SCR820 Updates &
Real-Time Operator Messaging Tool - POC Demo Tool Access to TOs

Sreenivas Badri

April 24, 2024

SCR820

Objective

- ❑ This SCR builds on the ERCOT Control Room Hotline communication process by developing a web-based platform supporting Real-Time, bi-directional, “Send-Review” messaging between ERCOT Operators and Transmission Operators (TOs) during emergency event coordination.

- ❑ The tool will support one-to-one or one-to-many communications.

- ❑ The Messaging System will log and store communications so that parties can stay current during the emergency event and for review subsequent to the emergency.

SCR820

- **Issue**

  - ❑ During any emergency event, such as the Energy Emergency Alert (EEA) Level 3 event, ERCOT provides Verbal Dispatch Instructions (VDIs) to Transmission Operators (TOs) to support emergency operations communications and/or instructions, including instructions to shed Load and for the restoration of Load.
  - ❑ During Winter Storm Uri, AEP Texas operators received over 4000 phone calls. The number of calls can be overwhelming, especially during Real-Time critical emergencies.
  - ❑ Communications under a Black Start situation would be even more overwhelming while trying to communicate properly with all the different parties of the different island developments.
  - ❑ AEP is part of four different islands and TOs may drop in and out of the ERCOT Black Start voice bridges due to taking other calls resulting in information exchange that will likely be lost.

SCR820

- **Key Benefits**

A new, secure, web-based Real-Time messaging platform will be created that allows fast, effective operational messaging between ERCOT and the ERCOT TOs. Some of the key benefits of this ERCOT/ TO Real-Time Messaging Application are:

- ❑ Reduction of phone calls as primary communication.
  - ❑ If there is no response to a message within five minutes, ERCOT follows up with a call.
- ❑ Provides a log of all messages so that if an operator is pulled away, the operator can quickly reference logged communications with no information lost.
- ❑ All TOs can confirm receipt for a one-to-many Hotline call vs currently the one randomly selected TO.
- ❑ The web-based application will allow all TOs to easily integrate with existing or easily accessible hardware and software.
- ❑ ERCOT or TOs can send or review messages like an internet-based email exchange.

- **Reference**
  - An in-house Real-Time Messaging System is leveraged by the Southwest Power Pool ("SPP") and has proven successful for managing Load shed events and proved beneficial in managing the Winter Storm Uri emergency event.

SCR820

- Project was initiated and currently it is **planning phase**
  - Requirements are developed
  - Design is in Progress
  - Working on Proof of Concept (POC)
    - Demo version of the Real-Time Operator Messaging tool was developed to demonstrate key functional requirements such as one-to-one and one-to-many communications between ERCOT Operators and TOs/QSEs.
    - Demonstrate POC to ERCOT Operators and TO and seek their feedback – **In Progress**
    - Finalize the design and implementation approach

- Project Implementation Timelines – will be developed after design and implementation approach is finalized.

- Initially, Tool will be rolled out for communication between ERCOT and TOs and will be extended for ERCOT to QSEs and TOs to TOs communication at later phases of the project.

SCR820

- **It is a Demo/POC Tool, NOT a finished Product**

- **Seeking TOs Feedback**

  - This Demo/POC version of the tool will be made available to TOs by 05/10/2024
  - 05/13/2024 – 05/24/2024 - Request TOs to evaluate the tool in terms of usability, core functionality of ERCOT to TOs communication and provide the feedback by 05/24/2024.
  - ERCOT will send email notification to TOs authorized representative regarding this request with more details to get the user list who can participate in evaluating this demo tool and provide the feedback.