Email This Letter

12 May 2005

Bill Chiu
Southern California Edison
501 South Marengo Avenue
Alhambra, CA 91802
bill.chiu@sce.com

Re: PC57.91 - Guide for Loading Liquid Immersed Transformers and Voltage Regulators

Dear Bill:

I am pleased to inform you that on 10 May 2005 the IEEE-SA Standards Board approved the above referenced project until 31 December 2009. A copy of the file can be found on our website at http://standards.ieee.org/board/nes/projects/C57-91.pdf.

Now that your project has been approved, please forward a roster of participants involved in the development of this project. This request is in accordance with the IEEE-SA Operations Manual, Clause 5.1.2i under Duties of the Sponsor which states:

"Submit annually to the IEEE Standards Department an electronic roster of individuals participating on standards projects"

For your convenience, an Excel spreadsheet for your use has been posted on our website at http://standards.ieee.org/guides/par/roster.xls. Please forward this list to me via e-mail at j.haasz@ieee.org no later than 08 August 2005.

Please visit our website, IEEE Standards Development Online (http://standards.ieee.org/resources/development/index.html), for tools, forms and training to assist you in the standards development process. Also, we strongly recommend that a copy of your draft be sent to this office for review prior to the final vote by the working group to allow for a quick review by editorial staff before sponsor balloting begins.

If you should have any further questions, please contact me at 732-562-6367 or by email at j.haasz@ieee.org.

Sincerely,

Jodi Haasz
Program Manager
International Stds Programs and Governance
Standards Activities
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PAR FORM

PAR Status: Revision PAR
PAR Approval Date: 2005-05-10
PAR Signature Page on File: Yes

1. Assigned Project Number: PC57.91

2. Sponsor Date of Request: 2005-03-01

3. Type of Document: Guide for

4. Title of Document:
Draft: Guide for Loading Liquid Immersed Transformers and Voltage Regulators

5. Life Cycle: Full-Use

6. Type of Project:
6a. Is this an update to an existing PAR? No

6b. The Project is a: Revision of Std C57.91-1995

7. Working Group Information:
Name of Working Group: WG for the Revision of C57.91
Approximate Number of Expected Working Group Members:60

8. Contact information for Working Group Chair:
Name of Working Group Chair: Timothy Raymond
Telephone: 518-884-0297 **FAX:** 518-884-4051
Email: tc.raymond@ieee.org

9. Contact information for Co-Chair/Official Reporter, Project Editor or Document Custodian if different from the Working Group Chair:
Name of Co-Chair/Official Reporter, Project Editor or Document Custodian:
Telephone: FAX:
Email:

10. Contact information for Sponsoring Society or Standards Coordinating Committee:
Name of Sponsoring Society and Committee: Power Engineering Society Transformers
Name of Sponsoring Committee Chair: Kenneth S Hanus
Telephone: 972-273-3638 **FAX:** 972-273-3603
Email: ken.hanus@ieee.org
Name of Liaison Rep. (if different from the Sponsor Chair): Bill Chiu
Telephone: 626-308-6086 **FAX:** 626-308-6930
Email: bill.chiu@sce.com

Name of Co-Sponsoring Society and Committee:

Name of Co-Sponsoring Committee Chair:
Telephone: FAX:
Email:
Name of Liaison Rep. (if different from the Sponsor Chair):
Telephone: FAX:
Email:

11. The Type of ballot is: Individual Sponsor Ballot
Expected Date of Submission for Initial Sponsor Ballot: December 2006

12. Projected Completion Date for Submittal to RevCom: December 2007

Target Extension Request Information for a Modified PAR whose completion date is being extended past the original four-year life of the PAR:

13. Scope of Proposed Project:
This guide provides recommendations for loading mineral-oil-immersed transformers and voltage regulators with insulation systems rated for a 65°C average winding temperature rise at rated load. This guide applies to transformers manufactured in accordance with IEEE C57.12.00 and tested in accordance with IEEE C57.12.90, and voltage regulators manufactured and tested in accordance with C57.15. Because a substantial population of transformers and voltage regulators with insulation systems rated for 55C average winding temperature rise at rated load are still in service, recommendations that are specific to this equipment are also included.

Is the completion of this document contingent upon the completion of another document?
No

14. Purpose of Proposed Project:
Applications of loads in excess of nameplate rating involve some degree of risk. It is the purpose of this guide to identify these risks and to establish limitations and guidelines, the application of which will minimize the risks to an acceptable level.

15. Reason for the Proposed Project:
This document is being updated to reflect current industry practices and present the latest state-of-the-art in transformer loading practices. Some specific areas that will be addressed are the avoidance of free gas evolution, impact of transformer condition, such as oxygen and moisture content, on insulation aging and the ability to endure increased loading, and the need for coordination of maintenance practices with increased loading. Research in these areas has been ongoing since the previous revision, and it is the intention of this revision to incorporate the significant findings of this recent research. In addition, guidance for loading voltage regulators manufactured in accordance with C57.15 is being added. This particular equipment type was previously covered in a separate guide on loading (C57.95), however that document has been withdrawn. This revision effort is intended to make this guide more complete, providing equipment users with practical information that can be applied in the field.

The primary stakeholders in this document are the users of mineral-oil-immersed distribution and power transformers and voltage regulators. Manufacturers of these equipments types also have a

minor stake in the outcome of this revision, as this document is often referenced is customer specifications.

16. Intellectual Property:

a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR? Yes 2005-03-01

b. Is the sponsor aware of copyright permissions needed for this project? No

c. Is the sponsor aware of trademarks that apply to this project? No

d. Is the sponsor aware of possible registration activity related to this project? No

17. Are there other documents or projects with a similar scope? No

Similar Scope Project Information:

18. Is there potential for this document (in part or in whole) to be adopted by another national , regional or international organization? Do not know at this time

If yes, the following questions must be answered:

Organization Name?

Technical Committee

International Contact Information?

19. Will this project result in any health, safety, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

20. Sponsor Information

a. Is the scope of this project within the approved/scope/definition of the Sponsor's Charter? Yes

If no, please explain:

b. The Sponsor's procedures have been accepted by the IEEE-SA Standards Board Audit Committee? Yes

21. Additional Explanatory Notes: (Item Number and Explanation)

Item #13 - Scope

The only substantive change is the inclusion of voltage regulators manufactured and tested in accordance with C57.15. Previously, there was a separate document (C57.95) that covered loading issues with this equipment. However, this document has been withdrawn. Therefore, C57.91 will be expanded to cover this equipment, replacing the withdrawn guide. The other changes to the scope were made to clarify the specific coverage of this document.

Item #14 - Purpose

The only change was the removal of references to specific sections of the document, which are

not appropriate in a statement of purpose.