



## Filing Receipt

**Received - 2021-08-13 03:35:47 PM**  
**Control Number - 52287**  
**ItemNumber - 18**

**PROJECT NO. 52287**

**POWER OUTAGE ALERT CRITERIA     §     PUBLIC UTILITY COMMISSION**  
**§**  
**§                                           OF TEXAS**

**COMMENTS OF**  
**MIDCONTINENT INDEPENDENT SYSTEM OPERATOR, INC.**

COMES NOW the Midcontinent Independent System Operator, Inc. (“MISO”) and files these Comments to the Public Utility Commission of Texas (“Commission”) Staff’s Request for Comments filed in this proceeding on July 30, 2021.

**Introduction**

MISO is an independent, not-for-profit, member-based Regional Transmission Organization (“RTO”) responsible for operating the wholesale power grid across 15 U.S. states and the Canadian province of Manitoba. MISO’s members are comprised of certain transmission owning utilities in these states and Canada. MISO does not provide service to retail or residential customers and does not administer markets for retail choice. Part of MISO’s footprint includes areas in East Texas. MISO is committed to reliable, nondiscriminatory operation of the bulk power transmission system and collaborating with all stakeholders to create cost-effective and innovative solutions for a changing industry. To this end, MISO administers one of the world’s largest wholesale electricity and operating reserve markets.

**Comments**

MISO provides these informational comments for the Commission’s consideration as it evaluates the proposed power outage alert required by Texas Government Code § 411.301. MISO is an RTO operating under the jurisdiction of the Federal Energy Regulatory Commission (“FERC”). When emergency conditions arise, MISO must comply with FERC and North

American Electric Reliability Corporation (“NERC”) requirements as well as MISO’s own internal operating procedures, as set forth in more detail below.

1. **Government Code § 411.301(a) states the alert should “be activated when the power supply in this state may be inadequate to meet demand.” Should the Public Utility Commission of Texas interpret this to mean that an alert will be activated when there is inadequate system-wide power supply to meet system-wide load demand? Should the commission also interpret this to mean that an alert will be activated when there are regional constraints that only restrict power supply to certain regions?**

As a preliminary matter, it appears that Texas Government Code § 411.301 is focused on implementing an outage alert in the Electric Reliability Council of Texas (“ERCOT”) system. MISO agrees that this focus is appropriate given potential concerns that any statewide alerts could conflict with alerts to which non-ERCOT entities are subject, depending on the criteria the Commission adopts. Additionally, because the purpose of the alert is to notify the public of emergency conditions that could lead to power outages, it appears more accurate to tailor the alert to the specific regions where the outages may occur and to place the notification requirements on the entities that directly serve the public.

2. **Government Code §411.301(b) states, “The criteria must provide for an alert to be regional or statewide.” How should the different regions be defined?**

MISO submits that regions should be defined geographically but also to specify whether ERCOT or non-ERCOT areas are included. More specifically, an ERCOT power outage in a geographic region would not necessarily mean that non-ERCOT entities would expect a power outage as well.

3. **Government Code §411.301(b) states, “The Public Utility Commission of Texas by rule shall adopt criteria for the content, activation, and termination of the alert.” At what threshold should the commission choose for the alert to be activated? Terminated? What content would be the most helpful for inclusion in the alert?**

MISO currently operates in accordance with FERC and NERC requirements and MISO's emergency procedures, which include emergency communications. Specifically, the MISO Market Capacity Emergency Procedures govern the communications to MISO's members and neighboring RTOs and utilities regarding the conditions within MISO's footprint. Each Step in those procedures is intended to communicate the level of risk on the system and commence the access to additional resources only available when MISO is in a Capacity Emergency situation. *See Attachment 1, Summary of MISO's Operating Procedures.*

For example, in the Maximum Generation Event Step 2c, MISO, as the Balancing Authority, directs affected Local Balancing Authorities (at the utility operating company level) to issue Public Appeals to conserve energy. Regarding public notifications, MISO utilizes its designated communication channels to notify affected utilities and stakeholders. This includes member company representatives (operations, regulatory, communications).

MISO also recently launched the MISO Mobile App allowing website users to access information via a new mobile application. MISO began developing the app after noticing a significant increase in website traffic from mobile devices and receiving valuable feedback from stakeholders. Users have the option to receive push notifications related to weather, overall system notifications like Minimum and Maximum Generation declarations, as well as information related to MISO's Day-Ahead and Real-Time markets.

### **Conclusion**

MISO appreciates the opportunity to provide these Comments and looks forward to working with the Commission and other interested parties on these issues.

Respectfully submitted,

/s/ Stephanie C. Sparks

Stephanie C. Sparks

Vedder Price P.C.

State Bar No. 24042900

100 Crescent Court, Suite 350

Dallas, Texas 75201

(469) 895-4830

(469) 895-4802 (FAX)

**ATTORNEYS FOR MIDCONTINENT  
INDEPENDENT SYSTEM OPERATOR, INC.**

**CERTIFICATE OF SERVICE**

I certify that a true and correct copy of this pleading has been forwarded to all parties of record on August 13, 2021.

/s/ Stephanie C. Sparks



## MISO Operating Procedures

**MISO's carefully designed operating procedures ensure reliability and predictable outcomes during emergency or abnormal operating situations.**

### Protecting Reliability

To maintain the reliability of the electric system, MISO operates under a set of carefully designed operating procedures that define system conditions and guide system operator actions in a variety of conditions.

These procedures empower MISO to quickly adjust to system conditions as they unfold. For example, extreme weather patterns or unexpected increases or decreases in available electric generation can affect the balance of supply and demand on the transmission system.

### Operating Conditions

- **Normal Operations:** MISO's Normal Operating Procedures (NOPs) guide our operation of the bulk electric system and are used during normal grid operations or, in some instances, to prevent an emergency. NOPs mitigate risk, facilitate the reliable and efficient operation of the electric system, and ensure compliance with federal and state regulatory requirements, reliability standards, and MISO's Tariff and contractual agreements.
- **Abnormal Operations:** MISO utilizes Abnormal Operating Procedures (AOPs) for events that deviate from normal but do not put the electric system at risk. Examples include malfunctioning software systems or other infrastructure problems affecting MISO or its members. The procedures help mitigate further risk and may include, but are not limited to, the back-up process used when a particular system fails.
- **Conservative Operations:** If conditions warrant, MISO will carefully transition from normal operating conditions to Conservative Operations to prepare local operating personnel for a potential event, and to prevent a situation or event from deteriorating. During conservative operations, non-critical maintenance of equipment is suspended or in some cases, returned to service. Operating personnel throughout the affected area are also in a higher state of alert. Conservative operation declarations may be initiated due to system conditions including severe weather, hot/cold weather, or geo-magnetic disturbance warning.
- **Emergency Operations:** Emergency Operating Procedures (EOPs) guide system operator actions when an event occurs on the electric system that has the potential to, or actually does, negatively impact system reliability. Emergency Operating Procedures are communicated in escalating order as advisories, alerts, warnings, and events. Advisories are provided for situational awareness of potential limited operating capacity. Alerts define the affected area and call to temporarily suspend generation unit maintenance in the defined area. During warnings, MISO may require external capacity resources to be available, or may curtail non-firm energy sales. MISO issues Max Gen Events due to a shortage of capacity resources. **During Emergency Events, MISO utilizes Emergency Pricing, which affects ex-post pricing, not system commitment or dispatch. Emergency Pricing will only be implemented during Max Gen Warnings, and Events, which may be caused by forced outages, higher than projected load, or other circumstances.**

### Did you know?

- MISO has never issued a call for rolling brownouts or blackouts, despite some of the hottest summers on record in 2006 and 2012, and record cold during the polar vortex of 2014.
- To maintain reliability, Conservative and Emergency operating conditions require a successive series of remedial actions.
- MISO must implement emergency procedures to use demand management (load modifying) resources. There are more than 9,000 MW of these resources.

### Reference Documents

Find MISO's Reliability Operating Procedures on the MISO website:

<https://www.misoenergy.org/markets-and-operations/reliability-operating-procedures/>



# MISO Operating Procedures

## General Guide to MISO's Emergency Operations Messaging

MISO's Emergency Operations messages define the area(s) involved, duration, and projections of system conditions. The table below is a summary, and does not replace or redefine MISO's Emergency Operations messages.

| Message                                                  | Communication Intent                                                                                                       | Potential Member/MISO Actions                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Conservative Operations Declaration</b>               | <b>Alert for Situational Awareness:</b><br>Reliability issue possible for defined area.                                    | <ul style="list-style-type: none"> <li>• Potentially suspend transmission maintenance</li> <li>• Review outage plans for deferral, cancellation</li> </ul>                                                                                                                                                                                                                                      |
| <b>Hot Weather, Cold Weather or Severe Weather Alert</b> | <b>Alert for Situational Awareness:</b><br>MISO could be approaching tight supply conditions.                              | <ul style="list-style-type: none"> <li>• Review outage plans for deferral, cancellation</li> </ul>                                                                                                                                                                                                                                                                                              |
| <b>Capacity Advisory</b>                                 | <b>Advisory for Situational Awareness:</b><br>Potential for limited operating capacity margins (<5%) in the next 2-3 days. | <ul style="list-style-type: none"> <li>• Update facility and generation outages, including de-rates</li> <li>• Update generation offers</li> <li>• Update Load Forecast Values</li> <li>• Update LMR Availability and Self Scheduled MW values</li> <li>• Update EDR offers</li> </ul>                                                                                                          |
| <b>Min Gen Alert</b>                                     | <b>Alert for Situational Awareness:</b><br>MISO is forecasting a potential supply surplus.                                 | <ul style="list-style-type: none"> <li>• Prepare for de-commitment (taking generation off line), reduction in purchases or other actions</li> </ul>                                                                                                                                                                                                                                             |
| <b>Max Gen Alert</b>                                     | <b>Alert for Situational Awareness:</b><br>MISO is forecasting a potential capacity shortage.                              | <ul style="list-style-type: none"> <li>• Declare Conservative System Operations</li> <li>• Prepare for possible Max Gen Event</li> </ul>                                                                                                                                                                                                                                                        |
| <b>Max Gen Warning</b>                                   | <b>Warning to Prepare for Possible Event</b>                                                                               | <ul style="list-style-type: none"> <li>• Curtail non-firm exports</li> <li>• Schedule all available external resources into the MISO Market</li> <li>• Implement Emergency Pricing Offer Tier 1. This is an ex-post pricing change, and does not affect system commitment or dispatch.</li> </ul>                                                                                               |
| <b>Max Gen Event (Step 1)</b>                            | <b>Actions Taken to Preserve Operating Reserves:</b> NERC Emergency Alert 1                                                | <ul style="list-style-type: none"> <li>• All available resources in use</li> <li>• Generators instructed to start off-line resources.</li> <li>• Use of reserves not yet implemented.</li> <li>• Emergency Pricing Offer Tier 1 is still effective.</li> </ul>                                                                                                                                  |
| <b>Max Gen Event (Steps 2, 3, 4)</b>                     | <b>Actions Taken to Preserve Firm Load:</b> NERC Emergency Alert 2 (Step 3 declaration)                                    | <ul style="list-style-type: none"> <li>• Implement demand management programs</li> <li>• Utilize Contingency Reserves</li> <li>• Purchase Emergency Energy</li> <li>• Issue Public Appeals</li> <li>• Prepare for possible firm load shed</li> <li>• Implement Emergency Pricing Offer Tier 2. This is an ex-post pricing change, and does not affect system commitment or dispatch.</li> </ul> |
| <b>Max Gen Event (Step 5)</b>                            | <b>Event Occurring:</b> NERC Energy Emergency Alert 3                                                                      | <ul style="list-style-type: none"> <li>• Shed firm load</li> <li>• Rolling brownouts or blackouts for defined area</li> <li>• Emergency Offer Tier 2 is still effective.</li> </ul>                                                                                                                                                                                                             |



# MISO Operating Procedures

## System Status Levels

MISO also issues color-coded System Status Levels (SSL) based on the severity of the impact to the bulk electric system. For more information, see [MISO's Abnormal Operating System Status Levels Procedure, SO-P-AOP-00-203](#).

| Operating Conditions                                                |                                                                                                                                 |                                                                                                                                              |                                                                                                                                                                                 |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SSL 0<br>Low - Green                                                | SSL Level 1<br>Elevated - Yellow                                                                                                | SSL Level 2<br>High - Orange                                                                                                                 | SSL Level 3<br>Severe - Red                                                                                                                                                     |
| <b>Description:</b><br>System status is normal. No adverse impacts. | <b>Description:</b> Short, minor impact to system, can be quickly remedied.<br><b>Examples:</b> Temporary infrastructure issue. | <b>Description:</b> Longer term, major impact to system, cause unknown.<br><b>Examples:</b> Loss of monitoring data or member infrastructure | <b>Description:</b> Major impact on MISO's ability to reliably operate system or market.<br><b>Examples:</b> Hardware failure, bomb threat, sabotage, control center evacuation |