

## IEEE Power and Energy Society Transformers Committee Annual Report

2016

Entity: Transformers Committee (<http://www.transformerscommittee.org/>)

### Officers for 2016-2017

Chair:	Stephen Antosz	Treasurer:	Greg Anderson
Vice-Chair:	Susan McNelly	Awards/Past Chair:	Donald Platts
Secretary:	Bruce Forsyth	Standards Coordinator:	Jim Graham

#### 1. Summary of Significant Accomplishments: (for details go to the website given above)

- Responsible for 110+ IEEE Standards documents
  - 10 new Standards approved
  - 24 new PARS approved
  - 25 open ballots
  - 44 open PARS
- Coordinated peer-reviews of 19 Transactions papers and 46 Conference papers
- Sponsored panel presentations from experts on Transformer Resiliency and Physical Security
- Organized into 13 Subcommittees; 120 Working Groups and Task Forces
- Held Spring & Fall meetings (Atlanta & Vancouver) each with 550+ attendees and 100+ spouses
  - 72 WG/TF working meetings over two days, 75 minutes each
  - Newcomers Orientation
  - Two tutorials, 75 minutes each
  - Five technical tours
  - Multiple Spouse activities
  - Cost-effective

#### 2. Benefits to Industry and PES Members from the Committee Work:

The Transformers Committee is one of the largest and most active of the technical committees of the IEEE Power & Energy Society (PES). The Committee is comprised of a volunteer group of technical and managerial representatives from domestic and international manufacturers, consultants, vendors, and end-users of electrical transformers & components. The scope covers: generation, transmission, and distribution transformers; liquid-filled & dry-type; regulators; reactors; rectifiers; phase-shifting transformers; bushings; tap changers; instrument transformers; and insulating fluids. The primary function of the Committee is to develop and update standards & guidelines for the design, testing, repair, installation, operation, and maintenance of transformers and associated components that are used within the electric utility and industrial power systems. One of the Committee's responsibilities is to develop and maintain documents contained in the IEEE C57 Standards Collection. The Committee's work provides a crucial service to society's need for continuing development and maintenance of a reliable, safe, and efficient power system infrastructure.

### 3. Benefits to Volunteer Participants from the Committee Work:

- Personal and professional development
- Training and tutorials
- Industry interactions
- Exposure to transformer experts
- Technical tours
- Reasonable cost to company sponsors
- The meetings have a technical focus and are strictly non-commercial.

### 4. Recognition of Outstanding Performance:

At the Spring and Fall meetings, the Awards Chair recognized the following:

- Solemnly made special memorial tributes to 3 members who recently passed away
- Welcomed 15 new Transformers Committee members
- Congratulated 1 new IEEE Fellow, to join 15 existing Fellows from our Committee
- Bestowed 1 Best Subcommittee award, at each meeting
- Presented 1 Outstanding Contributor Award
- Presented 1 Distinguished Service Award
- Presented 6 General Service awards
- Presented IEEE-SA Standards Board Awards for 17 Projects, to 80 Individuals

### 5. Coordination with Other Entities (PES Committees, CIGRE, standards, etc.):

CIGRE, IEC, CSA, NFPA, NEC, SCC4, SCC18, Doble, NERC/FERC, EPRI

### 6. New Technologies of Interest to the Committee:

- SF6 gas as a dielectric fluid (i.e. gas-insulated transformer technology)
- GMD/GIC mitigation techniques to protect transformers in the grid from solar storms
- Bullet-proof transformers and other measures of protection for resiliency and physical security

### 7. Problems and Concerns:

- The IEEE-SA patent disclosure requirements are too legalistic for engineers developing technical standards. The process lacks clarity, is cumbersome and time consuming (at every WG meeting).
- Requests to adopt documents as IEEE Standards from outside entities (such as CSEE) are a burden on the committee, and committee leaders need better guidance on how to handle.
- The “entity” ballot process is unfamiliar to the committee, but the committee has been asked to sponsor some Standards using this method. Again, this is a burden and better guidance is needed.

### 8. Significant Plans for the Next Period:

Continue developing and maintaining IEEE Standards and Guides.

**Submitted by:** Stephen Antosz, santosz@ieee.org

**Date:** Jan 5, 2017