Working group on PC57.162 – Guide for the Interpretation of Moisture Related Parameters in Dry, Gas Insulated and Liquid Immersed Transformers and Reactors – Chair - Tom Prevost

April 3, 2017

The meeting of the PC 57.162 Guide for the Interpretation of Moisture Related Parameters in Dry, Gas Insulated and Liquid Immersed Transformers and Reactors (Moisture in insulation systems) Working Group was held on April 3, 2017. Attendance Members 51 out of 81 Guest 77 Guests Requesting Membership 11

The chairman skipped introductions in order to save time and established a quorum. A quorum of the working group members were present (51 out of 81). Approval of agenda and then approval of minutes with minor corrections in Task Force 4 , belongs in Task Force 10. The chairman then asked for notification of any essential patents related to the group's work. None were stated. The chairman briefly described the working plan. The Par is allotted 4 years and the time is about up. The chairman discussed the need to ask for a PAR extension. The meeting started with the purpose and scope of the WG. The chairman asked about the need to address sealed dry types and it was determined that this was not in scope. The task force leaders then updated the WG on the progress of their respective task forces. The chairman asked for any information from the Task Force leaders so the Secretary can start to assemble the document. Task Force 1 Terminology and Definitions Task Force Leaders - Jeff Golarz golarz@aol.com Jeff Golarz has a list compiled from folks that has sent to him.

Task Force 2 Measurement and evaluation of moisture-in- gas insulation parameters Task Force Leaders - Tom Melle tom.melle.us@ieee.org Tom Melle stated that the dew point as referenced C57. 93 is outdated. He had asked for industry for help and is now looking at relative humidity instead. The Chairman mentioned to be careful not to add research into the standards. Tom Melle injected that there are some papers for verification. The team will have to use best practices for dew point. This information which goes back to 1946 and is outdated.

Task Force 3 Measurement and evaluation of moisture-in- liquid insulation parameters Task Force Leaders- Claude Beauchemin beauchemin@tjh2b.com The chairman has spoken with Claude and still needs a lot of work.

Task Force 4 Measurement of moisture in solid insulation Task Force Leader - Paul Griffin pgriffin@doble.com/ Ronald Hernandez They are basically done with the task.

Task Force 5 Evaluation of moisture in solid insulation using dielectric response methods Task Force Leader - George Frimpong george.k.frimpong@us.abb.com The task force is done. Task Force 6 Inferring of moisture in solid insulation from measurements conducted in liquid or gaseous medium Task Force Leader - Valery Davydov valery.davydov@ieee.org The draft has been distributed and proceeding very well.

Task Force 7 Evaluation of aging and end of life of solid insulation parameters Task Force Leader- Roger Wicks roger.c.wicks@usa.dupont.com Roger has promised an initial draft soon

Task Force 8 Factory/workshop application of knowledge on moisture; establishing baselines Task Force Leader - Poorvi Patel poorvi.patel@us.abb.com This task force is done.

Task Force 9 Field application of knowledge on moisture Task Force Leader – Jim Thompson serve1@svtv.com * Note: This section lists the risks associated with moisture Jim has a quick update presentation, in the past proposed a excel spreadsheet and wasn't working and he has taken some information for his company to come up with some data but it not complete. He is seeking anyone that can assist him with supplying him with industry data.

Task Force 10

Leader - Bruce Forsyth

This task force has been added half way through the working group. They have put together a scope for the task force. The chairman requested Bruce to resend it to him again.

Meeting adjourned.