

DATE: April 14, 2002
TO: Members of IEEE Transformers Committee
FROM: Tom Prevost, Standards Subcommittee Chair
SUBJECT: Standards Activities since the October, 2001 Meeting

TRANSFORMERS STANDARDS AND COORDINATION ACTIVITIES

The transformers standards status is given with two attachments:

Attachment 1 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, and coordination activities with other PES Committees. The standards that are not assigned yet, or do not belong to the Transformers committee, are listed under the Standards Subcommittee. For the publication of the Transformers Committee minutes, this attachment will be sorted by Subcommittee names, and each section will accompany the corresponding Subcommittee report.

Attachment 2 is a report of coordination activity on standards belonging to other PES Committees. This attachment is sorted by PES Committee names.

DOCUMENTS SUBMITTED TO THE STANDARDS BOARD

NESCOM (PARs)

December 5, 2001

Target Extension Requests

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

Recommendation: Approve target extension request until December 2004.

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

Recommendation: Approve target extension request until December 2004.

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

Recommendation: Approve target extension request until December 2002.

NEW PARS

PC57.12.10 (PE/TR) Standard Requirements for Liquid-Immersed Power Transformers (**Deferred from the December 2001 meeting**)

Recommendation: At the request of the sponsor, consideration of this PAR has been deferred to June 2002.

PC57.12.36 (PE/TR) Standard Requirements for Liquid-Immersed Distribution Substation Transformers
(Deferred from the December 2001 meeting)

Recommendation: At the request of the sponsor, consideration of this PAR has been deferred to June 2002.

PC57.143 (PE/TR) Guide for Application for Monitoring Equipment to Liquid-Immersed Transformers and Components (Deferred from the December 2001 meeting)

Recommendation: Approve new PAR until December 2006.

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

Recommendation: Approve new PAR until December 2006 (11 approve, 1 disapprove, 0 abstain).

REVISED PARS

PC57.13.5 (PE/TR) Test Requirements of Instrument Transformers of a Nominal System Voltage of 115 kV and Above (Deferred from the December 2001 meeting)

Recommendation: Approve revised PAR until December 2002.

February , 2002

PARS FOR THE REVISION OF STANDARDS

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

Recommendation: Approve PAR for the revision of a standard until December 2006.

TARGET EXTENSION REQUESTS

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

Recommendation: Approve target extension request until December 2002.

NEW PARS

PC57.12.31 (PE/TR) Standard for Pole Mounted Equipment - Enclosure Integrity

Recommendation: Approve new PAR until December 2005.

PC57.12.32 (PE/TR) Standard for Submersible Equipment - Enclosure Integrity

Recommendation: Approve new PAR until December 2005.

PARS FOR REVISIONS OF STANDARDS

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

Recommendation: Approve PAR for the revision of a standard until December 2005.

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

Recommendation: Approve PAR for the revision of a standard until December 2005.

REVCOM

5 December, 2001 Recommendations

NEW

PC57.135/D13 (PE/TR) Guide for the Application, Specification and Testing of Phase-Shifting Transformers

Recommendation: APPROVE

REVISION

PC57.12.59/D4.0 (PE/TR) Guide for Dry-Type Transformer Through-Fault Current Duration

Recommendation: APPROVE

5-YEAR REVIEW OF STANDARDS

637-1985 Guide for the Reclamation of Insulating Oil and Criteria for Its Use

Sponsor states that a reaffirmation is in progress and requests a two-year extension.

Recommendation: Extend until December 2002.

C57.12.20-1996 Standard for Overhead Type Distribution Transformers, 500 kVA and Smaller, High-Voltage 34 500 Volts and Below; Low-Voltage, 7970/13 800Y Volts and Below

Sponsor has submitted a PAR for revision to NesCom.

Recommendation: Extend until the expiration of the PAR for PC57.12.20.

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

Sponsor states that a reaffirmation is in progress and requests a two-year extension.

Recommendation: Extend until December 2002.

C57.12.40-1993 Standard for Requirements for Secondary Network Transformers - Subway and Vault Types (Liquid Immersed)

Sponsor has submitted a PAR for revision to NesCom.

Recommendation: Extend until the expiration of the PAR for PC57.12.40.

C57.12.58-1991 (R1996) Guide for Conducting a Transient Voltage Analysis of a Dry Type Transformer Coil

Sponsor states that a reaffirmation is in progress and requests a two-year extension.

Recommendation: Extend until December 2002.

C57.19.03-1996 Standard Requirements, Terminology, and Test Code for Bushings for DC Applications

Sponsor states that a reaffirmation is in progress and requests a two-year extension.

Recommendation: Extend until December 2002.

C57.19.100-1995 Guide for Application of Power Apparatus Bushings

Sponsor states that a reaffirmation is in progress and requests an extension.

Recommendation: Extend until December 2002.

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

Sponsor states that a reaffirmation is in progress and requests a two-year extension.

Recommendation: Extend until December 2002.

C57.91-1995 Guide for Loading Mineral-Oil-Immersed Transformers

Sponsor states that a reaffirmation is in progress and requests an extension.

Recommendation: Extend until December 2002.

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

Sponsor states that a reaffirmation is in progress and requests a two-year extension.

Recommendation: Extend until December 2002.

C57.124-1991 (R1996) Recommended Practice for the Detection of Partial Discharge and the Measurement of Apparent Charge in Dry Type Transformers

Sponsor states that a reaffirmation is in progress and requests a two-year extension.

Recommendation: Extend until December 2002.

C57.131-1995 Standard Requirements for Load Tap Changers

Sponsor states that a reaffirmation is in progress and requests a two-year extension.

Recommendation: Extend until December 2002.

20 March 2002

TRIAL-USE UPGRADE TO FULL-USE

1277-2000 (PE/TR) IEEE Trial Use General Requirements and Test Code for Dry-Type and Oil-Immersed Smoothing Reactors for DC Power Transmission

[no negative comments received during trial-use period, which is now complete; Sponsor requests elevation of status to full-use]

Recommendation: Elevate status of standard from trial-use to full-use. Editorial staff will be notified to implement the necessary changes. IEEE Standards Dept. database will be updated to reflect that the standard will be due for reaffirmation in 2005.

C57.129-1999 (PE/TR) IEEE Trial Use Standard General Requirements and Test Code for Oil-Immersed HVDC Converter Transformers

[no negative comments received during trial-use period, which is now complete; Sponsor requests elevation of status to full-use]

Recommendation: Elevate status of standard from trial-use to full-use. Editorial staff will be notified to implement the necessary changes. IEEE Standards Dept. database will be updated to reflect that the standard will be due for reaffirmation in 2004.

PARs Due to Expire

This letter is to advise you that the projects listed below will expire at the end of 2002 and action will be required.

- P1524 Guide for the Definition of Thermal Duplicate Liquid-Immersed Distribution, Power, and Regulating Transformers
- PC57.104 Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers
- PC57.106 Guide for Acceptance and Maintenance of Insulating Oil in Equipment
- PC57.113 Recommended Practice for Partial Discharge Measurement in Liquid-Filled Power Transformers and Shunt Reactors
- 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, 34 500 GrdY/19 920 Volts and Below; Low Voltage, 480 Volts and Below
- PC57.12.80 Standard Terminology for Power and Distribution Transformers
- PC57.13 Standard Requirements for Instrument Transformers
- PC57.13.5 Standard for Test Requirements for Instrument Transformer of a Nominal Voltage of 115 kV and Above
- PC57.133 Guide for Short Circuit Testing of Distribution and Power Transformers
- PC57.19.00 Standard General Requirements and Test Procedure for Power Apparatus Bushings

If the projects will not be submitted to RevCom in time for the December 2002 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.html>. Please note that this extension request can now be from one to four years.
2. Request withdrawal of the projects.

Please advise me in writing of the action that should be taken. This information will be placed on the agenda of the next scheduled NesCom meeting (based upon the date I receive the request), and NesCom will make its recommendation based upon the information provided.

If there is no response to this letter by 1 November 2002, the projects will be recommended for administrative withdrawal at the 11 December 2002 IEEE-SA Standards Board meeting.

Standards to be Withdrawn

PE/TR has some standards that are due for their 5-year review by the end of 2002. {Standards have a five-year lifespan.} An action is required of the Sponsor. Available choices:

- a) reaffirm
- b) revise
- c) extend
- d) withdraw

I MUST RECEIVE A RESPONSE BY THE 1 NOVEMBER 2002 SUBMITTAL DEADLINE (FOR THE DECEMBER 2002 STANDARDS BOARD MEETING SERIES). IF NO RESPONSE IS RECEIVED, THE STANDARDS IN QUESTION WILL BE PLACED ON THE AGENDA FOR ADMINISTRATIVE WITHDRAWAL.

If the Sponsor chooses to revise or reaffirm and the action cannot be completed by the submittal deadline, please send me an email requesting an extension of the life of the current standard and notification of the actions that are being taken. {Please let me know approximately when the reaffirmation will be submitted; or when the PAR for revision will be submitted to NesCom and the estimated completion date for the revision project.}

If there is no further interest in a standard and the Sponsor wishes it to be withdrawn, you do not need to ballot. It will be administratively withdrawn in December 2002. {Please note that standards that are administratively withdrawn can no longer be reinstated via reaffirmation. The only method for reinstating an administratively withdrawn standard is to initiate a revision process, starting with a PAR.}

The standards in question are:

637-1985 IEEE Guide for the Reclamation of Insulating oil and Criteria for

Its Use

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

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

C57.13-1993 IEEE Standard Requirements for Instrument Transformers
{Note: The PAR for PC57.13 is due to expire in December 2002. Please contact Jodi Haasz [j.haasz@ieee.org 1-732-562-6367], NesCom Administrator, for action on PARs.}

C57.19.00-1991 (R1997) IEEE Standard general Requirements and Test Procedure for Outdoor Power Apparatus Bushings
{Note: The PAR for PC57.19.00 is due to expire in December 2002. Please contact Jodi Haasz [j.haasz@ieee.org 1-732-562-6367], NesCom Administrator, for action on PARs.}

C57.19.03-1996 IEEE Standard Requirements, Terminology, and Test Code for Bushings for DC Applications

C57.19.100-1995 IEEE Guide for Application of Power Apparatus Bushings

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

C57.91-1995 IEEE Guide for Loading Mineral-Oil-Immersed Transformers
{Note: The PAR for PC57.91-1995/Cor 1 may be affected. Please contact Jodi Haasz [j.haasz@ieee.org 1-732-562-6367], NesCom Administrator, for action on PARs.}

C57.104-1991 IEEE Guide for the Interpretation of Gases Generated in Oil-Immersed Transformers
{Note: The PAR for PC57.104 is due to expire in December 2002. Please contact Jodi Haasz [j.haasz@ieee.org 1-732-562-6367], NesCom Administrator, for action on PARs.}

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

C57.113-1991 IEEE Guide for Partial Discharge Measurement in Liquid-Filled Power Transformers and Shunt Reactors
{Note: The PAR for PC57.113 is due to expire in December 2002. Please contact Jodi Haasz [j.haasz@ieee.org 1-732-562-6367], NesCom Administrator, for action on PARs.}

C57.124-1991 (R1996) IEEE Recommended Practice for the Detection of Partial Discharge and the Measurement of Apparent Charge in Dry Type Transformers

C57.131-1995 IEEE Standard Requirements for Load Tap Changers

Invitation to Ballot

Invitation Number	Sponsor (Soc/Com)	Working Group Chair	Date Requested	Invitation Open Date	Invitation Close Date	# of Invitations Sent Out	Type of Invitation
PC57.12.31	PE/TR	Bob Olen	2002/02/01	2002/02/09	2002/03/14	539	Electronic
PC57.12.32	PE/TR	Bob Olen	2002/02/01	2002/02/09	2002/03/14	539	Electronic
PC57.12.34/D8	PE/TR	Stephen Shull	2002/02/06	2002/01/03	2002/03/10		Electronic
PC57.104/D10c	PE/TR	Frank Heinrichs	2002/02/05	2002/02/11	2002/03/12		Electronic

Ballot Number	Type of Ballot	Sponsor (Soc/Com)	Ballot Opened	Scheduled Close Date	# Ballots	Balloting Results		Type of Ballot	
Std. C57.12.58	Reaff.	PE/TR	2002/01/20	2002/02/08		97%	3%	0%	Electronic
C57.106/D7 Rev	Recirc	PE/TR	2002/01/17	2002/02/13	136	95%	4%	1%	
PC57.12.23/D4	Revision	PE/TR	2002/01/21	2002/02/19		100%	0%	4%	Electronic
Std.C57.124	Reaff	PE/TR	2002/01/22	2002/02/20		97%	2%	2%	Electronic
Std.C57.131	Reaff	PE/TR	2002/01/2	2002/02/2		95%	4%	4%	Electronic

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PC57.12.01/D3	Revision	PE/TR	2002/01/24	2002/02/22		96%	4%	1%	Electronic
C57.12.80/D4 Rev.	3rd. Recirc.	PE/TR	2002/02/08	2002/03/01	155	90%	3%	3%	Paper
Std.C57.12.35	Reaff	PE/TR	2002/01/28	2002/03/04	77	95%	5%	0%	Paper
C57.21	Reaff. Reballot	PE/TR	2002/02/07	2002/03/19	78				Paper
PC57.12.32/D4.21	New	PE/TR							Electronic

NEXT STANDARDS BOARD MEETINGS AND SUBMITTAL DEADLINES

Meeting date

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

June 11, 2002
September 10, 2002
December 9, 2002
March 18, 2002

May 3, 2002
August 2, 2002
November 1, 2002
February 7, 2003

- (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.

Note:

The PAR form has been revised. To locate the current PAR form please go to <http://standards.ieee.org/guides/par/index.html>. Also, a new Target Extension Request form is to be used for all extension requests for PARs and is located at <http://standards.ieee.org/guides/par/extension.html>.

Current List of ALL Open Standards Project (from IEEE Web site April 9,2002)

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

PC57.12.23 (PE/TR) Standard for Underground Type, Self-Cooled, Single-Phase, Distribution Transformers with Separable Insulated High-Voltage Connectors; High Voltage 25000 V and Below; Low Voltage 600 V and Below; 167 kVA and Smaller

PC57.12.31 (PE/TR) Standard for Pole Mounted Equipment - Enclosure Integrity

PC57.12.32 (PE/TR) Standard for Submersible Equipment - Enclosure Integrity

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

PC57.12.37 (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

PC57.12.80 (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

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

PC57.13.5 (PE/TR) Test Requirements of Instrument Transformers of a Nominal System Voltage of 115 kV and Above

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

PC57.91-1995/Cor 1-200x (PE/TR) Corrigenda for C57.91-1995, Guide for Loading Mineral-Oil-Immersed Transformers

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

PC57.113 (PE/TR) Partial Discharge Measurement in Liquid-Filled Power Transformers and Shunt Reactors

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

PC57.123 (PE/TR) Guide for Transformer Loss Measurement

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

PC57.133 (PE/TR) Guide for Short Circuit Testing of Distribution and Power Transformers

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

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

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