## MINUTES OF THE MEETING OF THE HVDC CONVERTER TRANSFORMERS & SMOOTHING REACTORS S.C. IN LOMBARD, ILLINOIS, OCTOBER 26, 2009

The HVDC Converter Transformers and Smoothing Reactors S.C. met on Monday, October 26, 2009 from 1:45 p.m. to 3:00 p.m., in the Cypress A/B Meeting Room of the Westin Lombard Yorktown Center in Lombard, Illinois. There were 10 members and 12 guests present. One guest requested membership. The following are highlights of the meeting:

- 1. Introductions were made.
- 2. No patent issues were raised.
- 3. The minutes of the SC meeting in Miami were approved.

Note: The minutes of the Lombard meeting of the SC will not be approved until the SC meeting in Houston, Texas.

- 4. The Chairman briefed attendees on the highlights of the Administrative SC meeting.
- 5. The remainder of the meeting focused on the IEEE ballot of Draft #5 of the Revision of IEEE 1277; 2 negative ballots (Ballot Group 50, Returned 38, Negative 2) and approved with comments ballots. A recirculation ballot will be required to address the negative ballots.
  - (i) Since a recirculation ballot is required to address the negative ballots, the comments received with approved ballots can be included in Draft #6. If this is done, can those individuals in the ballot group who did not vote in the initial ballot vote in the recirculation ballot? RFD will check with Mat Ceglia.
  - (ii) Dates on referenced standards will be removed unless a specific clause etc. is cited. This "mixed" approach will be confirmed with IEEE by the Chairman.
  - (iii) Notes in tables will be converted to footnotes to ensure the information is normative vs. informative. Is it equally valid to enclose the notes in the table? The Chairman will check with IEEE.
  - (iv) J. Marlow's Negative ("Must Be Satisfied") was rejected as "guide" type information is necessary and was included in the previous edition of the standard.
  - (v) D. Shama's Negative ("Must Be Satisfied") re the notes in 12.12.3 was accepted; informative material in the notes will be integrated into the main text as normative information.

- (vi) D. Sharma's Negative ("Must Be Satisfied") re the NOTE at the end of 11.3 was rejected. The NOTE must remain where it is. It gives background information re the polarity reverse test and will not have the same impact in the "Introduction".
- (vii) D. Sharma's Negative ("Must Be Satisfied") re eliminating dates on referenced standards has merit. Dates will only be used if specific clauses, equations are referenced.
- (viii) J. Riboud's Affirmative with comment re liquid-immersed was not accepted. The scope of the standard is oil-immersed. Consideration can be given to including other liquids at the time of the next revision.
- (ix) J. Riboud's Affirmative with comment re cooling classes was accepted; ODAF will be added in addition to OFAF in clauses 6.6.1.2, 6.6.1.3 and 6.6.1.4. Titles of all clauses in 6.6 will be changed from "Liquid-immersed" to "Oil-immersed".
- (x) J. Riboud's Affirmative with comment re covers in clause 7.1.2. is accepted; bell type covers are available.
- (xi) J. Riboud's Affirmative with comment re nameplate location was accepted; "the nameplate shall be located on the main tank near the control cabinet".
- (xii) Lars-Erik Juhlin's Affirmative with comment re clause 12.4.4.2 was accepted; the title of the clause will be changed to reflect the measurement of ambient temperature "Containers for thermometers used to measure ambient temperature".
- (xiii) Lars-Erik Juhlin's Affirmative with comment re the use of the word "end user" was accepted; "purchaser" will be used as the "end user" may not be the "purchaser".
- (xiv) Lars-Erik Juhlin's Affirmative with comment re clause 6.4.3 and 9.2.1.1 was accepted, the tolerance on inductance and minimum inductance should include overload conditions as applicable or as specified by the purchaser.
- (xv) Lars-Erik Juhlin's Affirmative with comment re cooling class was accepted; clause 6.6.1.3 etc. This standard covers oil-immersed SMRs only and liquid-immersed will not be used. Also in clause 6.6.1.3 b) it should read oil-immersed self cooled / water cooled class ONAN/OFWF.

The Chairman agreed to make all changes and produce Draft #6. This will be sent to SC/WG members for approval/comment and then submitted for recirculation ballot. The objective is to complete the "recirculation" before year end so that Draft #6 can be sent to the Standards Board for approval at their March 23 meeting; submission deadline is February 12, 2010.

The meeting adjourned at 3:00 p.m.

R. Dudley :cb (08241)