DER Interconnection

Interconnection Process Working Group
April 11, 2022
Purpose & Key Takeaways

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.

Purpose:
Propose screening criteria and request stakeholder feedback
## 2022 Planned IPWG Meeting Dates with Draft DER Interconnection Topics

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

**Focus of Today’s Discussion**

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.

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

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

<table>
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<tr>
<th>Criteria</th>
<th>Threshold (equal to or exceeding level shown)</th>
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<tbody>
<tr>
<td>Distribution Factor</td>
<td>3%</td>
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<tr>
<td>Power injected onto transmission during system peak load at the substation level</td>
<td>5 MW</td>
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<tr>
<td>Line loading change as a percentage of summer normal transmission line rating during system peak load</td>
<td>1% AND</td>
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MISO affected systems screening thresholds

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

- **Electric Distribution Company (EDC)** interconnection screening and studies
- **Transmission Owner (TO) interconnection screening** and studies
  - **Proposal**: TO applies the 5 MW injection at peak threshold at the substation level
- **MISO interconnection screening**
  - **Proposal**: MISO applies the 1% line-loading change screen for DER at substations exceeding the TO screen
  - **Proposal**: DER groups, by substation, that trigger both TO and MISO thresholds enter a MISO DER study*

*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/](https://www.misoenergy.org/stakeholder-engagement/stakeholder-feedback/)
Contact Information

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Questions?