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20 June 2005

William R Goldbach
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Re: PC62.41.2 - Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less) AC power circuits

Dear William:

I am pleased to inform you that on 09 June 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/C62-41-2.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 07 September 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
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Standards Activities
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PAR FORM

PAR Status: Revision PAR

PAR Approval Date: 2005-06-09

PAR Signature Page on File: Yes

1. Assigned Project Number: PC62.41.2

2. Sponsor Date of Request: 2005-04-05

3. Type of Document: Recommended Practice for

4. Title of Document:

Draft: Recommended Practice on Characterization of Surges in Low-Voltage (1000 V and less)
AC power circuits

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 C62.41.2-2001

7. Working Group Information:

Name of Working Group: WG 3.6.4 Working Group on Surge Characterization

Approximate Number of Expected Working Group Members:19

8. Contact information for Working Group Chair:

Name of Working Group Chair: James Funke

Telephone: 403-717-2001 **FAX:** 403-717-0567

Email: funke@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 Surge Protective Devices/Low Voltage

Name of Sponsoring Committee Chair: Richard Odenberg

Telephone: 208-772-8515 **FAX:** 208-762-6163

Email: rodenberg@transtector.com

Name of Liaison Rep. (if different from the Sponsor Chair): William R Goldbach

Telephone: 804-236-3302 **FAX:** 804-236-4040

Email: wgoldbach@danaher-DPS.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:** April 2008**12. Projected Completion Date for Submittal to RevCom:** April 2009**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:**

The scope of this recommended practice is to characterize the surge environment at locations on ac power circuits described in IEEE Std C62.41.1-2002 by means of standardized waveforms and other stress parameters. The surges considered in this recommended practice do not exceed one half-cycle of the normal mains waveform (fundamental frequency) in duration. They can be periodic or random events and can appear in any combination of line, neutral, or grounding conductors. They include surges with amplitudes, durations, or rates of change sufficient to cause equipment damage or operational upset (see Figure 1). While surge protective devices (SPDs) acting primarily on the amplitude of the voltage or current are often applied to divert the damaging surges, the upsetting surges might require other remedies.

Is the completion of this document contingent upon the completion of another document?

No

14. Purpose of Proposed Project:

The purpose of this recommended practice is to offer to equipment designers and users a set of standard and additional surge-testing waveforms and stress levels derived from the surge environment described in the companion guide IEEE Std C62.41.1-2002. The selection and specification of which waveform and what stress level should be considered for specific equipment remain the prerogative and responsibility of designers and users. This recommended practice is only the basis for making an informed decision made possible by a simplification of a complex database. This simplification will then allow consistent, repeatable, and cost-effective specification of surge performance for equipment connected to low-voltage ac power circuits.

15. Reason for the Proposed Project:

The document is presently very influential and represents the best efforts of the surge suppression community. When this document was originally released, it included a combination of contentious and well accepted information. Most of the issues revolve around the long waves especially those from the IEC documents such as IEC 61643 series. The contentious material was altered from its original form within the consensus process which allowed the document to pass

the balloting process. With this document being in the field for four years now, and almost eight within the committee, there has been activity regarding the appropriateness of all of the information. The purpose of updating this document is to clarify the working group's knowledge in this field and to either; affirm the document's treatment of the subject, reinforce the subject matter, or decrease its relevance. The two other documents within the Trilogy, C62.41.1 and C62.45 are not intended to be altered other than to keep the three documents in sync with each. The surge suppression committee will gain by bringing the latest information forward on this subject, and having an authoritative group reach consensus just as they did on the last version of the document. The stakeholders for this document include the North American surge protection device community, such as test engineers, manufacturers, writers of other standards, consultants and specifiers.

16. Intellectual Property:

- a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR? Yes 2004-10-11**
- 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: This document will be updated to reflect the changes to the IEC 61643 series and newer papers that change some of the basic building blocks of the document, especially where the long surge waves are involved.

Item #14: The purpose contains no change from the present version of the standard.