Purpose & Key Takeaways

**Purpose:** Propose practices for DER Affected Systems study reports and Facilities Studies

**Key Takeaways:**

- MISO’s proposed DER Affected Systems study report closely follows the current MISO-SPP Affected Systems study report.
- MISO’s proposed DER Facilities Study approach follows practices outlined in MISO’s BPM-015.
- Request stakeholder feedback on MISO DER Affected System Proposals
# 2022 Planned IPWG Meeting Dates with Draft DER Interconnection Topics

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Today’s discussion focuses on coordination and processes after screening but before the DER Affected Systems Study

**Focus of Today’s Discussion**

- **Screening and study**
  - Proposals covered in April, June, and August IPWG meetings

- **Report delivery and Network Upgrades**
  - MISO issues draft DER AFS report
  - TO, EDC, and DER Customers may offer comments
  - MISO finalizes report
  - Facilities study / Construction process

**Definitions**

- AFS: Affected Systems study
- TO: Transmission Owner
- EDC: Electric Distribution Company
MISO posted Stakeholder feedback and responses

- MISO shared additional information in response to Stakeholders clarifying questions about the **DER Affected Systems study details**.

- MISO proposed a timeline adjustment in response to continued feedback on the **Transmission Owner’s** role in process coordination while seeking additional feedback on the change due to **DER Developer’s concerns about process delays**.

- Stakeholders requested clarifications and modifications the current **screening proposal** and MISO responded with additional information.
MISO understands TO internal processes may require more than the proposed 10-days for securing study deposits and transmitting funds to MISO

- At the same time, aware of DER Customer timeline concerns, MISO seeks to streamline the overall process timeframe.

- **MISO is considering increasing the study deposit submittal timeframe to be up to 30 business days and requests additional stakeholder feedback.**

Currently proposed to be 35 business days. Potentially extended up to 55 business days if study deposit timeframe extended.

The **90-calendar day** timeframe is inclusive of these steps.
DER Affected System Study Results and Facilities Studies
New MISO Proposals
MISO intends to use an Affected Systems Study report format following the current MISO-SPP study report.

*Illustrative Table of Contents*

Executive summary

1. **Introduction**
   i. Study Project Description

2. **Methodology and Assumptions**
   i. Study Models
   ii. Model Development
   iii. Methodology

3. **Steady State Analysis**
   i. Thermal
   ii. Voltage

4. **Network Upgrades and related cost estimates**

Appendices (as needed)
MISO will post a version of the report publicly and send the TO a version with full CEII information

- **A Public** version of the draft DER Affected Systems Study report will be posted on MISO’s website for the TO, EDC, and DER Customer to view high-level results.
  - Impact (Yes/No);
  - If Yes, indicative estimate ($/kW) for network upgrades.

- **A Confidential** version with CEII will be transmitted to the TO with restricted access.
  - CEII version is only needed if network upgrades are needed.
  - TOs could access the detailed study contingency and network upgrade information which would be shared with the EDCs as needed.

CEII: Critical Energy/Electric Infrastructure Information, information available at: [https://www.ferc.gov/ceii](https://www.ferc.gov/ceii)
A proposed 10-day comment period will follow the transmittal of a draft DER Affected Systems study

- MISO proposes a **10-day comment period** before finalizing the study
  - MISO’s standard Affected Systems study process has a 5-day comment period. However, DER studies often have more parties involved (e.g., EDC), leading to MISO’s longer review proposal

- MISO will respond all feedback
  - MISO aims to issue responses prior to finalizing the report, but some communications depend on other parties.
If Network Upgrades are required, the Facilities Study process is initiated

- Facilities Study determines estimated **cost and schedule** to construct the Network Upgrades
  - The TO performs Facilities Study
- The Facilities Study will list the required upgrades and include a categorized detailed cost breakdown of identified facilities, consistent with BPM-015 Sections 6.2.2 and 6.2.3
- After Facilities Study, a MISO Multi-Party Facilities Construction Agreement\(^1\) is needed between the MISO, TO, and DER Customers\(^*\)

\(^*\)Exception: If there's only one DER Customer, then a MISO Facilities Construction Agreement\(^2\) would be used in place of the MISO Multi-Party Facilities Construction Agreement.

The Facilities Study approach would follow standard MISO business practices for other Affected System Studies and Generator Interconnections.

The Facilities Study process is found in BPM-015, Sections 5.4.3 and 5.4.5.

- **MISO/TO Facilities Study and Report**: Up to 90 Calendar Days
- **DER Customer and TO comments**: Within 15 Calendar Days of draft report*
- **DER Customer, TO, and MISO may meet to discuss results**: Within 10 Business Days
- **MISO issues final Facilities Study Report**: Within 10 Calendar Days of DER Customer comments

*MISO may reasonably extend the fifteen (15) Calendar Days period upon notice to the IC if the IC’s comments require MISO to perform additional analysis or make other significant revisions prior to the issuance of the final Interconnection Facilities Study report.
MISO’s DER Affected System Study results will be at the substation level

- Since the DER Affected System Studies consider cumulative DER at the substation level, MISO does not attribute impacts to specific DER.
- The entity responsible for managing the RERRA interconnection process, typically the EDC, would be responsible for disaggregating the results.
  - Thermal: simple $/kW methodology
  - Voltage: Refer to MISO Affected System study Steady State Voltage Violations tables in Appendix B of the MISO-SPP study\(^1\). If cumulative impacts is 1% or greater, impacts are assigned per DER Substation based on voltage impact contributions.


RERRA: Relevant Electric Retail Regulatory Authority
MISO is not proposing cost-sharing between DPP study projects and DER Affected Systems study project for the initial implementation

- Due to process complexity (e.g., documentation, systems, training, etc.) needed to facilitate inter-process cost sharing is not justified by the current need.
- Should DER start to show MISO transmission system impacts, and DER Customers indicate a willingness to fund upgrades, MISO will revisit this position.
MISO is evaluating what type of DER tracking and reporting information is most valuable to stakeholders to help prioritize potential reporting information

- Under the current proposal, MISO would post DER Affected System study report results.
  - DER capacity studied, impacts, and indicative costs
- Stakeholders may find value in additional information, for instance, relating to the screening process.
- MISO will seek to provide visibility into the DER Affected System screening and study process without creating overly-burdensome tracking/reporting process that detract from processing study requests.
Stakeholder Feedback Request

- MISO is requesting feedback on the following **MISO DER Affected System Proposals** presented today by October 24, 2022.
  - Extending the deposit submittal timeframe to be up to 30 days
  - Information proposed for the public and confidential reports
  - Report delivery process, including 10-day comment period
  - Priority DER screening and study tracking information

- 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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