

Question text	Response
<p>Could you please share your experience when comparing results from shadow studies against MISO SIS Phase 1 results? And how helpful it has been in mitigating the network upgrades risk?</p>	<p>Interconnection Customers (ICs) generally do not provide MISO with their shadow studies.</p> <p>MISO provided ICs an opportunity to provide alternative mitigations and feedback and worked with ICs to answer (and resolve) any known issues/differences. MISO is not aware of any issue that was not able to be resolved.</p> <p>For DPP-2025, MISO asked ICs who submitted alternative mitigations which proposed new transmission paths or connections (new lines, transformers, re-routes, etc.) to demonstrate the benefit of the alternative mitigation (benefit needed to outweigh that of the previously identified mitigation). See <a href="https://www.esig.energy/wp-content/uploads/2026/07/Alternative-Mitigation-Instructions.pdf">https://www.esig.energy/wp-content/uploads/2026/07/Alternative-Mitigation-Instructions.pdf</a> for details.</p> <p>While MISO is not sure what the submitter means by “network upgrade risk”, each alternative mitigation that was submitted during the window was evaluated by MISO to determine if (1) the submittal met the entry requirements and (2) if the submittal resolved the constraint in question.</p> <p>If the alternative mitigation met the entry requirements and the mitigation resolved the constraint, it was accepted and used in the study. If the alternative mitigation met the requirements but did not mitigate the constraint as stated, it was not used.</p>
<p>Can MISO discuss the relationships and dependencies between clusters in each study region for modeling and analysis? I understand that MISO North and South are nearly functionally and operationally separate. However, projects in either region and the helper/harmer relationship can impact results.</p>	<p>While Interconnection Requests are assigned a group based on their electrical location, all requests in the same cycle are modeled together. This is intentional as we do often see South generators impacting facilities in the Central and West region, etc.</p>
<p>Alyssa when you mentioned Phase 3 upgrades are included in the bench model; do you mean a Phase 3 studies perhaps in process (perhaps finalized) where MISO expects a NU to occur and therefore included?</p>	<p>If a cycle is not actively under restudy and the SIS report is final (i.e. the portfolio of network upgrades is considered final) then those upgrades would be included in the bench/study models.</p> <p>While this question was not asked, we do include upgrades in both the bench and study to ensure consistency in topology between models. Consistency in topology is especially important in the voltage analysis.</p>
<p>Speaking of the "consistency" in STITCH is it possible to better align the MTEP, DPP, and ERAS models?</p>	<p>Per BPM-015, MISO leverages the latest available five-year-out MTEP model. MISO does not update the MTEP model used for the cycle between phases, even if one is available.</p> <p>The Tariff only permits a few days for building the next phase model, so updating to a new model series is not practical.</p> <p>DPP and ERAS models are intentionally different. ERAS only includes interconnection requests in the bench model which have executed GIAs. Per BPM 15, DPP models allow for higher queued interconnection requests (even those without GIAs) to be added to the bench.</p>

<p>What kind of stability studies will be considered, e.g. frequency, voltage, angle and resonance stability? Thanks!</p>	<p>Transient stability studies will analyze the performance of the proposed generator and the ERCOT System in terms of angular stability, voltage stability and excessive frequency excursions.  Study Requirements are stated in Planning Guide Section 5.3.2.4.3.  <a href="https://www.ercot.com/files/docs/2025/12/01/05-040126.docx">https://www.ercot.com/files/docs/2025/12/01/05-040126.docx</a>  Refer to DWG Procedure Manual:  <a href="https://www.ercot.com/files/docs/2025/06/06/DWG-Procedure-Manual-Revision-24-ROS.docx">https://www.ercot.com/files/docs/2025/06/06/DWG-Procedure-Manual-Revision-24-ROS.docx</a></p>
<p>Is ERCOT switching to 4-monthly QSA cadence only for large loads or for the generation as well?</p>	<p>PGRR146 Applies to both Generation and Load.  <a href="https://www.ercot.com/mktrules/issues/PGRR146#keydocs">https://www.ercot.com/mktrules/issues/PGRR146#keydocs</a></p>
<p>For ERCOT, what value does the "High Renewable Min Load" case bring from a study perspective? What are some of the seasonal or time of day conditions when this case is realistic?</p>	<p>The High Renewable Min Load case is an important stress cases in ERCOT planning and interconnection studies because it isolates conditions that maximize the gap between renewable output and system demand. Inverter-based resources (wind, solar, and battery) do not provide inertia, and as the resource mix shifts toward more IBRs and fewer synchronous generators, system inertia decreases. This case allows ERCOT to identify potential stability issues — including voltage, frequency response, and fault performance — associated with interconnecting a proposed generation or load resource under low-inertia, low-net-load conditions.  Realistic seasons and time of day: Spring and fall, overnight to early-morning hours</p>
<p>For ERCOT, is there a specific sink dispatch methodology for the screening study (e.g. ramp down specific generation in ERCOTs system)?</p>	<p>For the summer peak case: conventional generation dispatch to 100% of Pmax, solar to 95% of Pmax, noncoastal wind to 20% of Pmax, coastal wind to 50% of Pmax  For the HRML case: any additional conventional generation is not turned on, solar to 50% of Pmax, wind to 90% of Pmax.</p>
<p>Is the Transmission Owner or ERCOT responsible for EMT type studies in ERCOT?</p>	<p>SSR screening is completed by ERCOT for every Transmission connected Generator application submitted in R100-IS. TDSP performs SSR (if applicable) studies.</p>

<p>Is there a formal process to engage operations to gain insight on study dispatch and contingency pinch points?</p>	<p>MISO: Is this question asking if MISO Operations provides feedback to Resource Utilization regarding real time congestion? If so, this responder is not aware of it. The BPM states in section 6.1.5.1 that “Therefore, despite not being responsible for paying for Network upgrades, identified in the SISs, an IC’s generation facility can get curtailed in Real Time for the same constraint under varying operating environments. Therefore, to evaluate potential options to reduce Real Time congestion and curtailment for their respective generating facilities, ICs can request an Optional Interconnection Study by providing a detailed scope.” While these types of studies are available, we have not seen ICs ask for them as they would result in an IC-funded network upgrade. See 6.1.5.2 for details.</p> <p>ERCOT convenes several stakeholder forums, such as ROS and the committees that report to it, that provide a venue for these discussions. For specific technical questions, I can coordinate internally with the appropriate subject matter experts. <a href="https://www.ercot.com/committees">https://www.ercot.com/committees</a></p>
<p>Can you confirm that the TO is responsible for EMT studies in MISO? Are there MISO criteria for these studies?</p>	<p>MISO administers the overall interconnection process but the TOs often perform the EMT/stability studies. MISO also has modeling requirements (PSCAD data that needs to be submitted and will be reviewed) that were recently changed. We often rely on consultants to build those for us.</p>
<p>For VISH on ERCOT, how are you performing EMT modeling? Using the large scale ERCOT model or an equivalent model? Did you consider ERCOTs established stability GTCs?</p>	<p>We often rely on consultants to perform the model building and analysis for us. We have dedicated consultants for specific regions of the country. Internally, it’s largely revolving around model review, benchmarking, and our asset specific EMT analysis. We do not analyze the entire ERCOT system through the EMT analysis. I don’t think even ERCOT does that. The starting point is the ERCOT planning models and we build a model that captures a handful of buses away from our POI.</p> <p>Regarding the ERCOT GTCs, we are constantly reviewing the posted GTCs and limitations that are identified. If one of our projects is near or within a defined GTC, we build models that replicate the GTC flow conditions and capture the contingencies that would limit it. One additional step we take for our operational assets is work with a company to figure out if there are potential system reconfigurations (often tied to planned outages) that we could implement that will help improve the production of our generators.</p>
<p>Are there anecdotes or reports / sites that provide insights on total typical timeline (application to agreement)? What about construction timelines?</p>	<p>LBNL Queued Up analysis has this data by region, technology type etc. here <a href="https://emp.lbl.gov/publications/queued-2025-edition-characteristics">https://emp.lbl.gov/publications/queued-2025-edition-characteristics</a></p>