

DATE: October 18, 2004

TO: Members of IEEE Transformers Committee, Las Vegas, NV Meeting

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

SUBJECT: Standards Activities Since the March 2004 Meeting

TRANSFORMERS STANDARDS STATUS

The transformers standards status is given with one attachment entitled IEEE/PES Transformers Committee Status Report of Standards, Dated 10/18/2004.

The report is a list of all the transformer related standards under the sponsorship of IEEE Power Engineering Society Transformers Committee (IEEE PES/TR). The standards are grouped by Subcommittees and sorted by document numbers. The report also contains the active PARs under the responsible Subcommittee. The standards that are not yet assigned to a subcommittee are temporarily listed under the Standards Subcommittee.

DOCUMENTS SUBMITTED TO THE IEEE STANDARDS BOARD

NEW STANDARDS COMMITTEE (NesCom)

EXISTING PARS – EXTENSION & MODIFICATION

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

Recommendation: Approve modified PAR until December 2006. (6/23/2004)

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

Recommendation: Approve modified PAR until December 2007. (5/5/2004)

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

Recommendation: Approve target extension request until December 2006. (6/23/2004)

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

Recommendation: Approve target extension request until December 2005. (9/24/2004)

NEW PARS - REVISIONS OF EXISTING STANDARDS

PC57.110 (PE/TR) Recommended Practice for Establishing Transformer Capability When Supplying Nonsinusoidal Load Currents

Recommendation: Defer PAR for the revision of a standard. Request that the title be revised to be more descriptive of the type of transformers included in the standard. (9/24/2004)

Sponsor Action: Requested NesCom for reconsideration of accepting existing title through the continuous processing. (10/8/2004)

PC57.129 (PE/TR) Standard for General Requirements and Test Code for Oil-Immersed HVDC Converter Transformers

Recommendation: Approve PAR for the revision of a standard until December 2008. (6/23/2004)

NEW PARS - NEW STANDARDS

PC57.149 (PE/TR) Guide for the Application and Interpretation of Frequency Response Analysis for Oil Immersed Transformers

Recommendation: Approve new PAR until December 2008. (6/23/2004)

STANDARDS REVIEW COMMITTEE (RevCom)

NEW & REVISED STANDARDS

PC57.12.34/D11 (PE/TR) Standard 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

Recommendation: APPROVE (9/22/2004)

PC57.144/D5 (PE/TR) Guide for Metric Conversion of Transformer Standards

Recommendation: APPROVE (6/23/2004)

REAFFIRMATION

C57.12.35-1996 (PE/TR) IEEE Standard for Bar Coding for Distribution Transformers

Recommendation: APPROVE (6/23/2004)

C57.21-1990 (R1995) (PE/TR) IEEE Standard Requirements, Terminology, and Test Code for Shunt Reactors Rated Over 500 kVA

Recommendation: APPROVE (6/23/2004)

C57.91-1995 (PE/TR) IEEE Guide for Loading Mineral-Oil-Immersed Transformers

Recommendation: APPROVE (6/23/2004)

C57.110-1998 (PE/TR) IEEE Recommended Practice for Establishing Transformer Capability When Supplying Nonsinusoidal Load Currents

Recommendation: APPROVE (3/24/2004)

IEEE 259-1999 (PE/TR) IEEE Standard Test Procedure for Evaluation of Systems of Insulation for Dry-Type Specialty and General-Purpose Transformers

Recommendation: APPROVE [Vote: Yes=12; No=0; Abstain=1 (Engmann)] (9/22/2004)

C57.96-1999 (PE/TR) IEEE Guide for Loading Dry-Type Distribution and Power Transformers

Recommendation: APPROVE [Vote: Yes=12; No=0; Abstain=1 (Engmann)] (9/22/2004)

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

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

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

PC57.145 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 -- 2004, SORTED BY INVITATION NUMBER (As of 10/10/2004)

Invitation Number	Sponsor (Soc/Com)	Working Group Chair	Invitation Open Date	Invaiton Close Date	Invitations Sent Out	Type of Invitation
PC57.12.20	PE/TR	Alan Wilks(awilks@ermco-eci.com)	2004-02-03	2004-03-04	673	Electronic
PC57.146	PE/TR	William H Bartley(william_bartley@hsb.com)	2004-02-19	2004-03-20	675	Electronic
PC57.104 REV	PE/TR	Frank W Heinrichs(frankus1@earthlink.net)	2004-04-27	2004-05-27	729	Electronic
PC57.12.29 REV	PE/TR	Robert C Olen(rolen@cooperpower.com)	2004-05-18	2004-06-17	729	Electronic
PC57.12.28 REV	PE/TR	Robert C Olen(rolen@cooperpower.com)	2004-05-18	2004-06-17	729	Electronic
PC57.12.44 REV	PE/TR	Daniel H Mulkey(dhm3@pge.com)	2004-07-08	2004-08-07	737	Electronic

BALLOT STATUS -- 2004, SORTED BY BALLOT NUMBER (As of 10/10/2004)

Ballot Number	Sponsor (Soc/Com)	Type of Ballot	Ballot Opened	Sched. Close Date	# Ballots	Balloting Results			Type of Ballot
Std. 259-1999	PE/TR	Reaff	12-Dec-03	11-Jan-04	56	100%	0%	2%	Electronic
Std. C57.96-1999	PE/TR	Reaff	5-Jan-04	4-Feb-04	70	100%	0%	1%	Electronic
Std. C57.121-1998	PE/TR	Reaff	21-Jan-04	20-Feb-04	73	100%	0%	1%	Electronic
PC57.12.34/D10	PE/TR	New	3-Feb-04	15-Mar-04	90	95%	5%	4%	Electronic
PC57.13.2/D3	PE/TR	Rev	23-Mar-04	22-Apr-04	70	96%	4%	3%	Electronic
PC57.130/D14	PE/TR	New	23-Mar-04	22-Apr-04	128	90%	10%	3%	Electronic
PC57.12.37/D11a	PE/TR	New	26-Mar-04	25-Apr-04	78	96%	4%	3%	Electronic
PC57.146/D3	PE/TR	New	5-Apr-04	5-May-04	72	96%	4%	4%	Electronic
PC57.144/D5	PE/TR	Recirc	8-Apr-04	8-May-04	120	100%	0%	2%	Electronic
PC57.12.20/D10b	PE/TR	Rev	13-Apr-04	13-May-04	81	95%	5%	3%	Electronic
PC57.12.34/D11	PE/TR	Recirc	18-Jun-04	28-Jun-04	90	97%	3%	4%	Electronic
PC57.12.44/D1.9	PE/TR	Rev	09-Sep-04	08-Oct-04	50	94%	2%	4%	Electronic
PC57.104/D11d	PE/TR	Rev	6-Jul-04	5-Aug-04	138	85%	5%	3%	Electronic
PC57.13.6/D2	PE/TR	Recirc	15-Jul-04	14-Aug-04	82	97%	3%	5%	Electronic
PC57.12.28/D1.9	PE/TR	Rev	15-Jul-04	14-Aug-04	79	98%	2%	1%	Electronic
PC57.12.29/D1.4	PE/TR	Rev	15-Jul-04	14-Aug-04	70	100%	0%	1%	Electronic
PC57.19.00/D6.1	PE/TR	Recirc	12-Aug-04	11-Sep-04	89				Electronic

2005 STANDARDS BOARD MEETINGS SCHEDULE AND SUBMITTAL DEADLINES

2005

Proposed IEEE Standards Association Meeting Schedule

Jan 2005						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
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16	17	18	19	20	21	22
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30	31					

Feb 2005						
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Mar 2005						
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Apr 2005						
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May 2005						
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Jun 2005						
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February

- 4 Draft and PAR Submission Deadline
- 20 BoD/ExCom-San Francisco, CA

March

- 1 SA-BoG Caucus - Piscataway, NJ
- 2 SA-BoG Meeting - Piscataway, NJ
- 3 SA-BoG Meeting - Piscataway, NJ
- 18 StB Committee Mtgs - Atlanta, GA
- 19 StB Committee Mtgs - Atlanta, GA
- 20 Standards Board Meeting - Atlanta, GA

April

- 29 Draft and PAR Submission Deadline

June

- 7 StB Committee Mtgs - Piscataway, NJ
- 8 StB Committee Mtgs - Piscataway, NJ
- 9 Standards Board Meeting - Piscataway, NJ
- 19 BoD/ExCom - Chantilly, VA
- 22 SA-BoG Caucus - Piscataway, NJ
- 23 SA-BoG Mtg - Piscataway, NJ
- 24 SA BoG Mtg - Piscataway, NJ

August

- 12 Draft and PAR Submission Deadlines

September

- 20 StB Committee Mtgs - Piscataway, NJ
- 21 StB Committee Mtgs - Piscataway, NJ
- 22 Standards Board Meeting - Piscataway, NJ

October

- 6 BoG Teleconference
- 7 BoG Teleconference
- 17 Draft and PAR Submission Deadline

November

- 13 BoD/ExCom - Orlando, FL

December

- 1 SA-CAG Meeting - Florida
- 2 SA-CAG Mtg and SA-BoG/CAG Caucus - Florida
- 3 SA-BoG Meeting - Florida
- 4 SA Awards Ceremony - Florida
- 5 StB Committee Mtgs - Florida
- 6 StB Committee Mtgs - Florida
- 7 Standards Board Mtg - Florida

Jul 2005						
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Aug 2005						
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Sep 2005						
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Oct 2005						
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Nov 2005						
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27	28	29	30			

Dec 2005						
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25	26	27	28	29	30	31

Meeting Dates

March 19, 2005
June 8, 2005
September 21, 2005
December 6, 2005

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

February 4, 2005
April 29, 2005
August 12, 2005
October 17, 2005

- 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 Website 10/10/2004)
<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

[PC57.12.36](#) (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

[PC57.129](#) (PE/TR) Standard for General Requirements and Test Code for Oil-Immersed HVDC Converter Transformers

[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

[PC57.145](#) (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

[PC57.149](#) (PE/TR) Guide for the Application and Interpretation of Frequency Response Analysis for Oil Immersed Transformers

NEMA/ANSI DOCUMENTS TRANSFERRED TO IEEE

The following standards were transferred to IEEE as of December 2, 2002. The date of transfer (December 2, 2002) will be considered as the start of the standard's life. The Transformers Committee 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.

C57.12.10-1997
C57.12.20-1997
C57.12.21-2002
C57.12.22-1993
C57.12.24-2000

C57.12.25-1990
C57.12.26-1992
C57.12.28-1999
C57.12.29-1991
C57.12.31-2002

C57.12.32-2002
C57.12.40-2000
C57.12.50-1981
C57.12.51-1998
C57.12.52-1981

C57.12.55-1987
C57.12.57-1987

At this point IEEE SA indicated they can only provide PDF document for our revision work. Efforts are being made to contact ANSI/NEMA staff Mr. Scott Choinski to obtain the electronic word documents for these standards. The standards with yellow highlight indicate no activities at current time.