The Market evaluation may consist of evaluation focused on impacts on MISO markets as well as impacts on individual market participants The evaluation may include but is not limited to:
 - Impacts on MISO market economics including system-wide production cost and congestion cost.
 - Impacts on Market Funding Efficiency.
 - ~~• Impacts on MISO individual market participants.~~
 - ~~• Impacts on MISO DA market (RT reconfiguration only).~~
 - ~~• Evaluation of MISO FTR market (DA+RT reconfiguration) with impacts of existing FTR holders due to proposed reconfiguration.~~

Evaluation Phase

- The Market evaluation will consist of studying the system with and without the reconfiguration implemented.
- Reconfiguration may not be approved if significant adverse market impacts are identified.
- The general principle of approving the reconfiguration from a market impact perspective is:
 - Market-based simulation agrees with MISO/TOP proposed study on relief of congestion (e.g reduction of shadow price on target constraints and/or reduction of LMP on target nodes), without significantly increasing congestions in neighboring areas.
 - The proposed reconfiguration will not result in system-wide market efficiency deterioration and will not significantly affect financial market efficiency adversely.
 - ~~Participants in the MISO market (FTR, DA or RT) will not be significantly and adversely impacted by the proposed reconfiguration.~~

Implementation Phase

- Once a request has been deemed “acceptable” through the evaluation phase by all required parties, the reconfiguration must be documented for the real-time Operators (MISO RC and TOPs) for operational awareness. **This will be accomplished through Operating Guides or a Job Aid document.**
- MISO Operations will communicate internally to ensure all required teams are aware
- MISO Operations and the TOP will follow normal operating procedures to study and implement reconfigurations.
- The TOP **or MISO** shall enter in a CROW ticket.
- Nothing in this proposed process would limit the ability of MISO and TOPs to take appropriate actions to ensure reliable operations
- **Moved language around Conservative Ops, extreme weather events and TSE/LTE here from Initial Screening phase.**

Exit Phase

- If an economic reconfigure is no longer effective or reliable due to changes in system conditions, or fails one of the initial screening criteria, MISO and the TOP will exit the congestion cost reconfiguration.
- MISO RC along with the corresponding TOP will study ~~putting~~ **returning** the equipment ~~in-to~~ service to ensure this does not adversely impact the system.
- If all parties agree it is reliable to exit, they will coordinate these actions as they currently do for other similar situations, (e.g. Outage returning from service or a reliability-only based reconfiguration.)

Stakeholder Feedback Requested

- MISO is requesting feedback on the **DRAFT Congestion Cost Reconfiguration Process Document** by July 8, 2022.
- Feedback requests and responses are managed through MISO's Feedback Tool on the MISO website and may be accessed by the URL below:

<https://www.misoenergy.org/stakeholder-engagement/stakeholder-feedback/>



Questions?

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