MINUTES OF THE MEETING OF THE HVDC CONVERTER TRANSFORMERS & SMOOTHING REACTORS S.C. IN COSTA MESA, CALIFORNIA, MAR. 20, 2006

The S.C. met in the Balboa I Meeting Room of the Costa Mesa Hilton in Costa Mesa, California on Mar. 20, 2006 from 1:45 p.m. to 3:00 p.m. There were 10 members and 11 guests present. The following are the highlights of the meeting.

- 1. The minutes of the S.C. meeting in Memphis were approved. The minutes of the Costa Mesa meeting will not be approved until the S.C. meets in Montreal, Quebec.
- 2. IEEE patent policy was reviewed; details are on the IEEE Transformers Committee website. No patents affecting the revision process of IEEE C57.129 or IEEE 1277 were noted.
- 3. The Chairman reported on the meeting of the Administrative S.C. on Sunday, Mar. 19, 2006.
- 4. Consensus of the S.C. is that the revision process of IEEE C57.129 is complete. Seismic verification will be listed as "OTHER" test for converter transformers.
- 5. A PAR has been approved for the revision of IEEE 1277; oil-immersed and dry-type smoothing reactors. The remainder of the S.C. meeting was spent discussing revision objectives.
 - (i) RFD agreed to distribute a WORD version of IEEE 1277 to S.C. members to facilitate the revision process; selected S.C. members who have agreed to contribute to the revision process.
 - (ii) Seismic verification will be included in the revision of IEEE 1277 as "OTHER" test.
 - (iii) An informative annex will be added to IEEE 1277 re overloads and associated temperature rise test verification; similar to that included in the revision of IEEE C57.129. K. Papp and RFD will produce a draft for dry-type SMRs. Peter Heinzig will prepare a draft for oil-immersed SMRs; dissolved gas analysis will be included as well as other information from the annex on overloading in the revised converter transformer standard (IEEE C57.129).
 - (iv) Per Les Rickseidler gas-in-oil relay performance in oil immersed SMRs has been an issue under line fault conditions; false trip due to vibration. Les Rickseidler will solicit more input from the HVDC Users Group; extent of the problem.
 - (v) Per Peter Heinzig a Cigre W.G. (A2.28) has been set up to look into converter transformer failures and includes a review of polarity reversal especially as it

- may relate to converter transformer failures; under consideration is a polarity reversal type test at twice the time duration of the current polarity reversal test.
- (vi) NOTES added to Clause 6.11.7 in the revision of IEEE C57.129 covering the polarity reversal test for oil-immersed SMRs should be added re the polarity reversal test description in the revision of IEEE 1277.
- (vii) NOTES added to Table 1 in the revision of IEEE C57.129 should be added to the test summary table in IEEE 1277 for oil-immersed SMRs.

RFD will produce Draft #1 of the revision of IEEE 1277 except as noted where S.C. members will provide draft material. The meeting ended at 3:00 p.m.

R. Dudley

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