TRANSMISSION MAINTENANCE COORDINATION COMMITTEE (TMCC) MINUTES
January 21, 2021
Webex

Steve Rutty, Acting Chairperson of the Transmission Maintenance Coordination Committee (TMCC), called the meeting to order at approximately 10:00 a.m.

ATTENDANCE

The following TMCC members attended:

James Alligan (NextEra Energy Transmission)
James Andresen (Valley Electric Association (VEA))
Brian Brau (LS Power)
Tibor Foki (International Brotherhood of Electrical Workers Local Union 47 (IBEW 47))
Bob Gerstle (International Brotherhood of Electrical Workers Local Union 1245 (IBEW 1245))
Andrew Gazdziak (San Diego Gas & Electric (SDG&E))
David Hahn (Western Area Power Administration (WAPA))
Alan Hernandez (Southern California Edison (SCE))
Maria Ly (Pacific Gas & Electric (PG&E))
Chris McLean (California Energy Commission (CEC))
Charles Mee (California Public Utilities Commission (CPUC))
Steve Rutty (California Independent System Operator Corporation (CAISO)) – Acting Chairperson
Jim Useldinger (GridLiance West Transco (GWT))

The following TMCC members were not in attendance:

Jason Le (Los Angeles Department of Water & Power (LADWP))

The following members of the public were in attendance:

Lou Fonte (CAISO)
Licheng Jin (CAISO)
Samson Adigun (CAISO)
Chris Hillman (CAISO)
Scott Vaughan (CAISO)
Ross Hohlt (LS Power)
Michael Blunt (NextEra Energy Transmission)
Vince Steinman (PG&E)
Fariya Ali (PG&E)
Ping Phou (SCE)
Monica Curry (SDG&E)
Kevin Galloway (SDG&E)
The following agenda items were addressed:

**Opening Comments:**

Tibor Foki, IBEW 47 Senior Business Representative, began a discussion on current industry news. The discussion focused on the following points;
- Community Choice Aggregation (CCA)
- Impacts of rooftop solar

**Decision on 10/15/2020 General Session Minutes:**

The October 15, 2020 meeting minutes were reviewed and approved with a correction to the dates of the approved minutes.

**California Air Resources Board (CARB) Sulphur Hexafluoride regulation revisions:**

Steve Rutty, California ISO Director Grid Assets and acting chairperson, initiated a discussion about pending changes to CARB’s regulation regarding Sulphur Hexafluoride (SF6) emissions from gas insulated switchgear. Mr. Rutty explained that the California ISO requested participating transmission owners provide the ISO their concerns with the proposed revised regulation. The responses received centered on the notification process and the definition of catastrophic failure. Mr. Rutty provided an overview of the actions the ISO has taken.

The discussion focused on what alternatives to SF6 circuit breakers currently exist. SCE and SDG&E have limited experience with 72 kV class vacuum breakers but PG&E reports good results to date and are investigating 115 kV class vacuum breakers. Maria Ly, PG&E Director of Transmission and Substation Asset Strategy, explained that high voltage non-SF6 equipment is not commercially available and Ping Phou, SCE, cautioned that the nameplate and thermal rating of non-SF6 equipment may not work with existing systems. Brian Brau, LS Power Director of Asset Management, also expressed concerns with the physical space requirements of non-SF6 equipment in comparison to SF6 insulated equipment. Mr. Phou further explained that vendors are currently only focused on circuit breakers and not other SF6 insulated equipment.

Fariya Ali, PG&E, informed the members that PG&E is participating in a joint utility working group focused on the proposed regulation. Mrs. Ali explained that the group is providing a written response to CARB in mid-February requesting CARB consider a SF6 phase out exemption process, consider equipment nameplate capacities and suggest CARB start with a pilot project initially.

The discussion concluded with Mr. Phou describing the phase out considered in the revised regulations would impact all new equipment including ongoing and near term projects. Mrs. Ly also explained that the emissions levels proposed in the regulation will be held to 2019 levels with no increase.
**RC West Outage Coordination Process:**

Samson Adigun, California ISO Lead Reliability Coordinator, presented on RC West procedure RC0630 Outage Coordination Process.

Mr. Adigun reviewed the responsibilities of both the transmission operator and the balancing authority in the coordination process, then described the outages that fall into the scope of the RC outage process and the timing requirements. The presentation went on to explain the process for evaluating the impact of outages and the process for resolving conflicts.

**Open discussion items:**

Andrew Gazdziak, SDG&E Operations & Engineering Manager, initiated a discussion focused on confidentially of maintenance records. Mr. Gazdziak explained that SDG&E considers its maintenance practices, pending maintenance items, maintenance history and black start resources as confidential. Maria Ly, PG&E, added that customer information and operating diagrams are considered confidential at PG&E.

Tibor Foki, IBEW 47, inquired about the recently completed Harry Allen – Eldorado 500 kV transmission line. Brian Brau, LS Power, provided details on the construction methods, line design specifications and coordination with neighboring utilities.

**New Business Issues and Future Agenda Items:**

Steve Rutty 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. Suggestions provided at the meeting included;

- Continued discussion on the pending SF6 regulations
- Transmission owner perspective on restricted maintenance operations (Procedure No. 4420E)

**TMCC MEMBER ACTION ITEMS**

- ISO will draft the minutes for this meeting and post as a document for the April 15, 2021 TMCC meeting;
- ISO will post the approved minutes for the October 15, 2020 TMCC meeting on the ISO website;
- ISO will distribute an updated membership roster to the members;
- ISO will distribute the RC West Outage Coordination Process presentation.

The meeting was adjourned with no objections noted.