Annex F Instrument Transformers Subcommittee

Chair: Thomas Sizemore
Vice Chair: David Wallace

F.1 Introductions

Attendees were requested to introduce themselves and provide affiliations at the time of the meeting.

A total of 58 attendees were present. 24 members were present 21 were required for quorum. Quorum was met.

Requests for membership will be reviewed for recent attendance to determine eligibility.

F.2 Agenda

An agenda was displayed by the chair. Igor Ziger made a motion to approve which was seconded by Diego Robalino. There were no objections to approving the agenda.

F.3 Approval of minutes – Fall 2024 meeting

Minutes were approved after a motion by Jim McBride and a second by Igor Ziger. There were no objections to approval.

F.4 Essential Patent Claims & IEEE Copyright Policy

A slide was displayed as a reminder to all WG/TF leaders that it is necessary to display the essential patent claim and IEEE copyright policy slides.

F.5 Status of C57.13 Standards

The chair briefly presented the status of the various standards handled by the ITSC including both those being actively worked on at this time as well as those not yet due for revision.

F.6 Working Group Reports

F.7.1 JWG on Station Service Voltage Transformers, IEC-IEEE 63253-5713-8 – David Wallace & Ross McTaggart (unable to attend)

This working group did not meet at the Transformers Committee meeting. However, it has been active in comment resolution from both IEEE and IEC voters. The status of the comment resolution and latest balloting results were presented.

F.7.2.3 Working Group Instrument Transformer Requirements C57.13 – David Wallace

Attendees: Attendees: The number of participants was 61 over 3 time slots. 24 were members present and quorum was obtained in the 2 latter time slots. The comment resolution from the 1st time slot was communicated. Paper rosters / sign-in sheets were circulated. 12 people requested membership which will be reviewed.

Essential Patent Claims: Text was displayed, and the Chair inquired as to if anyone knew of essential patent claims. None were brought up.

Copyright: Text was displayed at the meeting

Minutes of the Fall 2023 meeting: Unanimously approved with motion brought forward by Ryan Hogg and seconded by Evan Knapp.

Agenda: Unanimously approved with motion brought forward by Jaroslaw Chorzepa and seconded by Stephen Oakes.

Resolution of comments on D1

- A total of 88 comments were addressed. There are 13 HW assignments outstanding from these comments which need to be completed by the next meeting
- Volunteers are welcome on any of those assignments
- There was a specific discussion on the comment made by S. Snyder on units with cast bushings. It was agreed to include the proposal into the standard
- R. Hogg submitted additional comments, which will be included after the document is revised to the new format

Motion to adjourn: A motion was put forth by William Solano and seconded by Robert Middleton

Next Meeting: This WG will meet to continue work at the St. Louis, Missouri Fall 2024 meeting.

F.7.5 TF for Instrument Transformers Accuracy – Igor Ziger

Attendees: The number of participants was 46. 21 members present and quorum was obtained. Paper rosters / sign-in sheets were circulated. 6 people requested membership which will be reviewed.

Essential Patent Claims: Text was displayed, and the Chair inquired as to if anyone knew of essential patent claims. None were brought up.

Copyright: Text was displayed at the meeting

Minutes of the Fall 2023 meeting: Unanimously approved with motion brought forward by Jaroslaw Chorzepa and seconded by Ryan Hogg.

Agenda: Unanimously approved with motion brought forward by David Wallace and seconded by Rudy Ogajanov

Review of the action items for this task force:

Information on non-5A secondary TF

- It was announced that the activities for this will continue after the meeting and if anyone would like to join, is invited to contact the chairs. The activities of IEC WG which also is working on the mA standard will be followed closely, and the conclusions from the face-to-face meeting in Milano in early April will be reported back to the group.

New business

Relaying CT accuracy thru measurement range and PRC-005-6 Table 1-3 by Ryan Hogg

- A presentation was held, followed by a discussion with multiple participants contributing.
- It was decided that the clause 9.1. will be rewritten to include this topic as well. The effort will be led by R. Hogg, with multiple people contributing.

Resolution of accuracy-related comments carried over from the main standard – D1

- A total of 40 comments were addressed either here or in the main standard WG. There are 8 HW assignments outstanding from these comments which need to be completed by the next meeting
- Volunteers are welcome on any of those assignments

All material presented in the meeting will be posted on the committee website and sent out to the TF body,

Motion to adjourn: A motion was put forth by David Wallace and seconded by Ryan Hogg

Next Meeting: This WG will meet to continue work at the St. Louis, MO Fall 2024 meeting.

F.7.6 WG for PLC capacitors and Coupling Capacitor Voltage Transformers (C57.13.9) – Zoltan Roman

The Working Group Chair, Zoltan Roman, started the meeting with Mike Craven as Secretary and introductions were made.

The Chair provided an update concerning online meetings to resolved remaining comments of this balloted standard. No official business took place for this WG in this meeting. Upon completion of this update the remaining time in the meeting was utilized by the WG to revise C57.13.

F.7.7 TF to integrate C57.13.5 into C57.13– Zoltan Roman

The Working Group Chair, Zoltan Roman, started this initial meeting.

A brief update was provided by Zolton Roman. task completed and an outline of work to be done over the coming months was discussed. No official business was conducted by this group.

Online meetings are expected throughout this effort.

Next Meeting: This WG will meet to continue work at the St. Louis, Missouri, Fall 2024 meeting.

F.7 Old Business

No old business was discussed.

F.8 New Business

Discussed the creation of sensor standard in the PSIM committee. There are two paths We as a group could ask that the IT subcommittee co-sponsor the new workgroup or we could a liaison for the workgroup to report back to the IT subcommittee.
Displayed the proposed Sensor PAR draft.

Jim McBride discussed that there is a standard being developed on PSIM to cover the entire system of sensors that would deal with the accuracy of the complete system. He discussed how these sensors could be used for a variety of purposes that were not normally designed for. Jim believes that PSIM would like to partner with the IT subcommittee to help develop the new standard. This would help cover areas that are not covered by the PSIM committee.

Pete Zhao suggested that we need to take into consideration the power industry when we look into the sensors. We need to define what areas the IT subgroup will cover. Jeff Britton mentioned the reason for the focus on medium voltage is that this is where the market is now. The scope of the PSIM is on all sensors including High Voltage. PSIM is looking for suggestions on how to improve the overall scope.

Jeff mentioned the Panel session on sensors that will be held at the PES general meeting in Seattle in July 2024 and read the outline of the panel session. He invited members of the IT subcommittee to join the panel.

Peter Zhao suggested that the PAR should focus on the High Voltage Aspect of the sensor technology. Zolton Roman felt that the sensors guys were not interested in the High Voltage side of the sensors. He feels that there will be parallel work between the standards when the work begins due to the difference between the high voltage and medium/low voltage aspects.

Frank Neder discussed the approach of IEC towards the sensors. He agrees that we need to focus on the High Voltage aspects in the IT Subcommittee.

The floor was open for comments on how the committee wanted to proceed with regards to the sensors.

Jim McBride discussed his experience from 30 years ago on transmission level sensors. He feels the reason there is no sensor is due to the different varieties of sensors that are on the market. PSIM is trying to stay out of the design and focus on the performance aspects of the sensors. The distribution level sensors have a variety of outputs that must be addressed. Does the High Voltage side want to try to control the output of the sensors.

Dan Sauer discussed taking the outputs of the sensors, He feels that it is not productive to take higher level of outputs from the sensors and converting them to digital.
Zolton Roman discussed the IEC work on the platform that covers all sensors (61850)
Jeff Britton discussed the cost of the sensors based on the quantity of the products being produced.

Kurt Kanideer discussed the reliability and accuracy of the sensors. This leads to different versions between the high voltage and medium voltage sensors. Kurt Kanideer feels that there should be liaison to work with the medium voltage group and have a separate group for the High Voltage side.

Zoltan Roman agreed with Kurt's approach. He feels that we can investigate the work that has been done in the IEC on the issue. He thinks we can do better than the IEC by working together with PSIM to form the standard. There is work already in process in the relaying committee.

Peter Zhao suggested forming a taskforce to investigate the sensors.

Farnoosh discussed the work being done on the PSIM committee and how it is medium voltage focused. He suggests that the workgroup should look into a white paper into all of the issues that are being faced in this project. He mentioned IEEE 1601 that was worked on between PSIM and IT subcommittee performed years ago.

Ryan Hogg discussed a user guide for sensor technology.

Zolton Roman discussed the green book being put together by CIGRE that will cover sensors. That would be a good guide for us to look at.

Jeff Britton mentioned that there is a group in PSIM that wis working on a general guide. This will be kicked off with a survery being sent out to the industry for comments.

Thomas Sizemore asked for a motion to proceed with the work on sensors.

Chris Steinman motioned to co-sponsor a standard with PSIM and kick off a taskforce focusing on High Voltage. Kurt Kanideer seconded the motion.

A vote was held by the members – 22 approved. Motion passed.

Thomas called for volunteers to work on the taskforce.

Jim McBride mention the 1601cis at NESCOM for PAR. Do we need to expand the scope of the PAR to cover High Voltage.

Zolton Roman mentioned that CIGRE wants to work with the IT Subcommittee. He asked if they could present at the next meeting. Thomas agreed that they should attend.

F.9 ITSC Adjournment

Motion to adjourn made by Rober Middleton seconded by Diego Robalino. No objections. Meeting ended at 9:15 am

The next meeting is to be held in St. Louis, Missouri, in the Fall of 2024.