



IEEE / PES /TRANSFORMERS COMMITTEE

Standards Report

To: Members of Transformers Committee
From: Jim Graham Standards Coordinator

September 24, 2016

Executive Summary

This report covers Transformers Committee Standards activity from March 1, 2016 to September 22, 2016. During this time three new Standards and no Revisions were approved by the Standards Board. In this same period, the Standards Board approved four PAR Extensions; no PAR modifications; one PAR for new standards; six PARs for Revisions; and two PARs for Corrigenda.

In this Report:

I.	Standards approved	pg 1
II.	PARs approved	pg 1-2
III.	Standards Board 2017 Meeting Schedule.....	pg 2
IV.	Transformer Committee Ballot Status	pg 3-4
V.	Transformers Committee PAR Status	pg 4-9
VI.	Transformer Stds Status e	pg 10- 21
VII.	Transformer Stds Org Chart	pg 22-23

I. Standards approved since Mar 1, 2016

New Transformer Standards Approved *(All expire 31 Dec 2026)*

- 60076-57-1202** International Standard Requirements for Liquid-Immersed Phase-Shifting Transformers
- C57.156** Guide for Tank Rupture Mitigation of Liquid-Immersed Power Transformers and Reactors
- C57.159** Guide on Transformers for Application in Distributed Photovoltaic (DPV) Power Generation Systems

REVISIONS to Transformer Standards approved *None*

II. PARs approved since Mar 1, 2016

PAR Extensions approved *(All extended until December 2018 unless noted)*

- P60076-16** Power Transformers - Part 16: Transformers for Wind Turbine Application
- C57.12.40** Standard for Network, Three-Phase Transformers, 2500 kVA and Smaller; High Voltage, 34 500 V and Below; Low Voltage, 600 V and Below; Subway and Vault Types (Liquid Immersed) (until Dec 2017)
- C57.93** Guide for Installation and Maintenance of Liquid-Immersed Power Transformers
- C57.147** Guide for Acceptance and Maintenance of Natural Ester Insulating Liquid in Transformers

PAR Modfications approved *None*

(PAR Modifications do not change the Expiration Date)

New Projects approved

Approved until December 2020)

PC57.164 Guide for Establishing Short Circuit Withstand Capabilities of Liquid Immersed Power Transformers

PAR Requests for Revision of Standards (Approved until December 2020)

PC57.12.01 Standard for General Requirements for Dry-Type Distribution and Power Transformers

PC57.12.34 Standard Requirements for Pad-Mounted, Compartmental-Type, Self-Cooled, Three-Phase Distribution Transformers, 10 MVA and Smaller; High-Voltage, 34.5 kV Nominal System Voltage and Below; Low-Voltage, 15 kV Nominal System Voltage and Below

C57.12.91 Standard Test Code for Dry-Type Distribution and Power Transformers

PC57.13.5 Standard of Performance and Test Requirements for Instrument Transformers of a Nominal System Voltage of 115 kV and Above

PC57.18.10 Standard Practices and Requirements for Semiconductor Power Rectifier Transformers

PC57.148 Standard for Control Cabinets for Power Transformers

PARs for Corrigenda approved (Approved until December 2020)

PC57.12.90-2015 Cor 1 Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers (2020)

PC57.163-2015 Cor 1 Guide for Establishing Power Transformer Capability while under Geomagnetic Disturbances (2020)

III. 2016 IEEE Standards Board Meeting Schedule

Starting in 2015, the Standards Board has only three *physical* board meetings per year. But they supplement this with three (3) teleconference meetings. The full list of 2017 meetings is shown in the calendar on the next page.

Deadlines for 2016-2017 Standards Board Submissions:

Standards Board Meeting	Submission Deadline
Jan 2017 (teleconference)	December 20, 2016
March 2017	February 10, 2017
May 2017 (teleconference)	March 24, 2017
June 2017	May 5, 2017
September 2017 (teleconference)	July 28, 2017
December 2017	October 16, 2017

Please Note: Anything that expires at the end of 2017 must be submitted to Standards Board (either NESCOM or REVCOM) by **October 16, 2017**

IV. Transformers Committee Ballot Status

(as of Sep 24, 2016)

PAR Number	Title	Ballot Close Date	Status
Dielectric Test			
PC57.138	Recommended Practice for Routine Impulse Test for Distribution Transformers	9/9/2016	Sponsor Ballot: Comment Resolution
Distribution Transformers			
PC57.12.39	Standard Requirements for Distribution Transformer Tank Pressure Coordination	7/14/2016	Sponsor Ballot: Comment Resolution
PC57.12.20	Standard for Overhead-Type Distribution Transformers 500 kVA and Smaller: High Voltage, 34 500 V and Below; Low Voltage, 7970/13 800Y V and Below	4/8/2016	Sponsor Ballot: Comment Resolution
PC57.12.38-2014 /Cor 1	Standard for Pad-Mounted-Type, Self-Cooled, Single-Phase Distribution Transformers 250 kVA and Smaller: High Voltage, 34 500 GrdY/19 920 V and Below; Low Voltage, 480/240 V and Below - Corrigendum 1: Correct an omission in the label of Figure 1.	8/11/2016	RevCom Agenda 06-Dec-2016
PC57.12.36	Standard Requirements for Liquid-Immersed Distribution Substation Transformers	10/5/2016	Sponsor Ballot: Ballot
PC57.15	Standard Requirements, Terminology, and Test Code for Step-Voltage Regulators	10/23/2016	Sponsor Ballot: Ballot
Dry Type Transformers			
PC57.12.58	Guide for Conducting a Transient Voltage Analysis of a Dry-Type Transformer Coil		Sponsor Ballot: PreBallot
HVDC Converter Xfmrs & Smoothing Reactors			
P60076-57-129	Converter Transformers for HVDC Applications	9/23/2016	Sponsor Ballot: Comment Resolution
Insulating Fluids			
PC57.147	Guide for Acceptance and Maintenance of Natural Ester Insulating Liquid in Transformers	3/31/2016	Sponsor Ballot: Comment Resolution
Insulation Life			
PC57.119	Recommended Practice for Performing Temperature Rise Tests on Oil-Immersed Power Transformers at Loads Beyond Nameplate Ratings	3/18/2015	Sponsor Ballot: Comment Resolution
Instrument Transformers			
PC57.13.7	Standard for Current Transformers with a Maximum mA Secondary Current of 250 mA		Sponsor Ballot: Invitation

PAR Number	Title	Ballot Close Date	Status
Performance Characteristics			
PC57.120	Guide for Loss Evaluation of Distribution and Power Transformers and Reactors	8/3/2016	Sponsor Ballot: Comment Resolution
PC57.158	Guide for the Application of Tertiary and Stabilizing Windings in Power Transformers		Sponsor Ballot: PreBallot
Power Transformers			
PC57.140	Guide for Evaluation and Reconditioning of Liquid Immersed Power Transformers	8/31/2016	Sponsor Ballot: Comment Resolution
P60076-16	Power Transformers - Part 16: Transformers for Wind Turbine Application	6/20/2016	Sponsor Ballot: Comment Resolution
Standards			
PC57.163-2015 /Cor 1	Guide for Establishing Power Transformer Capability while under Geomagnetic Disturbances - Corrigendum 1	10/14/2016	Sponsor Ballot: Ballot
Underground & Network Protectors			
PC57.12.24	Standard for Submersible, Three-Phase Transformers, 3750 kVA and Smaller: High Voltage, 34 500 GrdY/19 920 Volts and Below; Low Voltage, 600 Volts and Below	8/29/2016	Sponsor Ballot: Comment Resolution
PC57.12.40	Standard for Network, Three-Phase Transformers, 2500 kVA and Smaller; High Voltage, 34 500 V and Below; Low Voltage, 600 V and Below; Subway and Vault Types (Liquid Immersed)	10/13/2016	Sponsor Ballot: Ballot

V. Transformer Committee PAR Status

(as of Sep 24, 2016)

Bushings				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.19.01	Revision	Standard Performance Characteristics and Dimensions for Outdoor Apparatus Bushings	8-Dec-2010	12/31/2017
PC57.19.02	New	Standard for the Design and Performance Requirements of Bushings Applied to Liquid Immersed Distribution Transformers	5-Feb-2016	12/31/2020
PC57.19.04	New	Standard Performance Characteristics and Dimensions for High Current Power Transformer Bushings with Rated Continuous Current in Excess of 5000 A in Bus Enclosures	16-Jun-11	12/31/2017

Dielectric Test				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.127	Revision	Guide for the Detection, Location and Interpretation of Sources of Acoustic Emissions from Electrical Discharges in Power Transformers and Power Reactors	16-Feb-15	12/31/2019
PC57.138	Revision	Recommended Practice for Routine Impulse Test for Distribution Transformers	2-Feb-2011	12/31/2016
PC57.160	New	Guide for the Electrical Measurement of Partial Discharges in High Voltage Bushings and Instrument Transformers	6-Mar-2013	12/31/2017
PC57.161	New	Guide for Dielectric Frequency Response Test	23-Aug-13	12/31/2017

Distribution Transformers				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.12.39	New	Standard Requirements for Distribution Transformer Tank Pressure Coordination	5-Feb-2016	12/31/2016
PC57.12.20	Revision	Standard for Overhead-Type Distribution Transformers 500 kVA and Smaller: High Voltage, 34 500 V and Below; Low Voltage, 7970/13 800Y V and Below	8-Jun-2012	12/31/2016
PC57.12.38-2014/Cor 1	Corrigendum	Standard for Pad-Mounted-Type, Self-Cooled, Single-Phase Distribution Transformers 250 kVA and Smaller: High Voltage, 34 500 GrdY/19 920 V and Below; Low Voltage, 480/240 V and Below - Corrigendum 1: Correct an omission in the label of Figure 1.	5-Feb-2016	12/31/2020
PC57.12.32	Revision	Standard for Submersible Equipment - Enclosure Integrity	11-Jun-15	12/31/2019

Distribution Transformers				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.12.34	Revision	Standard Requirements for Pad-Mounted, Compartmental-Type, Self-Cooled, Three-Phase Distribution Transformers, 10 MVA and Smaller; High-Voltage, 34.5 kV Nominal System Voltage and Below; Low-Voltage, 15 kV Nominal System Voltage and Below	22-Sep-16	12/31/2020
PC57.12.36	Revision	Standard Requirements for Liquid-Immersed Distribution Substation Transformers	7-Dec-2011	12/31/2017
PC57.15	Revision	Standard Requirements, Terminology, and Test Code for Step-Voltage Regulators	5-Feb-2016	12/31/2018

Dry Type Transformers				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.12.01	Revision	Standard for General Requirements for Dry-Type Distribution and Power Transformers	12-May-16	12/31/2020
PC57.12.51	Revision	Standard for Ventilated Dry-Type Power Transformers, 501 kVA and Larger, Three-Phase, with High-Voltage 601 V to 34 500 V; Low-Voltage 208Y/120 V to 4160 V- General Requirements	21-Aug-14	12/31/2018
PC57.12.58	Revision	Guide for Conducting a Transient Voltage Analysis of a Dry-Type Transformer Coil	3-Sep-2015	12/31/2019
PC57.12.60	Revision	Standard Test Procedure for Thermal Evaluation of Insulation Systems for Dry-Type Power and Distribution Transformers	11-Jun-15	12/31/2019
PC57.12.91	Revision	Standard Test Code for Dry-Type Distribution and Power Transformers	3-Mar-2016	12/31/2020
PC57.16	Revision	Standard for Requirements, Terminology, and Test Code for Dry-Type Air-Core Series-Connected Reactors	5-Feb-2016	12/31/2020
HVDC Converter Xfmrs & Smoothing Reactors				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
P60076-57-129	Revision	Converter Transformers for HVDC Applications	10-Dec-14	12/31/2018
Insulating Fluids				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.104	Revision	Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers	5-Feb-2010	12/31/2017
PC57.147	Revision	Guide for Acceptance and Maintenance of Natural Ester Insulating Liquid in Transformers	5-Feb-2016	12/31/2018
Insulation Life				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.162	New	Guide for the Interpretation of Moisture Related Parameters in Dry, Gas Insulated and Liquid Immersed Transformers and Reactors	23-Aug-13	12/31/2017
P1276	Revision	Guide for the Application of High-Temperature Insulation Materials in Liquid-Immersed Distribution, Power and Regulating Transformers	27-Mar-14	12/31/2016

Insulation Life				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.119	Revision	Recommended Practice for Performing Temperature Rise Tests on Oil-Immersed Power Transformers at Loads Beyond Nameplate Ratings	27-Oct-14	12/31/2018
Instrument Transformer s				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.13.5	Revision	Standard of Performance and Test Requirements for Instrument Transformers of a Nominal System Voltage of 115 kV and Above	3-Mar-2016	12/31/2020
PC57.13.7	New	Standard for Current Transformers with a Maximum mA Secondary Current of 250 mA	30-Sep-10	12/31/2016
PC57.13.8	New	Standard Requirements for Station Service Voltage Transformers	11-Dec-13	12/31/2017
Performance Characteristics				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
P60076-16	New	Power Transformers - Part 16: Transformers for Wind Turbine Application	10-Dec-14	12/31/2018
PC57.164	New	Guide for Establishing Short Circuit Withstand Capabilities of Liquid Immersed Power Transformers, Regulators, and Reactors	30-Jun-16	12/31/2020
PC57.105	Revision	Guide for Application of Transformer Connections in Three-Phase Electrical Systems	26-Mar-15	12/31/2019
PC57.109	Revision	Guide for Liquid-Immersed Transformers Through-Fault-Current Duration	26-Mar-15	12/31/2019
PC57.110	Revision	Recommended Practice for Establishing Liquid-Immersed and Dry-Type Power and Distribution Transformer Capability When Supplying Nonsinusoidal Load Currents	12-Jun-14	12/31/2018
PC57.120	Revision	Guide for Loss Evaluation of Distribution and Power Transformers and Reactors	25-Mar-10	12/31/2016
PC57.158	New	Guide for the Application of Tertiary and Stabilizing Windings in Power Transformers	15-May-12	12/31/2016
PC57.18.10	Revision	Standard Practices and Requirements for Semiconductor Power Rectifier Transformers	30-Jun-16	12/31/2020
PC57.21	Revision	Standard Requirements, Terminology, and Test Code for Shunt Reactors Rated Over 500 kVA	21-Aug-14	12/31/2018

Power Transformers				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
P60214-2	New	Tap-Changers - Part 2: Application Guide	12-Jun-14	12/31/2018
PC57.12.10	Revision	Standard Requirements for Liquid-Immersed Power Transformers	26-Mar-15	12/31/2019
PC57.140	Revision	Guide for Evaluation and Reconditioning of Liquid Immersed Power Transformers	31-Mar-11	12/31/2017
PC57.148	Revision	Standard for Control Cabinets for Power Transformers	30-Jun-16	12/31/2020
PC57.93	Revision	Guide for Installation and Maintenance of Liquid-Immersed Power Transformers	29-Mar-12	12/31/2018
P60214-2	New	Tap-Changers - Part 2: Application Guide	12-Jun-14	12/31/2018
Standards				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.12.90-2015 /Cor 1	Corrigendum	Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers - Corrigendum 1: Editorial and Technical Corrections	30-Jun-16	12/31/2020
PC57.12.70-2011/Cor 1	Corrigendum	Standard Terminal Markings and Connections for Distribution and Power Transformers - Corrigendum 1: Correction of Annex A	5-Feb-2016	12/31/2019
PC57.163-2015 /Cor 1	Corrigendum	Guide for Establishing Power Transformer Capability while under Geomagnetic Disturbances - Corrigendum 1	30-Jun-16	12/31/2020
Underground & Network Protectors				
PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.12.23	Revision	Standard for Submersible Single-Phase Transformers: 250 kVA and Smaller; High Voltage 34 500GrdY/19 920V and Below; Low Voltage 600 V and Below	21-Aug-14	12/31/2018
PC57.12.24	Revision	Standard for Submersible, Three-Phase Transformers, 3750 kVA and Smaller: High Voltage, 34 500 GrdY/19 920 Volts and Below; Low Voltage, 600 Volts and Below	9-Nov-2011	12/31/2017
PC57.12.40	Revision	Standard for Network, Three-Phase Transformers, 2500 kVA and Smaller; High Voltage, 34 500 V and Below; Low Voltage, 600 V and Below; Subway and Vault Types (Liquid Immersed)	30-Aug-12	12/31/2017

Underground & Network Protectors

PAR Number	Project Type	Title	Approval Date	PAR Expiration
PC57.12.44	Revision	Standard Requirements for Secondary Network Protectors	26-Mar-15	12/31/2019
P60076-16	New	Power Transformers - Part 16: Transformers for Wind Turbine Application	10-Dec-14	12/31/2018

VI. Transformers Standards Status

(as of Sep 24, 2016)

Bushings Subcommittee		SC Chair: Peter Zhao email: peter.zhao@HydroOne.com phone: (417) 345-5926		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	Status PAR Expiration
C57.19.00	see organization chart	IEEE Standard General Requirements and Test Procedure for Power Apparatus Bushings	2004 2020	Complete
C57.19.01	see organization chart	IEEE Standard Performance Characteristics and Dimensions for Outdoor Apparatus Bushings	2000 2018	2017
65700-19-03	see organization chart	IEC/IEEE International Standard -- Bushings for DC application	2014 2024	Complete
C57.19.100	see organization chart	IEEE Guide for Application of Power Apparatus Bushings	2012 2022	Complete
Dielectric Test		SC Chair: Ajith Varghese email: ajith.varghese@spx.com phone: (262) 442-7197		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	Status PAR Expiration
C57.113	see organization chart	IEEE Recommended Practice for Partial Discharge Measurement in Liquid-Filled Power Transformers and Shunt Reactors	2010 2020	Complete
C57.127	see organization chart	IEEE Guide for the Detection and Location of Acoustic Emissions from Partial Discharges in Oil-Immersed Power Transformers and Reactors	2007 2018	Draft Stage 2019
C57.138	see organization chart	IEEE Recommended Practice for Routine Impulse Test for Distribution Transformers	1998 2018	Complete
C57.98	see organization chart	IEEE Guide for Transformer Impulse Tests	2011 2021	Complete

Distribution Transformers		SC Chair: Steve Shullemail: sdshull@ieee.orgphone: (417) 625-6110		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	Status PAR Expiration
C57.12.20	see organization chart	IEEE Standard for Overhead-Type Distribution Transformers 500 kVA and Smaller: High Voltage, 34 500 V and Below; Low Voltage, 7970/13 800Y V and Below	2011 2021	Comment Res 2016
C57.12.37	see organization chart	IEEE Standard for the Electronic Reporting of Distribution Transformer Test Data	2015 2025	Complete
C57.12.38	see organization chart	IEEE Standard for Pad-Mounted-Type, Self-Cooled, Single-Phase Distribution Transformers 250 kVA and Smaller: High Voltage, 34 500 GrdY/19 920 V and Below; Low Voltage, 480/240 V and Below	2014 2024	Complete
C57.12.28	see organization chart	IEEE Standard for Pad-Mounted Equipment--Enclosure Integrity	2014 2024	Complete
C57.12.29	see organization chart	IEEE Standard for Pad-Mounted Equipment--Enclosure Integrity for Coastal Environments	2014 2024	Complete
C57.12.30	see organization chart	IEEE Standard for Pole-Mounted Equipment--Enclosure Integrity for Coastal Environments	2010 2020	Complete
C57.12.31	see organization chart	IEEE Standard for Pole-Mounted Equipment--Enclosure Integrity	2010 2020	Complete
C57.12.31-2010 /Cor 1	see organization chart	IEEE Standard for Pole-Mounted Equipment--Enclosure Integrity - Corrigendum 1: Correction to the SCAB Corrosion Test in 4.5.6	2014 2024	Complete
C57.12.32	see organization chart	IEEE Standard for Submersible Equipment - Enclosure Integrity	2002 2018	Draft Stage 2019
C57.12.34	see organization chart	IEEE Standard Requirements for Pad-Mounted, Compartmental-Type, Self-Cooled, Three-Phase Distribution Transformers, 10 MVA and Smaller; High-Voltage, 34.5 kV Nominal System Voltage and Below; Low-Voltage, 15 kV Nominal System Voltage and Below	2015 2025	Complete

Distribution Transformers		SC Chair: Steve Shullemail: sdshull@ieee.orgphone: (417) 625-6110		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	Status PAR Expiration
C57.12.35	see organization chart	IEEE Standard Bar Coding for Distribution Transformers and Step-Voltage Regulators	2013 2023	Complete
C57.12.36	see organization chart	IEEE Standard Requirements for Liquid-Immersed Distribution Substation Transformers	2007 2018	Complete
C57.15	see organization chart	IEEE Standard Requirements, Terminology, and Test Code for Step-Voltage Regulators	2009 2019	Ballot 2017
Dry Type Transformers		SC Chair: Chuck Johnsonemail: chuckj@ieee.orgphone: (276) 688-3325		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
259	see organization chart	IEEE Standard Test Procedure for Evaluation of Systems of Insulation for Dry-Type Specialty and General-Purpose Transformers	1999 2020	Complete
C57.12.01	see organization chart	IEEE Standard for General Requirements for Dry-Type Distribution and Power Transformers	2015 2025	Draft Stage 2020
C57.12.51	see organization chart	IEEE Standard for Ventilated Dry- Type Power Transformers, 501 kVA and Larger, Three-Phase, with High- Voltage 601 V to 34 500 V; Low-Voltage 208Y/120 V to 4160 V- General Requirements	2008 2018	Complete
C57.12.52	see organization chart	IEEE Standard for Sealed Dry-Type Power Transformers, 501 kVA and Higher, Three-Phase, with High-Voltage 601 to 34500 Volts, Low-Voltage 208Y/120 to 4160 Volts--General Requirements	2012 2022	Complete
C57.12.58	see organization chart	IEEE Guide for Conducting a Transient Voltage Analysis of a Dry-Type Transformer Coil	1991 2018	Pre ballot 2019

Dry Type Transformers		SC Chair: Chuck Johnson email: chuckj@ieee.org phone: (276) 688-3325		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.12.59	see organization chart	IEEE Guide for Dry-Type Transformer Through-Fault Current Duration	2015 2025	Complete
C57.12.60	see organization chart	IEEE Standard Test Procedure for Thermal Evaluation of Insulation Systems for Dry-Type Power and Distribution Transformers, Including Open-Wound, Solid-Cast, and Resin-Encapsulated Transformers	2009 2019	Draft Stage 2019
C57.12.60-2009 /Cor 1	see organization chart	IEEE Standard Test Procedure for Thermal Evaluation of Insulation Systems for Dry-Type Power and Distribution Transformers, Including Open-Wound, Solid-Cast, and Resin-Encapsulated Transformers	2013 2023	Complete
C57.12.91	see organization chart	IEEE Standard Test Code for Dry-Type Distribution and Power Transformers	2011 2021	Draft Stage 2020
C57.124	see organization chart	IEEE Recommended Practice for the Detection of Partial Discharge and the Measurement of Apparent Charge in Dry-Type Transformers	1991 2019	Complete
C57.134	see organization chart	IEEE Guide for Determination of Hottest-Spot Temperature in Dry-Type Transformers	2013 2023	Complete
C57.16	see organization chart	IEEE Standard for Requirements, Terminology, and Test Code for Dry-Type Air-Core Series-Connected Reactors	2011 2021	Draft Stage 2020
C57.94	see organization chart	IEEE Recommended Practice for Installation, Application, Operation, and Maintenance of Dry-Type Distribution and Power Transformers	2015 2025	Complete
C57.96	see organization chart	IEEE Guide for Loading Dry-Type Distribution and Power Transformers	2013 2023	Complete

HVDC Converter Xfmrs & Smoothing Reactors		SC Chair: Mike Sharp email: mike.sharp@trench-group.com phone: (416) 298-8108 x237		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
1277	see organization chart	IEEE Standard General Requirements and Test Code for Dry-Type and Oil-Immersed Smoothing Reactors for DC Power Transmission	2010 2020	Complete
Instrument Transformers		SC Chair: Ross McTaggart email: ross.mctaggart@ieee.org phone: (416) 751-8570 x127		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.13	see organization chart	IEEE Standard Requirements for Instrument Transformers	2016 2026	Complete
C57.13.2	see organization chart	IEEE Standard for Conformance Test Procedure for Instrument Transformers	2005 2020	Complete
C57.13.5	see organization chart	IEEE Standard of Performance and Test Requirements for Instrument Transformers of a Nominal System Voltage of 115 kV and Above	2009 2019	Draft Stage 2020
C57.13.6	see organization chart	IEEE Standard for High Accuracy Instrument Transformers	2005 2020	Complete
60076-C57.129	see organization chart	Standard for General Requirements and Test Code for Oil-Immersed HVDC Converter Transformers	2007 2018	Comment Res 2018

Insulating Fluids		SC Chair: Dave Wallach email: david.wallach@duke-energy.com phone: (980) 373-4167		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.104	see organization chart	IEEE Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers	2008 2018	Draft Stage 2017
C57.106	see organization chart	IEEE Guide for Acceptance and Maintenance of Insulating Mineral Oil in Electrical Equipment	2015 2025	Complete
C57.111	see organization chart	IEEE Guide for Acceptance of Silicone Insulating Fluid and Its Maintenance in Transformers	1989 2019	Complete
C57.121	see organization chart	IEEE Guide for Acceptance and Maintenance of Less-Flammable Hydrocarbon Fluid in Transformers	1998 2019	Complete
C57.130	see organization chart	IEEE Guide for the Use of Dissolved Gas Analysis Applied to Factory Temperature Rise Tests for the Evaluation of Mineral Oil-Immersed Transformers and Reactors	2015 2025	Complete
C57.139	see organization chart	IEEE Guide for Dissolved Gas Analysis in Transformer Load Tap Changers	2015 2025	Complete
C57.146	see organization chart	IEEE Guide for Interpretation of Gasses Generated in Silicone-Immersed Transformers	2005 2021	Complete
C57.147	see organization chart	IEEE Guide for Acceptance and Maintenance of Natural Ester Fluids in Transformers	2008 2018	Comment Res 2018
C57.155	see organization chart	IEEE Guide for Interpretation of Gases Generated in Natural Ester and Synthetic Ester-Immersed Transformers	2014 2024	Complete
C57.637	see organization chart	IEEE Guide for the Reclamation of Mineral Insulating Oil and Criteria for Its Use	2015 2025	Complete

Insulation Life		SC Chair: Sheldon Kennedy email: skennedy@niagaratransformer.com phone: (716) 896-6500 X105		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
1276	see organization chart	IEEE Guide for the Application of High-Temperature Insulation Materials in Liquid-Immersed Power Transformers	1997 2018	Draft Res 2016
1538	see organization chart	IEEE Guide for Determination of Maximum Winding Temperature Rise in Liquid-Filled Transformers	2000 2024	Complete
1538a	see organization chart	IEEE Guide for Determination of Maximum Winding-Temperature Rise in Liquid Immersed Transformers -- Amendment 1	2015 2025	Complete
C57.100	see organization chart	IEEE Standard Test Procedure for Thermal Evaluation of Insulation Systems for Liquid-Immersed Distribution and Power Transformers	2011 2021	Complete
C57.119	see organization chart	IEEE Recommended Practice for Performing Temperature Rise Tests on Oil-Immersed Power Transformers at Loads Beyond Nameplate Ratings	2001 2018	Comment Res 2018
C57.154	see organization chart	IEEE Standard for the Design, Testing, and Application of Liquid-Immersed Distribution, Power, and Regulating Transformers Using High-Temperature Insulation Systems and Operating at Elevated Temperatures	2012 2022	Complete
C57.91	see organization chart	IEEE Guide for Loading Mineral-Oil-Immersed Transformers and Step-Voltage Regulators	2011 2021	Complete
C57.91-1995 /Cor 1	see organization chart	IEEE Guide for Loading Mineral-Oil-Immersed Transformers - Corrigendum 1	2002 2018	Complete

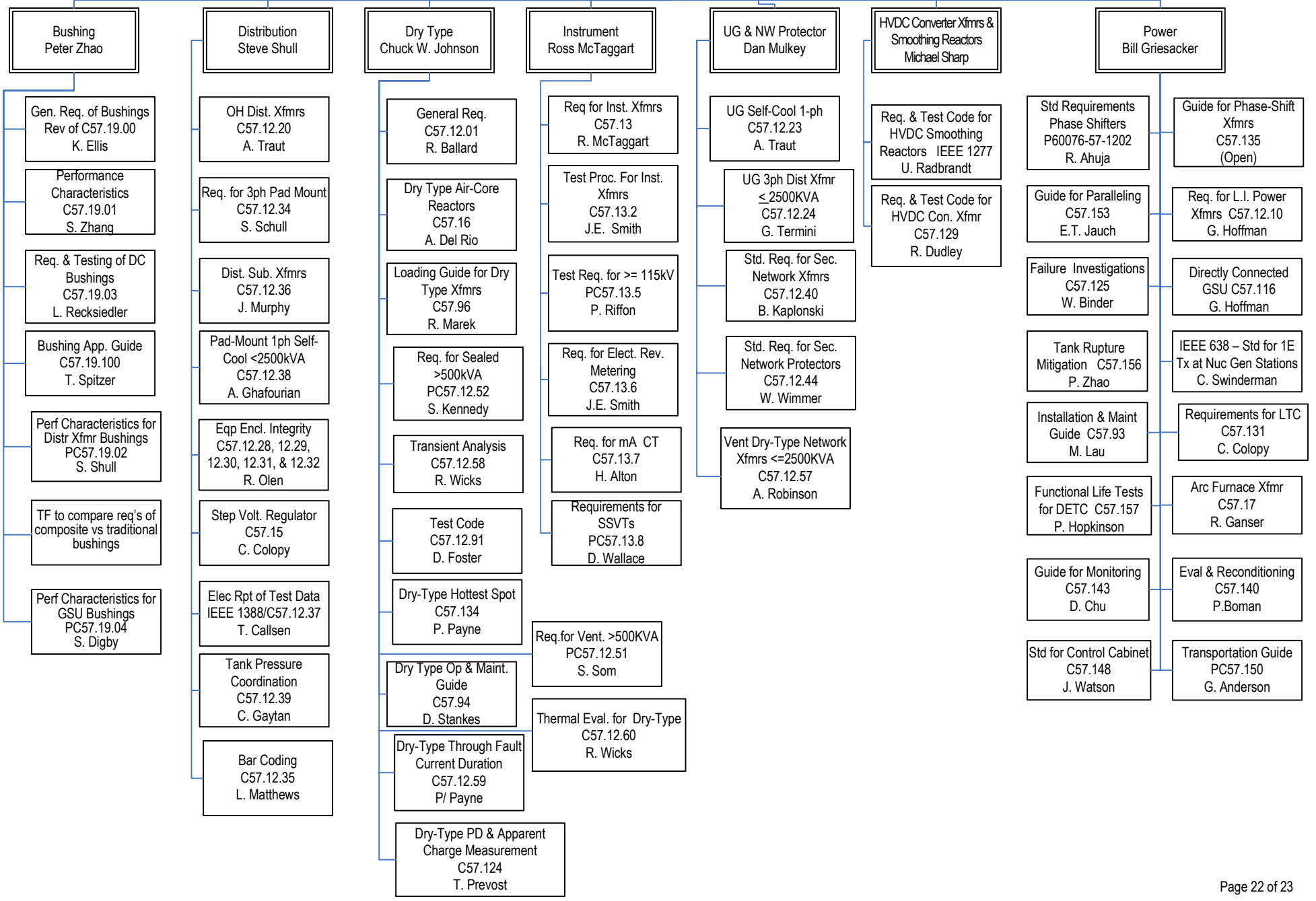
Performance Characteristics		SC Chair: Ed teNyenhuis email: edt@ieee.org phone: (905) 460-3210		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.21	see organization chart	IEEE Standard Requirements, Terminology, and Test Code for Shunt Reactors Rated Over 500 kVA	2008 2018	Draft Dev 2018
C57.32	see organization chart	IEEE Standard for Requirements, Terminology, and Test Procedures for Neutral Grounding Devices	2015 2025	Complete
C57.105	see organization chart	IEEE Guide for Application of Transformer Connections in Three-Phase Distribution Systems	1978 2018	Draft Stage 2019
C57.109	see organization chart	IEEE Guide for Liquid-Immersed Transformers Through-Fault-Current Duration	1993 2018	Draft Stage 2019
C57.110	see organization chart	IEEE Recommended Practice for Establishing Liquid-Filled and Dry-Type Power and Distribution Transformer Capability When Supplying Nonsinusoidal Load Currents	2008 2018	Draft Stage 2018
C57.120	see organization chart	IEEE Loss Evaluation Guide for Power Transformers and Reactors	1991 2018	Comment Res 2016
C57.123	see organization chart	IEEE Guide for Transformer Loss Measurement	2010 2020	Complete
C57.136	see organization chart	IEEE Guide for Sound Level Abatement and Determination for Liquid-Immersed Power Transformers and Shunt Reactors Rated Over 500 kVA	2000 2018	Complete
C57.142	see organization chart	IEEE Guide to Describe the Occurrence and Mitigation of Switching Transients Induced by Transformers, Switching Device, and System Interaction	2010 2020	Complete
C57.149	see organization chart	IEEE Guide for the Application and Interpretation of Frequency Response Analysis for Oil-Immersed Transformers	2012 2022	Complete

Performance Characteristics		SC Chair: Ed teNyenhuis email: edt@ieee.org phone: (905) 460-3210		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.159	see organization chart	IEEE Approved Draft Guide on Transformers for Application in Distributed Photovoltaic (DPV) Power Generation Systems	2016 2026	Complete
C57.18.10	see organization chart	IEEE Standard Practices and Requirements for Semiconductor Power Rectifier Transformers	1998 2019	Draft Dev 2020
C57.18.10a	see organization chart	IEEE Standard for Practices and Requirements for Semiconductor Power Rectifier Transformers Amendment 1: Added Technical and Editorial Corrections	2008 2018	Complete
Power Transformers		SC Chair: Bill Griesacker email: bgriesacker@doble.com phone: (412) 264-3266		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
638	see organization chart	IEEE Standard for Qualification of Class 1E Transformers for Nuclear Power Generating Stations	2013 2023	Complete
60076-57-1202	see organization chart	IEC/IEEE Approved Draft International Standard Requirements for Liquid Immersed Phase-Shifting Transformers	2016 2026	Complete
C57.131	see organization chart	IEEE Standard Requirements for Tap Changers	2012 2022	Complete
C57.116	see organization chart	IEEE Guide for Transformers Directly Connected to Generators	2014 2024	Complete
C57.12.10	see organization chart	IEEE Standard Requirements for Liquid-Immersed Power Transformers	2010 2020	Draft Dev 2019

Power Transformers		SC Chair: Bill Griesacker email: bgriesacker@doble.com phone: (412) 264-3266		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.12.10-2010 /Cor 1	see organization chart	IEEE Standard Requirements for Liquid-Immersed Power Transformers- -Corrigendum 1: Correction of 5.1.9--Sudden Pressure Relay	2012 2022	Complete
C57.12.10-2010 /Cor 2	see organization chart	IEEE Standard Requirements for Liquid-Immersed Power Transformers -- Corrigendum 2: Correction of A.3.2.13 Autotransformer LTC application considerations	2013 2023	Complete
C57.93	see organization chart	IEEE Guide for Installation and Maintenance of Liquid-Immersed Power Transformers	2007 2018	Draft Dev 2018
C57.125	see organization chart	IEEE Guide for Failure Investigation, Documentation, Analysis, and Reporting for Power Transformers and Shunt Reactors	2015 2025	Complete
62032	see organization chart	IEC 62032 Ed.1 (IEEE Std C57.135(TM)-2001): Guide for the Application, Specification and Testing of Phase-Shifting Transformers	2005	
C57.135	see organization chart	IEEE Guide for the Application, Specification, and Testing of Phase- Shifting Transformers	2011 2021	Complete
C57.140	see organization chart	IEEE Guide for Evaluation and reconditioning of Liquid Immersed Power Transformers	2006 2018	Comment Res 2017
C57.143	see organization chart	IEEE Guide for Application for Monitoring Equipment to Liquid- Immersed Transformers and Components	2012 2022	Complete
C57.148	see organization chart	IEEE Standard for Control Cabinets for Power Transformers	2011 2021	Complete
C57.150	see organization chart	IEEE Guide for the Transportation of Transformers and Reactors Rated 10 000 kVA or Higher	2012 2022	Complete
C57.153	see organization chart	IEEE Guide for Paralleling Regulating Transformers	2015 2025	Complete

Power Transformers		SC Chair: Bill Griesacker email: bgriesacker@doble.com phone: (412) 264-3266		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.156	see organization chart	IEEE Approved Draft Guide for Tank Rupture Mitigation of Liquid-Immersed Power Transformers and Reactors	2016 2026	Complete
C57.157	see organization chart	IEEE Guide for Conducting Functional Life Tests on Switch Contacts Used in Insulating Liquid--Immersed Transformers	2015 2025	Complete
C57.17	see organization chart	IEEE Standard Requirements for Arc Furnace Transformers	2012 2022	Complete
Standards		SC Chair: Jerry Murphy email: jerry.murphy@ieee.org phone: (407) 824-4194		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.12.00	see organization chart	IEEE Standard for General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers	2015 2025	Complete
C57.12.90	see organization chart		2015 2025	Complete
C57.12.70	see organization chart	IEEE Standard for Standard Terminal Markings and Connections for Distribution and Power Transformers	2011 2021	Complete
C57.12.80	see organization chart	IEEE Standard Terminology for Power and Distribution Transformers	2010 2020	Complete
C57.144	see organization chart	IEEE Guide for Metric Conversion of Transformer Standards	2004 2020	Complete
C57.152	see organization chart	IEEE Guide for Diagnostic Field Testing of Fluid-Filled Power Transformers, Regulators, and Reactors	2013 2023	Complete

Standards		SC Chair: Jerry Murphy email: jerry.murphy@ieee.org phone: (407) 824-4194		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.163	see organization chart	IEEE Guide for Establishing Power Transformer Capability while under Geomagnetic Disturbances	2015 2025	Complete
Underground & Network Protectors		SC Chair: Dan Mulkey email: dhmulkey@ieee.org phone: (707) 776-7346		
Standard Number	Working Group Chair	Title	Published Yr Expiration Yr	PAR Approval PAR Expiration
C57.12.23	see organization chart	IEEE Standard for Submersible Single-Phase Transformers: 167 kVA and Smaller; High Voltage 25 000 V and Below; Low Voltage 600 V and Below	2009 2019	Draft Dev 2018
C57.12.24	see organization chart	IEEE Standard for Submersible, Three-Phase Transformers, 3750 kVA and Smaller: High Voltage, 34 500 GrdY/19 920 Volts and Below; Low Voltage, 600 Volts and Below	2009 2019	Comment Res 2017
C57.12.40	see organization chart	IEEE Standard for Network, Three-Phase Transformers, 2500 kVA and Smaller; High Voltage, 34 500 GrdY/19 920 and Below; Low Voltage, 600 V and Below; Subway and Vault Types (Liquid Immersed)	2011 2021	Ballot 2017
C57.12.44	see organization chart	IEEE Standard Requirements for Secondary Network Protectors	2014 2024	Draft Dev 2019



IEEE/PES Transformers Committee
 Chair: Stephen Antosz
 Vice Chair: Susan McNelly Secretary: Bruce Forsyth Treas: Greg Anderson
 Past Chair: Donald Platts Std. Coordinator: Jim Graham

Revised J.Graham
 19 Oct, 2016

