Memorandum

To: ISO Board of Governors

From: Neil Millar, Vice President of Infrastructure and Operations Planning

Date: December 10, 2025

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 meeting on October 16, 2025. The following topics were discussed:

- San Diego Gas and Electric's (SDG&E) 2026-2028 Wildfire Mitigation Plan
- An overview of Western Area Power Administration (Sierra Nevada Region) Electric Power Research Institute's (EPRI) Leakage Current Monitoring System Project
- Accelerating data center interconnection at Pacific Gas and Electric (PG&E) with advanced power controllers
- Southern California Edison's (SCE) use of circuit breaker radiography

The next regularly scheduled TMCC meeting will be held on January 21, 2026, 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, ten 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 the October 16, 2025, meeting

SDG&E's 2026-2028 Wildfire Mitigation Plan

Crystal Bertolini, SDG&E Project Manager, and Katie Mauer, SDG&E Project Manager, presented SDG&E's 2026-2028 Wildfire Mitigation Plan. The presentation detailed SDG&E's evolving strategy, shifting towards a "sustained approach" that prioritizes permanent, non-operational solutions such as strategic undergrounding and covered conductor over temporary measures like Public Safety Power Shutoffs. SDG&E presented a lifecycle cost analysis demonstrating that strategic undergrounding is the more cost-effective solution that provides a 99% reduction in wildfire risk while also eliminating long-term operational expenses for vegetation management and inspections. The SDG&E 2026-2028 plan is guided by their data-driven Wildfire Next Generation System model and includes 50 miles of undergrounding and 130 miles of covered conductor. The plan will increase undergrounding to 100 miles per year starting in 2027.

Overview of EPRI's Leakage Current Monitoring System project at the Tracy Substation

Dave Hahn, Western Area Power Administration (WAPA) Maintenance Management Specialist, presented an overview of EPRI's Leakage Current Monitoring System project at WAPA's Tracy Substation . The pilot program is designed to monitor insulator leakage current in order to determine when to wash substation insulators and to serve as an early warning system for an impending flashover. Leakage current data is transmitted to EPRI where it is analyzed to provide alerts of when washing is needed and when there is an elevated risk of flashover.

Accelerating Data Center Interconnection with Advanced Power Flow Controllers

Chad Dupuis, PG&E Principal Electrical Engineer, presented on PG&E's Advanced Power Flow Controller (APFC) project. The APFC project provides a near-term solution to certain power flow issues due to new load demand from data centers in the Bay Area. The APFC is an advanced static synchronous series compensator that will be installed in series with an existing 115 kV transmission line at the Los Esteros Substation. This technology will redirect power from overloaded lines to less heavily loaded lines and mitigate thermal overloads in real time. This solution is an alternative to reconductoring or installing single solution air-core reactors and is expected to provide an additional 100 MW of firm power delivery capacity.

Circuit Breaker Radiography

Alan Hernandez, SCE's Senior Advisor, Transmission and Development Transmission Compliance Integration, Arthur Jackson, SCE Test Technician and Sheikh Ahmed, SCE Technical Lead, presented on SCE's use of radiography for circuit breaker maintenance. Radiography has been implemented as a maintenance tool to perform internal inspections of critical components without opening the circuit breaker tank. The process involves passing gamma radiation through the breaker assembly onto a "phosphorous-laden plate" which captures a digital image based on the density of the internal parts. This data is used to identify equipment wear and anomalies. SCE has successfully used this technology to identify failing circuit breaker internal snap-rings and contact wear. SCE is expanding this program from its 220 kV and 500 kV sulfur hexafluoride breakers to include other types of breakers, such as dry-air-vacuum breakers. Key benefits include reducing sulfur hexafluoride gas emissions by avoiding the need to open healthy, sealed breakers and achieving significant cost and labor savings from reduced field work and equipment outages.