

5.0 CHAIR’S REPORT – STEPHEN ANTOSZ

5.1 CHAIR’S REMARKS – PRESENTED AT THE MONDAY GENERAL SESSION -- LOUISVILLE, KENTUCKY - FALL 2017

5.1.1 IEEE PES Technical Council

The Technical Council of the IEEE Power Energy Society (PES) is presently composed of the Chairpersons of the PES Technical and Coordinating Committees, plus the Chairpersons of Standing Committees reporting to it. The organizational structure of the PES is shown in the current version of the IEEE PES Organization Chart and Committee Directory (<http://www.ieee-pes.org/pes-organization-chart-and-committee-directory>). The PES Technical Committees report to the Technical Council on matters concerning membership, recognition, technical publications, scope and the coordination of the Power Energy Society generated standards. For standards relating to their technical scope, the Technical Committees work directly with the IEEE-SA Standards Board and the PES Standards Coordinating Committee. For further details on the Statement of Purpose and Scope of Activities for the PES Technical Council Please see; <http://www.ieee-pes.org/statement-of-purpose-and-scope-of-activities-for-the-pes-technical-council>.

5.1.2 Technical Council Officers & Members

The officers and members of the Technical Council are listed below for your reference. Each individual listed here is the chair of that respective committee.

TECHNICAL COUNCIL OFFICERS 2016-2017

Miriam Sanders, Chair (SEL University)
Farnoosh Rahmatian, Vice Chair (Quanta Technology)
Secretary, Vijay Vittal (Arizona State University)
Past-Chair, Jeffrey Nelson (TVA)

STANDING COMMITTEES	CHAIR
Awards	Jeff Nelson
Technical Sessions, TS	Farnoosh Rahmatian
Organization & Procedures, O&P	Vijay Vittal
Standards Coordination, SC	Ted Burse
COORDINATING COMMITTEES	CHAIR
Intelligent Grid & Emerging Technology, IGETCC	Doug Houseman
Marine Systems, MSCC	Dwight Alexander
Wind and Solar Power, WSPCC	Debbie Lew
Power & Energy Education, PEEC	Sukumar Brahma
TECHNICAL COMMITTEES	CHAIR
Electric Machinery, EM	Kiruba Haran
Energy Development & Power Generation, EDPG	Ward Jewell
Energy Storage & Stationary Battery, ESSB	Chris Searles
Insulated Conductors, IC	Frank Frentzas
Nuclear Power Engineering, NPE	Thomas Koshy

Analytical Methods for Power Systems, AMPS	Joydeep Mitra
Power System Communications & Cybersecurity, PSCC	Mike Dood
Power System Dynamic Performance, PSDP	Claudio Canizares
Power System Instrumentation & Measurements, PSIM	Jim McBride
Power System Operation Planning & Economics, PSOPE	Hong Chen
Power System Relaying & Control, PSR	Praytap Mysore
Smart Buildings Loads & Customer Systems, SLCS	Shawn Chandler
Substations, SUB	Diane Watkins
Surge Protective Devices, SPD	Ronald Hotchkiss
Switchgear, SWGR	Paul Sullivan
Transformers, TRANS	Stephen Antosz
Transmission and Distribution, T&D	D.D. Sabin

5.1.3 PES Technical Council Activities

Joint Technical Committee Meeting, JTCM. <https://www.pestechical.org/>. July 18, 2017. Chicago. Second of two annual gatherings where Technical Council meets to discuss activities of the Standing, Coordinating, and Technical Committees.

There were discussions about Tech Council's new O&P document, along with a new template for Sponsor P&P's. Our existing Transformers Committee Sponsor P&P was approved on Mar 27, 2014 and expires on Dec 31, 2019. So, we will form an Administrative Task Force to work on the revision.

Advance planning for the 2018 IEEE PES T&D Expo.

- Technical papers for presentation at were discussed. Our Committee Vice-Chair will circulate the papers for peer review.
- Supersession topics are being considered.
- Tutorial topics are requested

5.2 TRANSFORMERS COMMITTEE ACTIVITIES

5.2.1 Liaison Representatives. Appointed by Committee Chair.

- CIGRE - Raj Ahuja
- IEC TC-14 - Phil Hopkinson
- Standards Coordinating Committee, SCC No. 18 (NFPA/NEC) – David Brender
- Standards Coordinating Committee, SCC No. 4 (Electrical Insulation) - Evanne Wang

5.2.2 RFID

This issue will be covered by our Meeting Planner, Greg Anderson. We are using RFID tags on the namebadges for this Louisville meeting in a similar manner as past meetings. Bear with us as we implement this new technology, which is intended to make our meetings better.

5.2.3 Thursday morning Tutorials

We always continue to look for new and exciting topics. Tom Prevost is the leader of this activity for coordination efforts. If interested, see Tom or any of the officers. Any feedback by attendees is welcome.

5.2.4 Association Management System, 123 Signup

All WG's should be using AMS to track their membership and meeting attendance. If unable to do so, then please assign it to someone who can do it.

5.2.5 Website Password Usage

It is not for public dissemination. It is for use by our meeting attendees (CM, AP, II) and associated work of the Transformers Committee. One can think of it as a benefit of attendance and participation. Use it for yourself and within your immediate workplace, but not beyond that.

5.2.6 Call for Patents (Essential Patent Claims)

<http://standards.ieee.org/about/sasb/patcom/index.html>

We are required to have a call for patents at every Working Group (WG) meeting. This is a reminder to all WG leaders to call for patents and record the results in the meeting minutes. Note it is not required to show the patent slides; it is only necessary to call for patents and record the response in the minutes. If there is a claim reported, the WG chair shall include in the minutes the name & affiliation of the individual asserting a patent claim. Here is what each WG Chair should ask at the beginning of each WG meeting. This applies only to WG's after the PAR is approved by the IEEE-SA Standards Board.

If anyone in this meeting is aware of any patent claims that are potentially essential to implementation of the document under consideration by this WG, that fact should be made known to the WG and recorded in the meeting minutes.

That's it. Move on. Don't spend a lot of WG time on this issue. Don't discuss it. Proceed with the WG meeting. Record in the minutes that the call for patents was made.

If a patent holder or patent applicant is identified, then the WG Chair (or designee) should ask the patent holder or patent applicant of a patent claim that might be or become an Essential Patent Claim to complete and submit a Letter of Assurance in accordance with Clause 6 of the IEEE-SA Standards Board Bylaws.

A Letter of Assurance (LoA) is a document submitted to IEEE-SA by a patent holder which documents the submitter's position with regard to ownership, enforcement, or licensing of an Essential Patent Claim that may be incorporated into a specific IEEE document. As of Apr 2017, the following five (5) existing Accepted Letters of Assurance pertain to our committee:

1. C57.127 Guide for Detection and Location of Acoustic Emissions from Partial Discharges in Oil-Immersed Power Transformers and Reactors. LoA recorded September 6, 2005. Filed by ABB Technology, Ltd.
2. C57.139 Guide for Dissolved Gas Analysis in Transformer Load Tap Changers. LoA recorded January 16, 2013. Filed by Maschinenfabrik Reinhausen GMBH.

3. C57.163 Guide for Establishing Power Transformer Capability while under Geomagnetic Disturbances. LoA recorded May 5, 2014. Filed by Advanced Power Technologies, LLC.
4. C57.147 Guide for Acceptance and Maintenance of Natural Ester Fluids in Transformers, and C57.155 Guide for Interpretation of Gases Generated in Natural Ester and Synthetic Ester-Immersed Transformers. LoA recorded April 5, 2017. Filed by Cooper Power Systems, LLC.
5. C57.147 Guide for Acceptance and Maintenance of Natural Ester Fluids in Transformers, and C57.155 Guide for Interpretation of Gases Generated in Natural Ester and Synthetic Ester-Immersed Transformers. LoA recorded April 5, 2017. Filed by Cooper Power Systems, LLC.

Distribution of an LoA to the related Working Group is permitted.

5.2.7 100-year celebration in Spring 2018 in Pittsburgh

The Spring 2018 Meeting will be held March 25-29, 2018 in Pittsburgh, Pennsylvania at the Omni William Penn Hotel. This is a significant meeting, as the committee will celebrate 100 years of transformer standards development and the evolution of the Transformers Committee and all that it has accomplished. The roots of the committee go back to 1918 when a subcommittee of the Standards Committee 'No 8. Transformers' was formed to contribute to the Standardization Rules of the American Institute of Electrical Engineers (AIEE), the single common standard of the AIEE at that time. AIEE and IRE (Institute of Radio Engineers) merged to form IEEE in 1963. The Pittsburgh meeting will start with a special reception and banquet dinner on Sunday evening, with many IEEE PES dignitaries joining in the celebration. We will have a formal banquet on Sunday with special guests and speakers, a reunion of former members, significant honors and awards, and a sumptuous reception. More info to come.

- The first electric system with transformers was at Barrington, Vermont in 1886.
- The electric system was growing exponentially. Much of the equipment being used was unmatched. AIEE (which was just organized in 1884) recognizes in 1898 the need for standards as this industry moves forward.
- In 1899 AIEE produces the first standard of 14 pages covering all aspects of the industry, known as the 'Standardization Rules' where transformers are discussed as Stationary Induction Apparatus.
- The Standardization Rules were revised and updated and grew to hundreds of pages.
- During this process a Transformers subcommittee was formed in 1918, and titled "No. 8 Transformers (Cooperating with N. E. L. A, and Power Club)". It is the first formal AIEE/IEEE Transformer committee on record developing standards.

5.2.8 Ballot Resolution Groups (BRG)

There has been some "discussion" about this issue, so this is a reminder from the Chair that all BRG's should be done with a smaller group, not the entire Working Group. This subject came up prior to the spring meeting this year and again afterwards. Our Standards Coordinator presented the following instructions at the standards luncheon outlining how BRG's should be handled. Only substantial issues brought up in the ballot need to be discussed with the WG. The WG must be presented with and approve the work of the BRG. The Transformers Committee P&P, Section 5.0, which addresses subgroups of the working group, states "Any resolution of a subgroup shall be subject to confirmation by the working group." A BRG is a subgroup of the working group, so section 5.0 applies. Unless explicitly empowered by the working group otherwise, **the BRG comment resolutions shall be presented to the working group for confirmation and approval.** Concurrence requires approval of two-thirds of the voting WG members. Existing Ballot Resolution Groups are NOT exempt.

5.2.9 Transformers Committee Policies and Procedures (P&P) Update

Our Sponsor P&P was approved on Mar 27, 2014 and expires on Dec 31, 2019. A new template was developed by PES Tech Council and approved by AudCom. We will use this new template as the starting point for our new P&P. Peter Balma has volunteered to take on this task of revising this document.

The P&P is one of our three main governing documents that comes to us from PES Tech Council and IEEE-SA. It is sometimes called the Sponsor P&P, and it applies to Standards Development.

We also have an O&P, for Organization & Procedures, which supplements the P&P and applies to everything else we do. It covers: general operating procedures of the committee, subcommittees, and working groups; responsibilities of officers; membership issues; org chart; technical papers and presentations, etc.

Our third governing document is the Working Group P&P.

5.2.10 FERC and IEEE – A Question from PES President, Damir Novosel about Transformer Standardization to Improve Grid Resiliency

IEEE has a signed Memo of Understanding (MOU) with certain government entities such as; FERC, NERC, DOE (Federal Energy Regulatory Commission, North American Electric Reliability Corporation, Department of Energy). The purpose is to be aware of and get in front of governmental mandates that might affect our industry. Bill Chiu is a liaison between PES and FERC.

FERC has approached PES about ways to improve the electric grid resiliency, in the event of some severe weather event, terrorist attack, etc. Damir has asked the Transformers Committee if we have any Standards about “transformer standardization”, to make it easier and faster to replace power transformers and make the system more resilient. I told him that we do not. So, he asked if we might think about this and come up with ideas about developing some guiding documents about a standard transformer.

There are spare transformer programs by Edison International, EPRI, Grid Assurance, and maybe others, whereby transformers are purchased and stored in warehouses around the country. These would be used by Members of such programs, based on contracts and of course agreed to fees.

I had a brainstorming session with Bill Chiu about whether or not we the Transformers Committee could develop some kind of a ‘*Guide for a Standard Transformer to Improve Grid Resiliency*’. Obviously, there are a lot of obstacles to overcome such as ratings variations (voltage, impedance, etc.) from utility to utility based on the system the xfmr would be installed on, paralleling, overload practices, purchasing preferences, etc. A universal spare (standard) transformer would have to incorporate the most stringent requirements of all, and would be most expensive. But in a severe emergency situation a user might accept some relaxation of their requirements and be temporarily flexible, and could use a “standard transformer” to turn back on the lights. Our committee might work with the Substation Committee to develop something.

I agreed to at least bring up this topic and ask our meeting attendees to “think about this”. The question is: ***What can the Transformers Committee do (related to transformer standardization) to improve grid resiliency and help the US electric system withstand disruptions from weather disasters or other attacks?*** So, if anyone has any bright ideas, send it to me in an email.

5.2.11 Approval of Main Minutes and Subcommittee Minutes

The Main Committee meeting minutes are approved exclusive of all Subcommittee Minutes that are included as Appendices in the compilation document. So be aware that the approved version of Subcommittee Minutes may differ than what is in the compilation, if there are changes made after the initial submittal. This is because each subcommittee approves their own minutes AFTER the Main Committee minutes. A clarification note will be added at the front of the Appendices to explain the issue.

5.2.12 New Webmaster

Susan McNelly has been our Webmaster for many years. She has had and continues to serve in other roles as well. Sue will soon become the Chair. This is a very demanding job; therefore, we are looking for a new Webmaster. However, this involves more than just a personnel replacement. Our website needs modernized to a new platform. This involved a lot of upfront work along with long term maintenance. So, we are looking for volunteers within our committee to step up and take on this role. If the expertise does not exist here, then we may need to outsource web development and maintenance. The first step is to solicit volunteers to contact Sue now! Depending on what kind of response we get in the next two weeks, we may have to outsource. If anyone here has webmaster skills and interest, please contact Sue or any one of the Officers.

5.2.13 Officer's Travel for Committee Required Business

This is a notification to all attendees that the Officers have discussed and approved that all relevant and reasonable travel costs for extra meetings that Officers are required to attend shall be reimbursable by the Transformers Committee, for the following meetings:

Chair: 2 meetings per year

1. JTCM in January for Technical Council meeting
2. GM in July for O&P Committee
3. Chair retreat late Fall every 2 years is NOT included, since PES already pays the expenses.

Vice-Chair: 2 meetings per year; plus 1 every two years

1. JTCM in January for Technical Sessions meeting
2. GM in July for Technical Sessions meeting
3. T&D Expo in Spring even years for Paper/Poster Session, and any Panel Sessions

Standards Coordinator: 1 meeting per year

1. GM in July for Standards Coordinating Committee meeting

Typical business expenses will be covered, such as; air, hotel, meals, mileage, parking, taxi/car, baggage fees, tolls, other. The Treasurer should budget accordingly, for 5-6 meetings per year (and include meeting registration fees, as appropriate).

5.2.14 Reappointment of SC Chairs

According to the Transformers Committee O&P Manual, July 2016, clause 8.1 Appointment of Subcommittee Officers; "The Chair of a Subcommittee is appointed by the Chair of the Committee... The Subcommittee Chair's term of office is two years with reappointments as appropriate."

To address this reappointment, in August 2017 I asked each SC Chair to reconfirm their intent to stay on as SC Chair for two more years, and they all have done so and were thus officially reappointed.

5.2.15 Officer Rotations

Every 2 years there is an officer progression – the Secretary gets promoted to Vice-Chair, the Vice-Chair gets promoted to Chair, the Chair gets promoted to Past-Chair, the Past-Chair gets promoted to “retirement”. This rotation will occur on Jan 1, 2018. I want to say thanks to Don Platts for his 8 years of service as a Committee Officer. (round of applause). We have appointed a new Secretary, Ed teNyenhuis. He is currently Performance Characteristics Subcommittee Chair. His Vice-Chair Craig Stiegemeier will take over as Chair of the subcommittee.

We also have a new Treasurer set to step in for a 2-year term on Jan 1, 2018. We all know Greg Anderson has been our Committee Treasurer for many years. Greg has done a great job as Treasurer (AND Meeting Planner). To ease Greg’s workload and to introduce a new person into the rotation, Paul Boman will replace Greg Anderson who has served in this role for many years now. I want to say thanks to Greg for his years of service as Treasurer. (round of applause).

Respectfully submitted,

Stephen Antosz

Chair, IEEE/PES Transformers Committee
October 30, 2017