

Memorandum

To: ISO Board of Governors
From: Keith Casey, Vice President of Market and Infrastructure Development
Date: September 11, 2014
Re: Transmission Maintenance Coordination Committee update

This memorandum does not require Board action.

EXECUTIVE SUMMARY

The Transmission Maintenance Coordination Committee (TMCC) met on April 17, 2014 and conducted a web conference on July 17, 2014. The following topics were discussed:

April 17, 2014

1. Recent experiences involving North American Electric Reliability Corporation (NERC) Reliability Standards;
2. California Public Utilities Commission (CPUC) General Order 174 (Rules for Electric Utility Substations) and General Order 165 (Inspection Requirements for Electric Distribution and Transmission Facilities);
3. Critical Infrastructure Protection;
4. Major grid events;
5. Pacific Gas & Electric presented on the SGS Statistical Services method of determining availability;

July 17, 2014

1. CPUC General Order 174 (Rules for Electric Utility Substations) and General Order 165 (Inspection Requirements for Electric Distribution and Transmission Facilities);
2. Critical Infrastructure Protection;
3. Updates to ISO Maintenance Procedure 2 – Outage Data File Format; and
4. TMCC Membership changes for San Diego Gas & Electric and Southern California Edison;

The next regular scheduled TMCC meeting will be held on October 16, 2014 at the ISO Folsom Headquarters.

BACKGROUND

The TMCC is an advisory committee to ISO Management. TMCC membership includes one member representing each participating transmission owner with transmission facilities subject to the ISO transmission maintenance standards, two members representing organizations representing labor interests, five members representing other organizations, and the ISO vice president responsible for transmission maintenance, or his or her designee, who serves as the Chair of the TMCC.

Members of the TMCC perform duties specified in Appendix C to the transmission control agreement, including:

- Convey transmission facility maintenance related information to the ISO vice president responsible for transmission maintenance;
- Seek input from other participating transmission owners and interested stakeholders regarding the ISO transmission maintenance standards; and
- Review any proposed changes to the ISO transmission maintenance standards submitted by the ISO, a participating transmission owner, or any interested stakeholder, and recommend revisions to the ISO transmission maintenance standards for submittal to the Board for decision.

SUMMARY OF TMCC RECENT ACTIVITIES APRIL 14, 2014

Recent experiences involving NERC Reliability Standards

Steven Powell, Trans Bay Cable Director of Operations, discussed the notice of penalty issued to the Western Electricity Coordination Council. The notice of penalty stated the Northeast Power Coordination Council and WECC have entered into a settlement agreement to resolve the issues and according to the agreement the WECC neither admits nor denies the violations. The notice of penalty is located at http://www.nerc.com/pa/comp/CE/Enforcement%20Actions%20DL/Public_FinalFiled_NOP_NOC-2268.pdf.

CPUC General Orders 165 (Inspection Requirement for Electric Distribution and Transmission Facilities) and General Order 174 (Rules for Electric Utility Substations)

Ryan Yamamoto, CPUC Senior Utilities Engineer, indicated the CPUC's audit of SDG&E, LADWP and SCE were completed for 2014. Mr. Yamamoto also reminded members the first General Order 174 submission for Rule 40 is due July 1, 2014 and should be sent to the respective CPUC in-box. The CPUC's General Order 174 Rule 40 concerns reporting requirements for utilities subject to CPUC jurisdiction. Additional information can be found at: http://www.cpuc.ca.gov/gos/GO174/GO174_rule_040.htm.

Critical Infrastructure Protection (CIP) Standards

Tibor Foki, International Brotherhood of Electrical Workers Local Union 47, opened a discussion on the recent momentum at FERC and NERC to develop standards concerning physical security at substations as a result of the recent incident at PG&E's Metcalf substation and various public reports concerning threats to the US Electric Grid.

Mike Palusso, SCE Manager of Transmission and Substation FERC/CAISO Compliance, and Robert Lloyd, SCE Manager Substation Regulatory Compliance, indicated NERC Standard CIP-014-1, which is currently in final ballot, is part of FERC and NERC efforts to address physical security. CIP-014-1 addresses physical security of transmission stations and substations. The current draft language states the purpose is to identify and protect transmission stations and transmission substations, and their associated primary control centers, which if rendered inoperable or damaged as a result of a physical attack could result in widespread instability, uncontrolled separation, or cascading within an interconnection.

Major grid events

Mr. Foki asked Tom Wright, PG&E Director of Substation, if there were any new developments in the Metcalf investigation. Mr. Wright indicated the incident at PG&E's Metcalf substation is still under investigation by the appropriate authorities and there are no new developments.

Jamie Patterson, California Energy Commission Senior Electrical Engineer, asked the members if there are any possible mitigation measures or plans that could limit threats to substations. Some options to limit possible threats were discussed.

PG&E presentation on SGS Statistical Services method of determining availability

David Gregory, PG&E Reliability Asset Planning Engineer, presented on the features and results of PG&E's 2013 SGS transmission reliability benchmarking study.

SUMMARY OF TMCC RECENT ACTIVITIES JULY 17, 2014

CPUC General Orders 165 (Inspection Requirement for Electric Distribution and Transmission Facilities) and General Order 174 (Rules for Electric Utility Substations)

Mr. Yamamoto indicated that the CPUC would be auditing the Imperial Irrigation District and Bear Valley Electric in the fall. In addition, the CPUC will be reviewing SDG&E's transmission division for compliance in August.

Mr. Yamamoto led a discussion on the California State Senate Bill 699. The bill will define procedures and policies to address security threats to the distribution system of electrical corporations.

Critical Infrastructure Protection (CIP) Standards

Mr. Powell opened a discussion on the NERC CIP-014, physical substation security. Mr. Powell noted that Trans Bay Cable was concerned about the implementation and third party validation identified in the standard. He was also interested in hearing how other organizations represented at the TMCC were implementing the standard. Jack Vranish, PacifiCorp Director of Asset Management, noted that planning staff within his organization were evaluating their facilities in an effort to determine which substations would be affected. He voiced concern over the lack of a defined methodology for determining specific substation applicability.

Updates to ISO Maintenance Procedure 2 – Outage Data File Format

Duke Luu, ISO Senior Grid Asset Engineer, led a review of the proposed changes to the ISO's Maintenance Procedure 2 which will align the procedure with the recently approved availability methodology. The proposed changes to the new procedure were approved by the TMCC with no objections noted.

TMCC Membership changes for San Diego Gas & Electric and Southern California Edison

SDG&E Manager of Substation Operations and Maintenance, Katie Speirs, was nominated by SDG&E to replace their current voting member, Cory Mitsui, on the TMCC for the remainder of his 3 year term that expires on March 31, 2015. SCE Manager of Transmission and Substation FERC/CAISO Compliance, Ray Fugere, was nominated by SCE to replace their current voting member, Mike Palusso, on the TMCC for the remainder of his 3 year term that expires on March 31, 2017. The TMCC Acting Chair introduced the candidates stating their qualifications to be considered for nomination. Ms. Katie Speirs (SDG&E) and Raymond Fugere (SCE) were approved as new members of the TMCC with no objections noted.