

TRANSMISSION MAINTENANCE COORDINATION COMMITTEE (TMCC) MINUTES

October 20, 2016

Meeting from the ISO Headquarters Folsom, California

Steve Ruty, Acting Chairperson of the Transmission Maintenance Coordination Committee (TMCC), called the meeting to order at approximately 9:30 a.m.

ATTENDANCE

The following TMCC members attended:

Tibor Foki (International Brotherhood of Electrical Workers Local Union 47 (IBEW 47))
Steve Ruty (California Independent System Operator Corporation (ISO)) – Acting Chairperson
Raymond Fugere (Southern California Edison (SCE))
Jamie Patterson (California Energy Commission (CEC))
Tom Wright (Pacific Gas & Electric (PG&E))
James Alligan (NextEra Energy Transmission)
Jack Vranish (PacifiCorp)
David Hahn (Western Area Power Administration (WAPA))
Steve Powell (Trans Bay Cable (TBC))

The following TMCC members were not in attendance:

David Haerle (Los Angeles Department of Water & Power (LADWP))
James Andresen (VEA)
Tyson Swetek (San Diego Gas & Electric (SDG&E))
Landis Marttila (International Brotherhood of Electrical Workers Local Union 1245 (IBEW 1245))
Ryan Yamamoto (California Public Utilities Commission (CPUC))

The following members of the public were in attendance:

Chris Hillman (ISO)
Scott Vaughan (ISO)
Valentina Guzman Ridad (Silicon Valley Power)
Jed Ferguson (VEA)
Lee Bridges (VEA)
Monica Curry (SDG&E)
Brett Ball (SDG&E)
Ron Gonzalez (SCE)
Gary Kelly (WAPA)
Kevin Meagher (TBC)
Ebrahim Rahimi (ISO)

The following agenda items were addressed:

Opening Comments:

Tibor Foki (IBEW 47) began a discussion on current industry news. The discussion focused in the following points;

- Nuclear power coming to an end in California
- Casinos in Las Vegas are considering defecting from Nevada Energy through 3rd party power contracts
- California Cap & Trade program
- Vehicles generating electricity through piezoelectric crystals on freeways

Decision on 4/21/16 General Session Minutes:

The April 21, 2016 meeting minutes were reviewed and approved with no objections noted.

Trans Bay Cable presentation on the Quick Start Project:

Steven Powell, Trans Bay Cable's Director of Operations, presented on completion of TBC's Quick Start Project. The project was designed to address a Category D contingency of loss of transmission from the southern peninsula to the City of San Francisco.

Quick Start (QS) will allow TBC to operate in voltage/frequency mode versus voltage support mode (i.e. no system reference required). The voltage/frequency mode will allow the system to create an AC signal and allow the Potrero converter system to be charged via the DC line from the Pittsburg converter system. The upgrade consisted of new software and Control & Protection equipment.

Over 300 functional performance test and dynamic performance tests were completed prior to onsite performance testing. QS performance testing utilized the largest mobilized load bank test ever assembled and required QS to demonstrate the ability to pick up load and maintain voltage/frequency within required standards.

Southern California Edison presentation on Vegetation Management and the California Drought:

Raymond Fugere, Southern California Edison's Manager of Compliance Strategy, presented on the challenges being faced by SCE due to the drought in southern California. SCE has implemented a vegetation identification and removal program to address trees succumbed to pine bark beetle investigations resulting from drought conditions.

SCE has over 30 crews completing patrols on a 4 – 6 week cycle on both their transmission and distribution infrastructure. To date they have removed 33,400 trees with 14,200 identified for removal with an additional 750 identified each week.

Pacific Gas & Electric presentation on their Mission Substation Modernization:

Tom Wright, Pacific Gas & Electric's Director Substations Maintenance & Construction, presented on the rebuild of PG&E's Mission substation. The substation was built in 1948 initially with two transformers and two 115kV cables and was built out with an additional two transformers and two 115kV cables in the 60s.

The modernization was completed in three phases. Phase I, completed in 2010, involved the replacement of a portion the distribution equipment while Phase II, completed in 2013, involved the replacement of the remaining distribution equipment. Phase III was completed in 2015 and consisted of the replacement of the transmission equipment and the installation of a GIS to replace the 115kV ring bus.

Recent Experiences with NERC Reliability Standards and compliance processing:

Attendees were informed that revisions are pending to NERC regulations EOP-005-2 and EOP-006-2 with a January 1, 2017 implementation date.

Jack Vranish, PacifiCorp's Director of Asset Management, also informed the attendees of upcoming revisions to the NERC CIP Standards to address issues identified by the Version 5 Advisory Group.

Briefing on major grid events:

PG&E provided an update on the partial discharge monitor installs related to the ELIN 500/230kV 420 MVA transformers failures they reported at the April meeting.

SCE shared their recent experience with the power outage that resulted in the flaring at the Torrance refinery in September and October.

Open discussion items:

None

New Business Issues and Future Agenda Items:

Acting TMCC Chairperson Steve Ruddy asked the members to work with the CAISO over the next few months to decide which topics they would like to discuss at the next TMCC meeting.

TMCC MEMBER ACTION ITEMS

- ISO will draft the minutes for this meeting and post as a document for the January 19, 2017 TMCC meeting;
- ISO will post the minutes approved for the April 21, 2016 TMCC meeting on the ISO website;

The meeting was adjourned with no objections noted.