DER Interconnection

Interconnection Process Working Group

April 11, 2022

Purpose & Key Takeaways

Purpose:

Propose screening criteria and request stakeholder feedback

Key Takeaways:

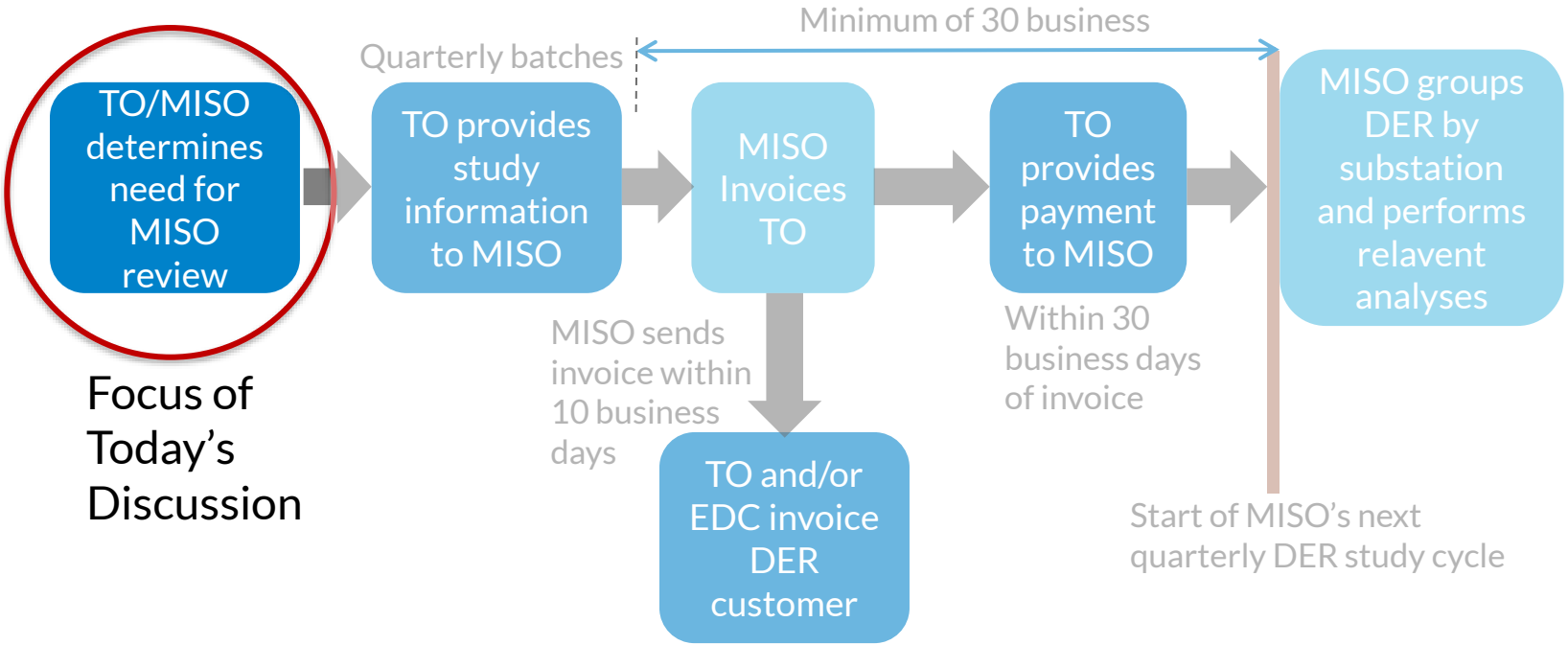
- MISO proposes technical screening for DER reliability impacts be performed jointly by the TO and MISO.
- MISO proposes screening criteria consistent with Affected Systems studies.

2022 Planned IPWG Meeting Dates with Draft DER Interconnection Topics

Date	Draft Topics*
February 7	Framing and objectives
April 11	DER technical thresholds and pre-MISO analysis
June 6	Process and coordination pre-MISO analysis
August 15	MISO DER analysis
October 10	Post-analysis processes: study results and system upgrades
November 14	Reserved for topics needing additional time

*Distributed Energy Aggregated Resource (DEAR) Technical Review topics may be added, pending FERC's acceptance of MISO's 2222 compliance filing

What analysis and coordination could be needed leading up to a MISO DER study?



Flow diagram presented at the February 7 IPWG as an example process.

Screening is a common technical approach to determine when detailed analysis is needed

Illustration of FERC SGIP interconnection review approach[1]

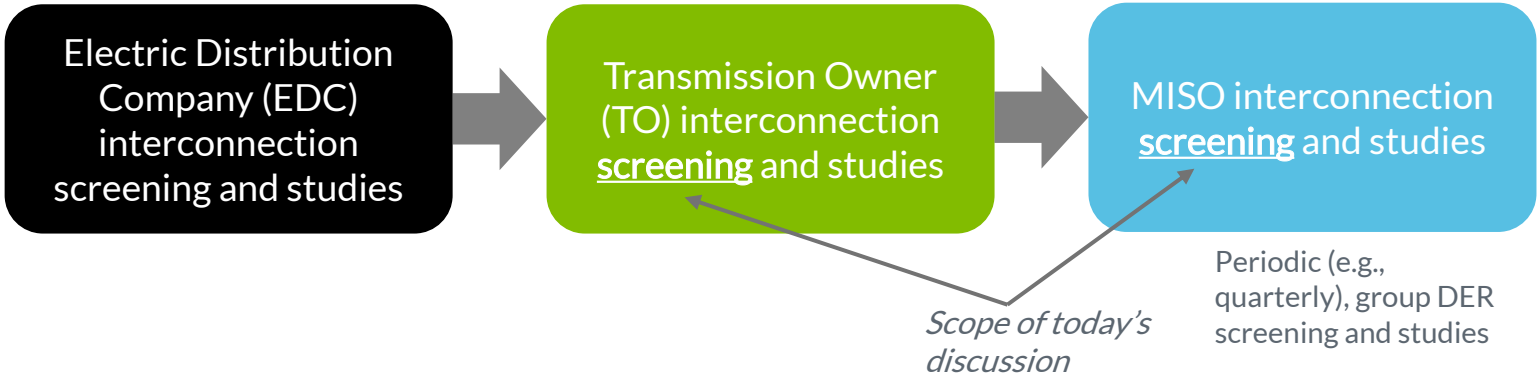
- Lower complexity
- Shorter timeframes
- Less data needed

- Higher complexity
- Longer timeframes
- More data needed

Screening aims to filter interconnection requests that require deeper analysis from those that could have streamlined technical reviews

Reference: [1] Federal Energy Regulatory Commission, Small Generator Interconnection Procedures. Updated August 27, 2018. Available at: https://www.ferc.gov/sites/default/files/2020-04/sm-gen-procedures.pdf

MISO proposes to define standard screening practices for Transmission Owners and MISO, used as a stage gate for MISO DER Studies



- EDCs and TOs may be subject to State regulatory rules that define screening or study requirements.
- MISO has a responsibility to review potential transmission reliability impacts.
  - Standard screens applied by the TO and MISO offer a process on-ramp for reviewing potential impacts.
- DER interconnection requires coordination between State and Federal jurisdictional activities.

MISO proposes using standard Affected System study screens with a modification

Criteria	Threshold (equal to or exceeding level shown)
Distribution Factor	3%
Power injected onto transmission during system peak load at the substation level	5 MW
	AND
Line loading change as a percentage of summer normal transmission line rating during system peak load	1%

MISO affected systems screening thresholds

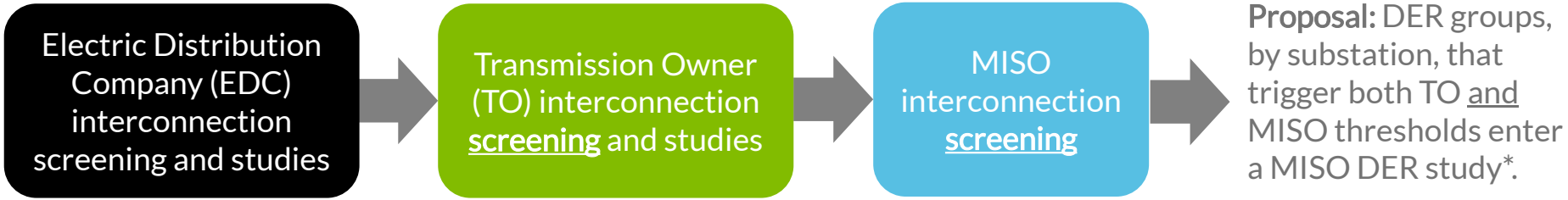
Proposed DER Criteria & Thresholds.

Proposal uses AND logic*.

MISO proposes eliminating the Distribution Factor screen for DER since that screen aims to capture effects of external generators on MISO Transmission. DER contemplated in this context is largely internal to MISO and therefore the Distribution Factor screen is not applicable.

* "AND logic" means that both thresholds need to be exceeded for a DER interconnection request to move from TO/MISO initial screening to a MISO supplemental review or detailed analysis.

The two proposed screens would be split between the TO and MISO



Proposal: TO applies the 5 MW injection at peak threshold at the substation level

Proposal: MISO applies the 1% line-loading change screen for DER at substations exceeding the TO screen

*The details of the MISO study is a topic for the August 15th IPWG meeting.

Stakeholder Feedback Request

- MISO requests feedback on **Proposed Technical Screening Criteria** by Friday, April 22, 2022:
  - Do the proposed screens accurately capture potential transmission system reliability impacts?
    - Are there gaps in the coverage of the proposed technical screens (i.e., false negative outcome)?
    - Are there alternative screening criteria that should be evaluated?
  - Do the screens allow for passing through projects without potential transmission system reliability impacts?
  - Are the screens practical to implement?

- Feedback requests and responses are managed through the Feedback Tool on the MISO website: https://www.misoenergy.org/stakeholder-engagement/stakeholder-feedback/

Contact Information

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Questions?