



Updating ERCOT Outage Scheduler During Cold Weather Events

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April 17, 2025

Outage Scheduler Nature of Work, Notes and Supporting Information

- This presentation is intended to guide Market Participants (MP) in providing accurate information for updates to a forced or derate outage into the Outage Scheduler.
- Within two hours after the 'Actual End Date/Time' is entered into the outage by the QSE or TSP, the following can be updated with more accurate information:
 - Nature of work
 - Notes section
 - Supporting information – required for any “forced” or “derated” outage.

Outage Scheduler Nature of Work and Notes



- Background Information
- When severe cold weather events occur such as Winter Storm Kingston, ERCOT Weatherization and Inspection (W&I) team extract all forced and derated outages from the ERCOT Outage Scheduler:
 - Our extracts will typically use the same timeframe that ERCOT Operations issues a Weather Watch.
 - All forced and derated outages are reviewed.
 - Outages with insufficient information in the “Notes” section or where ***cold weather related*** or ***other*** was selected in the “Nature of Work” are flagged for follow up.
 - MP’s Authorized and Backup Authorized Representatives are contacted to provide additional information related to the outages(s).

Outage Scheduler Nature of Work and Notes

Example 1 original outage entered by QSE

- Actual start date/time - 02/XX/2025 at 08:30.
- Notes section - reason for the outage was GT# derated due to trip risk.
- Actual end date/time – 02/XX/2025 20:18 Outage complete.
- Nature of work - Other.

Example 2 original outage entered by QSE

- Actual start date/time - 02/XX/2025 at 05:38.
- Notes section - Unit is currently in a forced outage state due to ice and cold weather.
- Actual end time - 02/XX/2025 17:00.
- Nature of work – Cold weather related.

Example 1 suggested update by QSE

- ✓ Actual start date/time - 02/XX/2025 at 08:30.
- ✓ Notes Section - **GT# was limited on load to mitigate the potential for lean blowout trips.**
- ✓ Actual end date/time - 02/XX/2025 20:18 Outage complete.
- ✓ Nature of work was changed to **Emissions.**

Example 2 suggested update by QSE

- ✓ Actual start date/time - 02/XX/2025 at 05:38.
- ✓ Notes section - **ice build-up on the turbine blades would not allow the turbines to operate.**
- ✓ Actual end time - 02/XX/2025 17:00.
- ✓ Nature of work – changed to **Icing.**

Nature of Work - 35 Categories for Resources

- Black Start Test
- Boroscope
- Cold weather related
- Combustion Inspection and Repair
- Control system issues
- Cooling Water Problems/Repairs
- Emissions
- Exhaust Problems/Repairs
- Feedwater Problems/Repairs
- Frequency issue
- Frozen Equipment
- Fuel Limitation/Lack of Fuel Availability
- Fuel Problems/Repairs
- Fuel Switching
- Gas Company Pipeline Work
- Hot weather related
- Human Error
- Icing
- Inlet Air Problems/Repairs
- Lack of Steam Load Availability
- Lightening
- Mothballed
- New Equipment Energization
- Other
- Overhaul
- Personnel Safety
- Retirement of Old Equipment
- Seasonal Resource
- Snow
- Steam Turbine Limited/Unavailable Due to CT/GT Work
- Temperature Limit
- Transformer Repair/Replace
- Tube Leak
- Turbine/Generator Vibration/Repair
- Unknown

Nature of Work - 31 Categories for Transmission

- Associated Equipment Outage
- Breaker Maintenance
- Breaker Repair/Replace
- Cold weather related
- Cross Arm Structure
- Frozen Equipment
- Galloping Conductors
- Hot weather related
- Human Error
- Icing
- Lightening
- Line Maintenance
- Line Rebuild/Upgrade
- New Equipment Energization
- Other
- Personnel Safety
- Relay Work - See Notes
- Relay/Breaker failure
- Repair Hot Spot
- Repair/Replace Damaged Equipment
- Replace Equipment
- Retirement of Old Equipment
- Switch Maintenance
- Switch Repair/Replace
- Telcom Work
- Temperature Limit
- Third Party Request
- Transformer Maintenance
- Transformer Repair/Replace
- Transformer Testing
- Unknown

Key Takeaways

- Observed “Notes” and “Nature of work” that are helpful as we analyze outages:
 - “Not cold weather related” followed by additional outage details.
 - “Not weather related” followed by additional outage details.
 - “Icing” – for wind generators and followed by additional outage details.

- ❑ The ERCOT Outage Scheduler “Notes” section is limited to 1000 characters which provides for ample details.
- ❑ Using the most accurate information in “Nature of work” and “Notes” related to forced or derated outages is helpful to the W&I team as we evaluate outages during extreme cold weather events.
- ❑ Within two hours after the ‘Actual End Date/Time’ is entered into the outage by the QSE or TSP, the “Notes” and “Nature of Work” sections can be updated.

Questions?

