

Memorandum

To: ISO Board of Governors
From: Neil Millar, Vice President of Infrastructure and Operations Planning
Date: December 6, 2023
Re: Transmission Maintenance Coordination Committee update

This memorandum does not require ISO Board of Governors action.

EXECUTIVE SUMMARY

The Transmission Maintenance Coordination Committee (TMCC) held a teleconference meeting on October 12, 2023. The following were the main topics discussed:

- Non-SF6 Circuit Breaker Pilot Program
- Robotic Substation Inspection Pilot Program

The next regularly scheduled TMCC meeting will be held on January 18, 2024, at the ISO headquarters.

BACKGROUND

The TMCC is an advisory committee to ISO management. TMCC membership includes one member representing each participating transmission owner (PTO) with transmission facilities subject to the ISO transmission maintenance standards, two members representing organizations that represent labor interests, five members representing other organizations, and the ISO Vice President of Infrastructure and Operations Planning, or their designee, who serves as the Chair of the TMCC.

Members of the TMCC perform duties specified in Appendix C to the transmission control agreement focused on maintaining the availability of transmission facilities, including:

- Conveying transmission facility maintenance-related information to the ISO Vice President of Infrastructure and Operations Planning;
- Seeking input from PTOs and interested stakeholders regarding the transmission maintenance standards; and

- Reviewing any proposed changes to the transmission maintenance standards submitted by the ISO, a PTO, or any interested stakeholder; and recommending revisions to the standards for submittal to the ISO Board of Governors for decision.

Summary of October 12, 2023, meeting

Non- SF6 Circuit Breaker Pilot Program

Evan Richardson, San Diego Gas and Electric (SDG&E) Team Lead, Substation Apparatus & Standards, presented an overview of SDG&E's SF6 (Sulfur Hexfluoride) gas replacement program and potential timelines. Mr. Richardson specifically discussed SDG&E's ongoing pilot program using new technology vacuum type non-SF6 circuit breakers. He also discussed the overall industry circuit breaker manufacturer's progress in developing new equipment to meet the mandated California Air Resources Board implementation schedule for reducing SF6 emission from circuit breakers and gas insulated switchgear.

Robotic Substation Inspection Pilot Program

Chris Nielsen, Founder and CEO of Levatas, Inc. presented on the Trans Bay Cable (TBC) pilot robotic inspection program at TBC's Portero substation. The robot was supplied by Boston Dynamics with specific artificial intelligence routines and programs developed by Levatas in conjunction with TBC operations personnel. The robot is able to perform routine automated inspections within the TBC site, including thermal anomaly detection, analog gauge reading, authorized/unauthorized person detection, unexpected object detection and door monitoring. The goals for this automation is to increase overall substation reliability and efficiency, increase worker safety, and earn measurable cost savings.