Working Group D2 - Standard 525 - Cable Systems in Substations

Debra Longtin – Chair

Meeting Summary

The working group has a PAR that was approved in March (good until 2015). The meeting was spent discussing proposed revisions and making assignments.

Working Group D3 - Standard 605 - Bus Design in Air Insulated Substations

Hanna Abdallah – Chair

Meeting Summary

The working group reviewed the changes that were made on the IEEE605 -1998 and the present status of the IEEE605-2008. Two teams have been formed. The first team will continue to review the mechanical forces calculations and will issue a report by next meeting in Nashville. The second team will continue to review the short circuit force calculations. It is agreed that the second team will use WINIGS computer program to calculate the short circuit forces and compare them against the simplified method using the finite element method.

Working Group D4 - Standard 693 - Seismic Design of Substations

Eric Fujisaki– Chair

Meeting Summary

Par was approved last Fall with an expiration date of 12/31/14. The working group discussed the high priority items recommended for inclusion in the next revision of the standard. The approach is to set meeting agendas to focus on a defined set of items and come to resolution on those items. An update for items requiring longer periods of time to resolve will be reported by the specific task force. Small sub-groups will discuss each item and reconvene for a large group discussion. The planned work items for the next revision are:

- 1. Transformer bushing qualification test protocol and transformer modeling requirements.
- 2. First support clarification.
- 3. Foundation design re-write with clarification
- 4. Transformer anchorage revisions
- 5. Application of Use of post-installed anchors
- 6. Add new annex on DC equipment
- 7. Composite insulator acceptance criteria
- 8. Porcelain insulator acceptance criteria
- 9. Clarify/ make 693 consistent w/ 1527 as related to conductor interaction effects

- 10. Guidance for testing of equipment in the low-frequency range
- 11. Guidance for testing equipment using base isolation/ supplemental damping
- 12. Inherently acceptable requirements revision
- 13. Replacement of parts during PL testing, clarification.
- 14. Clean up text, move items to commentary, work on commentary (continuing effort)
- 15. Surge arrester qualification requirements.
- 16. Load Factor on DL and load combination for Allowable Strength Design
- 17. Dynamic Equivalency of supports, clarification and guidance.

Technical presentations were also made at the meeting:

- a) Transformer bushing test protocol
- b) New Zealand Earthquake
- c) Tohok, Japan Earthquake

Working Group D5 – Standard 998 – Direct Stroke Shielding of Substations

Robert Nowell – Chair

Meeting Summary

The working group meeting mainly dealt with the many appeals involved with the draft of IEEE std. 998. Sue Vogel of IEEE SA discussed the two types of appeals, procedural and technical. Technical comments will be addressed during the sponsor ballot process. IEEE-SA has formed a Procedural Appeals committee with John McDonald as the Chair. The committee will review the procedural appeals and determine the validity of the complaints. If necessary, the Procedural Appeals committee will set up a meeting with the individuals that filed the appeals, the working group sponsors where both sides will present their side of each appeal. This meeting will take place in the summer.

The appeals process will not delay the sponsors balloting process. The Ballot Group Formation sign-up deadline was January 22, 2011. There is a total of 200 people in the balloting group.

There are a few copyright permissions that still need to be obtained for figures and tables in the Guide. IEEE Standards is helping to resolve these problems.

A balloting resolution committee will be set up to handle the non-controversial comments in the balloting process. Anything that is controversial will be presented to the full working group for resolution by the balloting resolution committee.

Based on the number of people in the balloting pool, the chairman will request an extension of the PAR through the balloting process.

The next meeting of the working group will be in Nashville in October.

Working Group D6 – Task Force on Flexible Seismic Interconnections of Bus

Jean-Bernard Dastous - Chair

Meeting Summary

Did not meet in Chicago

Working Group D7 – Standard 80 – Guide for Safety in AC Substation Grounding

Rich Keil – Chair

Meeting Summary

Reviewed Clause 11 in great detail to discuss suggested wording changes and modifications to equations. The chair discussed the schedule needed to meet PAR date of October 2012. The working group will need to review the final draft before it can be sent to the IEEE Standard editorial staff. This needs to be done by the end of the year. Any corrections will be made in the October working group meeting scheduled in Nashville to finalize the draft before it is sent to IEEE.

Working Group D8 – Standard 1267 – Guide for Development of Standards for Turnkey Substations

Doug Sharpe – Chair

Meeting Summary

This was the initial meeting to revise the standard that was developed in 1999. The purpose of this revision is to determine if there is additional information that is needed in the standard and to consider areas that may need to be updated to include new technologies that have been developed in the substation industry since the original version was developed.

As this was the first meeting for revision of the standard, the main focus of the meeting was to encourage new membership to the Working Group, to review the existing standard and to start discussions about the focus of the standard and potential changes that may be needed.

The present standard discusses only the technical requirements to be included in a Turnkey Specification. But there is no discussion on the process that is required for producing a turnkey specification or any other supporting information concerning the project scope or other aspects of the project.

There were additional discussions on the CIGRE Turnkey Substation Projects Brochure from CIGRE Working Group B3.21 that was presented early in the week in a Tutorial session. It was determined that some of the information contained in the CIGRE brochure will be applicable to this revision of the IEEE standard.

There were a total of eleven in attendance. Three chose to join the WG as members. All others were listed as guests. No members volunteered for WG positions.

Our next meeting will be in Nashville in October. I am anticipating maybe six people to attend – mainly those that are members of other WG's.

Working Group D9 – Standard ? – AC/DC Auxiliary Systems in Substations

Hanna Abdallah – Chair

Meeting Summary

This working group consists of two teams. The first team is responsible for writing the DC section of this guide; the second team is responsible for writing the AC section. During the Chicago meeting, the working group reviewed the present status of both sections. The working group also reviewed a prepared flow chart of the design process of both sections. The working group discussed the information needed by the substation engineer in order to design both AC and DC auxiliary systems for the substation. Both teams will incorporate the discussed information in their sections.