

DATE: March 7, 2004

TO: Members of IEEE Transformers Committee

FROM: Bill Chiu, Standards Subcommittee Chair
IEEE /PES Transformers Committee

SUBJECT: Standards Activities since the October, 2003 Meeting

TRANSFORMERS STANDARDS STATUS

The transformers standards status is given with one attachment entitled IEEE/PES Transformers Committee Status Report of Standards, Dated 3/6/2004.

The report is a list of all the C57 standards, including ANSI C57 standards, sorted by Subcommittee names. It contains a listing of the projects for which a Subcommittee is responsible. The standards that are not assigned to a subcommittee yet are temporarily listed under the Standards Subcommittee.

NEMA/ANSI DOCUMENTS TRANSFERRED TO IEEE

The following standards were transferred to IEEE as of December 2, 2002. Currently there is no process for reaffirmation for these standards as these were not prepared under IEEE. The date of transfer (December 2, 2002) will be considered as the start of life. These standards will need a PAR for revision. We will have 5 years from the date of transfer to revise these standards. Given that these are special circumstances, it is likely we could obtain some extension from RevCom.

At this point IEEE SA indicated they can only provide PDF document for our revision work.

C57.12.10-1997	C57.12.26-1992	C57.12.50-1981
C57.12.20-1997	C57.12.28-1999	C57.12.51-1998
C57.12.21-2002	C57.12.29-1991	C57.12.52-1981
C57.12.22-1993	C57.12.31-2002	C57.12.55-1987
C57.12.24-2000	C57.12.32-2002	C57.12.57-1987
C57.12.25-1990	C57.12.40-2000	

DOCUMENTS SUBMITTED TO THE IEEE STANDARDS BOARD

NEW STANDARDS COMMITTEE (NesCom)

Recommendations - 22 October 2003

PC37.91 (PE/PSR) Guide for Protecting Power Transformers

Recommendation: Approve PAR for the revision of a standard until December 2007.

Recommendations - 9 December 2003

PC57.12.01 (PE/TR) Standard General Requirements for Dry-Type Distribution and Power Transformers Including Those with Solid Cast and/or Resin Encapsulated Windings

Recommendation: Approve target extension request until December 2005.

PC57.130 (PE/TR) Trial-Use Guide for the Use of Dissolved Gas Analysis During Factory Temperature Rise Tests for the Evaluation of Oil-Immersed Transformers and Reactors

Recommendation: Approve target extension request until December 2005 (8 approve, 0 disapprove, 1 abstain-Paul Nikolich).

PARS TO BE ADMINISTRATIVELY WITHDRAWN

PC57.141 (PE/TR) Guide for the Application of Load Tap ChangersGuide for the Application of Load Tap Changers

Recommendation: Approve administrative withdrawal.

NEW PARS

PC57.147 (PE/TR) Guide for Acceptance and Maintenance of Natural Ester Fluids in Transformers

Recommendation: Approve new PAR until December 2007.

PARS FOR REVISIONS OF STANDARDS

PC57.13 (PE/TR) Standard Requirements for Instrument Transformers

Recommendation: Approve PAR for the revision of a standard until December 2007.

NEW STANDARDS COMMITTEE (NesCom)

Recommendations - 19 February 2004

NEW PARS

PC57.19.03-1996/Cor 1-20xx (PE/TR) Standard Requirements, Terminology, and Test Code for Bushings for DC Applications - Corrigendum 1

Recommendation: Approve new PAR until December 2008.

PC57.148 (PE/TR) Standard for Control Cabinets for Power Transformers

Recommendation: Approve new PAR until December 2008.

STANDARDS REVIEW COMMITTEE (RevCom)

RECOMMENDATION – 9 December, 2003

C57.13-1993 (PE/TR) IEEE Standard Requirements for Instrument Transformers

Recommendation: APPROVE

C57.18.10-1998 (PE/TR) IEEE Standard Practices and Requirements for Semiconductor Power Rectifier Transformers

Recommendation: APPROVE [Vote: Yes=9; No=0; Abstain=2 (Aggarwal, Klerer)]

C57.19.100-1995 (PE/TR) IEEE Guide for Application of Power Apparatus Bushings

Recommendation: APPROVE

C57.111-1989 (R1995) (PE/TR) IEEE Guide for Acceptance of Silicone Insulating Fluid and Its Maintenance in Transformers

Recommendation: APPROVE

STANDARDS REVIEW COMMITTEE (RevCom)

5-Year Review Cycle – December, 2003

62-1995 IEEE Guide for Diagnostic Field Testing of Electric Power Apparatus - Part 1: Oil Filled Power Transformers, Regulators, and Reactors

Sponsor states that a reaffirmation ballot is in progress.

Recommendation: Extend until December 2004.

1276-1997 IEEE Guide for the Application of High-Temperature Insulation Materials in Liquid-Immersed Power Transformers

Sponsor states that a reaffirmation ballot is in progress.

Recommendation: Extend until December 2004.

C57.12.01-1998 IEEE Standard General Requirements for Dry-Type Distribution and Power Transformers Including Those with Solid Cast and/or Resin Encapsulated Windings

Sponsor has submitted a PAR extension request to NesCom for revision project PC57.12.01.

Recommendation: Extend until the expiration of the PAR for PC57.12.01 {December 2005}.

C57.12.35-1996 IEEE Standard for Bar Coding for Distribution Transformers

Sponsor requests an extension to determine whether to revise or reaffirm the standard.

Recommendation: Extend until December 2004.

C57.12.56-1986 (R1998) IEEE Standard Test Procedure for Thermal Evaluation of Insulation Systems for Ventilated Dry-Type Power and Distribution Transformers

Sponsor has submitted a PAR for revision to NesCom.

Recommendation: Extend until the expiration of the PAR for PC57.12.60 {December 2007}.

C57.12.60-1998 IEEE Guide for Test Procedures for Thermal Evaluation of Insulation Systems for Solid Cast and Resin-Encapsulated Power and Distribution Transformers

Sponsor has submitted a PAR for revision to NesCom.

Recommendation: Extend until the expiration of the PAR for PC57.12.60 {December 2007}.

C57.110-1998 IEEE Recommended Practice for Establishing Transformer Capability When Supplying Nonsinusoidal Load Currents

Sponsor states that a reaffirmation ballot is in progress.

Recommendation: Extend until December 2004.

C57.117-1986 (R1998) IEEE Guide for Reporting Failure Data for Power Transformers and Shunt Reactors on Electric Utility Power Systems

Sponsor states that a reaffirmation ballot is in progress.

Recommendation: Extend until December 2004.

C57.121-1998 IEEE Guide for Acceptance and Maintenance of Less-Flammable Hydrocarbon Fluid in Transformers

Sponsor states that a reaffirmation ballot will be initiated shortly.

Recommendation: Extend until December 2004

C57.125-1991 (R1998) IEEE Guide for Failure Investigation, Documentation, and Analysis for Power Transformers and Shunt Reactors

Sponsor states that a reaffirmation ballot is in progress.

Recommendation: Extend until December 2004.

C57.138-1998 IEEE Recommended Practice for Routine Impulse Test for Distribution Transformers

Sponsor states that a reaffirmation ballot is in progress.

Recommendation: Extend until December 2004.

PARS DUE TO EXPIRE AT THE END OF 2004

(from IEEE SA/J. Haas)

PC57.12.25 Standard for Pad-Mounted, Compartmental-Type, Self-Cooled, Single-Phase Distribution Transformers with Separable Insulated High-Voltage Connectors; High Voltage, 34500 GrdY/19920 Volts and Below, Low Voltage, 240/120 Volts; 167 kVA and Smaller – Requirements

PC57.12.33 Guide for Distribution Transformer Loss Evaluation

PC57.12.34 Requirements for Pad-Mounted, Compartmental-Type, Self-Cooled, Three-Phase Distribution Transformers, 2500 kVA and Smaller: High-Voltage, 34 500GrdY/19 920 Volts and Below; Low Voltage, 480 Volts and Below

PC57.15 Standard Requirements, Terminology, and Test Code for Step-Voltage Regulators

PC57.19.00 Standard General Requirements and Test Procedure for Power Apparatus Bushings

PC57.104 Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers

PC57.119 Recommended Practice for Performing Temperature Rise Tests on Oil Immersed Power Transformers at Loads Beyond Nameplate Rating

PC57.142 A Guide To Describe The Occurrence And Mitigation Of Switching Transients Induced By Transformer-Breaker Interaction

PC57.145 Guide for the Definition of Thermal Duplicate Liquid-Immersed Distribution, Power, and Regulating Transformers

If the projects will not be submitted to RevCom in time for the December 2004 meeting, you have the following options:

1. Request an extension for the projects. The Target Extension Request Form can be found at <http://standards.ieee.org/guides/par/extension.rtf>. Please note that this extension request can now be from one to four years.
2. Request withdrawal of the projects.

If there is no response by 19 October 2004, the projects will be recommended for administrative withdrawal at the 8 December 2004 IEEE-SA Standards Board meeting.

INVITAION TO BALLOT STATUS -- 2003-2004 , SORTED BY INVITATION NUMBER (As of 3/5/2004)

Invitation Number	Sponsor (Soc/Com)	Working Group Chair	Invitation Open Date	Invitation Close Date	Invitations Sent Out	Type of Invitation
PC57.12.20	PE/TR	Alan Wilks	2/3/2004	3/4/2004	673	Electronic Invitation
PC57.12.37	PE/TR	Richard Hollingsworth	11/13/2003	12/13/2003	658	Electronic Invitation
PC57.13.2	PE/TR	Vladimir Khalin	10/17/2003	11/16/2003	658	Electronic Invitation
PC57.13.6	PE/TR	Chris Ten-Haagen	9/12/2003	10/12/2003	653	Electronic Invitation
PC57.130	PE/TR	Frank J Gryszkiewicz	9/8/2003	10/8/2003	653	Electronic Invitation
PC57.144	PE/TR	Dudley L Galloway	7/7/2003	8/6/2003	651	Electronic Invitation
PC57.146	PE/TR	William H Bartley	2/19/2004	3/20/2004	675	Electronic Invitation
Std.259 REAFF	PE/TR	Robert Simpson	11/7/2003	12/7/2003	664	Electronic Invitation
Std.C57.110 REAFF	PE/TR	Richard P Marek	1/23/2003	2/22/2003	844	Electronic Invitation
Std.C57.111 REAFF	PE/TR	N Kent Haggerty	3/31/2003	4/30/2003	642	Electronic Invitation
Std.C57.117 REAFF	PE/TR	Wallace B Binder	9/12/2003	10/12/2003	653	Electronic Invitation
Std.C57.121 REAFF	PE/TR	Charles Patrick McShane	10/23/2003	11/22/2003	658	Electronic Invitation
Std.C57.125 REAFF	PE/TR	Wallace B Binder	9/12/2003	10/12/2003	653	Electronic Invitation
Std.C57.13 REAFF	PE/TR	James Smith	4/1/2003	5/1/2003	642	Electronic Invitation
Std.C57.138 REAFF	PE/TR	John R Rossetti	9/4/2003	10/4/2003	653	Electronic Invitation
Std.C57.18.10 REAFF	PE/TR	Sheldon P Kennedy	6/5/2003	7/5/2003	650	Electronic Invitation
Std.C57.91 REAFF	PE/TR	Timothy Raymond	7/15/2003	8/14/2003	651	Electronic Invitation
Std.C57.96 REAFF	PE/TR	Michael E Haas	11/21/2003	12/21/2003	663	Electronic Invitation

BALLOT STATUS - 2003-2004, SORTED BY BALLOT NUMBER (As of 3/5/2004)

Ballot Number	Sponsor (Soc/Com)	Type of Ballot	Ballot Opened	Sched. Close Date	# Ballots	Balloting Results			Type of Ballot
						Affirm	Neg	Abstain	
PC 57.13.6/D1	PE/TR	New	20-Nov-03	20-Dec-03	82	95%	5%	5%	Electronic
PC57.12.34/D10	PE/TR	Reballot	3-Feb-04	4-Mar-04	90				Electronic
PC57.12.34/D9	PE/TR	Recirc	7-Feb-03	9-Mar-03	90	79%	21%	3%	Electronic
PC57.144/D4	PE/TR	New	11-Nov-03	11-Dec-03	120	98%	2%	3%	Electronic
Std. 259-1999	PE/TR	Reaff	12-Dec-03	11-Jan-04	56	100%	0%	2%	Electronic
Std. 62-1995	PE/TR	Reaff	17-Mar-03	16-Apr-03	122	95%	5%	3%	Electronic
Std. 62-1995	PE/TR	Reaff Recirc	26-Sep-03	26-Oct-03	122	99%	1%	3%	Electronic
Std. C57.110-1998	PE/TR	Reaff	27-Feb-03	30-Mar-03	132	99%	1%	1%	Electronic
Std. C57.111-1989 (R1995)	PE/TR	Reaff	9-May-03	8-Jun-03	73	100%	0%	0%	Electronic
Std. C57.117-1986	PE/TR	Reaff	16-Oct-03	15-Nov-03	98	100%	0%	3%	Electronic
Std. C57.121-1998	PE/TR	Reaff	21-Jan-04	20-Feb-04	73	100%	0%	1%	Electronic
Std. C57.125-1991	PE/TR	Reaff	16-Oct-03	15-Nov-03	137	99%	1%	4%	Electronic
Std. C57.13-1993	PE/TR	Reaff	9-May-03	8-Jun-03	92	94%	6%	5%	Electronic
Std. C57.13-1993	PE/TR	Reaff Recirc	5-Aug-03	4-Sep-03	92	98%	2%	3%	Electronic
Std. C57.138-1998	PE/TR	Reaff	10-Oct-03	9-Nov-03	83	100%	0%	1%	Electronic
Std. C57.18.10-1998	PE/TR	Reaff	10-Jul-03	9-Aug-03	52	95%	5%	2%	Electronic
Std. C57.21-1990	PE/TR	Reaff Recirc	12-Sep-03	27-Oct-03	78	93%	7%	3%	Paper
Std. C57.91-1995	PE/TR	Reaff	11-Sep-03	11-Oct-03	155	98%	2%	3%	Electronic
Std. C57.96-1999	PE/TR	Reaff	5-Jan-04	4-Feb-04	70	100%	0%	1%	Electronic

2004 STANDARDS BOARD MEETINGS SCHEDULE AND SUBMITTAL DEADLINES

2004

IEEE Standards Association Meeting Schedule

Jan 2004							Feb 2004							Mar 2004							Apr 2004							May 2004							Jun 2004													
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S							
				1	2	3	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7							
4	5	6	7	8	9	10	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	22	23	24	25	26	27	28	29	30	31								
11	12	13	14	15	16	17	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																									
18	19	20	21	22	23	24																																										
25	26	27	28	29	30	31																																										
							13 Draft and PAR Submission Deadline							21 BoD/ExCom - San Antonio, TX																																		
							15 BoD/ExCom - Savannah, GA							2 December																																		
							25 SA-BoG Caucus - Piscataway, NJ							3 SA-BoG Meeting - NYC																																		
							26 SA-BoG Meeting - Piscataway, NJ							4 SA-BoG Meeting - NYC																																		
							27 SA-BoG Meeting - Piscataway, NJ							5 SA-BoG/StB Awards Ceremony - NYC																																		
														6 StB Committee Mtgs - NYC																																		
														7 StB Committee Mtgs - NYC																																		
														8 Standards Board Mtg - NYC																																		

NesCom and RevCom meet on the second day of the Standards Board meetings

Meeting Dates

March 23, 2004
June 22, 2004
September 21, 2004
December 6, 2004

Deadline for Submittal of PAR⁽¹⁾ or Draft Standard⁽²⁾

February 13, 2004
May 14, 2004
August 13, 2004
October 19, 2004

- 1) A PAR must be sent to the Standards Subcommittee Chair before the stated deadline.
- 2) Standards must be submitted directly to the IEEE Standards Department by the Working Group Chair before the stated deadline to be considered at the next Standards board Meeting.

For current PAR form: <http://standards.ieee.org/guides/par/index.html>.

Target Extension Request form: <http://standards.ieee.org/guides/par/extension.html>.

CURRENT LIST OF ALL OPEN STANDARDS PROJECT (FROM IEEE WEB SITE MARCH 5, 2004)

<http://standards.ieee.org/board/nes/C2-C136.html>

Only PARs submitted electronically and approved since the December 1998 Standards Board meeting are listed

[PC57.12.00](#) (PE/TR) Standard General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers

[PC57.12.01](#) (PE/TR) Standard General Requirements for Dry-Type Distribution and Power Transformers Including Those with Solid Cast and/or Resin Encapsulated Windings

[PC57.12.10](#) (PE/TR) Standard Requirements for Liquid-Immersed Power Transformers

[PC57.12.20](#) (PE/TR) Standard for Overhead Type Distribution Transformers, 500 kVA and Smaller: High Voltage, 34500 Volts and Below; Low Voltage, 7970/13800Y Volts and Below

[PC57.12.25](#) (PE/TR) Standard for Pad-Mounted, Compartmental-Type, Self-Cooled, Single-Phase Distribution Transformers with Separable Insulated High-Voltage Connectors; High Voltage, 34500 GrdY/19920 Volts and Below, Low Voltage, 240/120 Volts; 167 kVA and Smaller - Requirements

[PC57.12.28](#) (PE/TR) Standard for Pad Mounted Equipment - Enclosure Integrity

[PC57.12.29](#) (PE/TR) Standard for Pad Mounted Equipment - Enclosure Integrity for Coastal Environments

[PC57.12.33](#) (PE/TR) Guide for Distribution Transformer Loss Evaluation

[PC57.12.34](#) (PE/TR) Requirements for Pad-Mounted, Compartmental-Type, Self Cooled, Three-Phase Distribution Transformers, 2500 kVA and Smaller: High-Voltage, 34 500 GrdY/19 920 Volts and Below; Low Voltage, 480 Volts and Below

[PC57.12.36](#) (PE/TR) Standard Requirements for Liquid-Immersed Distribution Substation Transformers

[PC57.12.37](#) (PE/TR) Standard for the Electronic Reporting of Distribution Transformer Test Data

[PC57.12.40](#) (PE/TR) Requirements for Secondary Network Transformers, Subway and Vault Types (Liquid-Immersed)

[PC57.12.44](#) (PE/TR) Standard Requirements for Secondary Network Protectors

[PC57.12.60](#) (PE/TR) Standard Test Procedure for Thermal Evaluation of Insulation Systems for Dry Type Power and Distribution Transformers, Including Ventilated, Solid-Cast and Resin Encapsulated Transformers

[PC57.12.80](#) (PE/TR) Standard Terminology for Power and Distribution Transformers

[PC57.12.90](#) (PE/TR) Standard Test Code for Liquid-Immersed Distribution, Power, and Regulating Transformers

[PC57.13](#) (PE/TR) Standard Requirements for Instrument Transformers

[PC57.13.1](#) (PE/PSR) Guide for Field Testing of Relaying Current Transformers

[PC57.13.2](#) (PE/TR) Conformance Test Procedure for Instrument Transformers

[PC57.13.3](#) (PE/PSR) Guide for Grounding of Instrument Transformer Secondary Circuits and Cases

[PC57.13.6](#) (PE/TR) Standard for High Accuracy Instrument Transformers

[PC57.15](#) (PE/TR) Standard Requirements, Terminology, and Test Code for Step-Voltage Regulators

[PC57.19.00](#) (PE/TR) General Requirements and Test Procedures for Power Apparatus Bushings

[PC57.19.03-1996/Cor 1-20xx](#) (PE/TR) Standard Requirements, Terminology, and Test Code for Bushings for DC Applications - Corrigendum 1

[PC57.21](#) (PE/TR) Standard Requirements, Terminology, and Test Code for Shunt Reactors Rated Over 500 kVA

[PC57.32](#) (PE/TR) Standard Requirements, Terminology and Test Procedures for Neutral Grounding Devices

[PC57.93](#) (PE/TR) Guide for Installation of Liquid-Immersed Power Transformers

[PC57.98](#) (PE/TR) Guide for Transformer Impulse Tests

[PC57.104](#) (PE/TR) Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers

[PC57.106](#) (PE/TR) Guide for Acceptance and Maintenance of Insulating Oil in Equipment

[PC57.119](#) (PE/TR) Recommended Practice for Performing Temperature Rise Tests on Oil Immersed Power Transformers at Loads Beyond Nameplate Rating

[PC57.127](#) (PE/TR) Guide for the Detection and Location of Acoustic Emissions from Partial Discharges in Oil-Immersed Power Transformers and Reactors

[PC57.130](#) (PE/TR) IEEE Trial-Use Guide for the Use of Dissolved Gas Analysis During Factory Temperature Rise Tests for the Evaluation of Oil-Immersed Transformers and Reactors

[PC57.131](#) (PE/TR) Standard Requirements for Tap Changers

[PC57.139](#) (PE/TR) Guide for Dissolved Gas Analysis in Transformer Load Tap Changers

[PC57.140](#) (PE/TR) Evaluation and Reconditioning of Liquid Immersed Power Transformers

[PC57.142](#) (PE/TR) A Guide To Describe The Occurrence And Mitigation Of Switching Transients Induced By Transformer-Breaker Interaction

[PC57.143](#) (PE/TR) Guide for Application of Monitoring to Liquid-Immersed Transformers and Components

[PC57.144](#) (PE/TR) Guide to Metric Conversion of Transformer Standards

[PC57.145](#) (PE/TR) Guide for the Definition of Thermal Duplicate Liquid-Immersed Distribution, Power, and Regulating Transformers

[PC57.146](#) (PE/TR) Guide for Interpretation of Gasses Generated in Silicone-Immersed Transformers

[PC57.147](#) (PE/TR) Guide for Acceptance and Maintenance of Natural Ester Fluids in Transformers

[PC57.148](#) (PE/TR) Standard for Control Cabinets for Power Transformers