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16 March 2006

Shayne Wright
POWER Engineers, Inc.
15621 Blue Ash, Suite 110
Houston, TX 77090-5827
shayne.wright@ieee.org

Re: P848 - Standard Procedure for the Determination of the Ampacity Derating Factor for Fire-Protected Cable Systems

Dear Shayne:

I am pleased to inform you that on 16 March 2006 the IEEE-SA Standards Board approved the above referenced project until 31 December 2010. A copy of the file can be found on our website at <http://standards.ieee.org/board/nes/projects/848.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 14 June 2006.

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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International Stds Programs and Governance
Standards Activities
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PAR FORM

PAR Status: Revision PAR
PAR Approval Date: 16 March 2006
PAR Signature Page on File: Yes

1. Assigned Project Number: P848

2. Sponsor Date of Request: 2005-10-26

3. Type of Document: Standard for

4. Title of Document:

Draft: Standard Procedure for the Determination of the Ampacity Derating Factor for Fire-Protected Cable Systems

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 848-1996

7. Working Group Information:

Name of Working Group: Standard Procedure for the Determination of the Ampacity Derating Factor For Fire-Protected Cable Systems

Approximate Number of Expected Working Group Members:12

8. Contact information for Working Group Chair:

Name of Working Group Chair: Ajit K Gwal

Telephone: 202-694-7123 **FAX:** 202-208-6518

Email: ajitg@dnfsb.gov

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: IEEE Power Engineering Society Insulated Conductors

Name of Sponsoring Committee Chair: James Fitzgerald

Telephone: 201-825-0300 **FAX:** 201-327-0276

Email: fitzgerald@okonite.com

Name of Liaison Rep. (if different from the Sponsor Chair): Shayne Wright

Telephone: +1 281 248 4310 **FAX:** +1 281 248 4396

Email: shayne.wright@ieee.org

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: June 2006

12. Projected Completion Date for Submittal to RevCom: December 2010

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 standard provides a test procedure for determining the ampacity derating factor in the following cable installation configurations:

- Block-out or sleeve type cable penetration fire stops
- Conduits covered with a protective material
- Tray covered with a protective material
- Cable directly covered or coated with a fire-retardant material
- Free-air drops enclosed with a protective material

The standard is applicable to cables installed and sized to IEEE Std 835-1994 for conduits and free-air drops, and NEMA WC51-1991/ICEA P-54-440 for cable tray. IEEE Std 835-1994 does provide ampacities for cables in a tray with a fixed spacing and may be used for cable penetration fire stop configurations only.

This standard does not endorse the use of or provide application guidance for the installation of cable penetration fire stops and fire-protective materials. Cable designs are available that can withstand and remain functional during direct exposure to a fire. The user should refer to IEEE Std 634-2004 for the qualification requirements of cable penetration fire stops.

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

14. Purpose of Proposed Project:

The purpose of this standard is to provide a test procedure for use in establishing the ampacity derating factor for cables installed in fire-protected conduits, trays, free-air drops, cable penetration fire stops, or electrical separation wrap systems.

15. Reason for the Proposed Project:

Fire-protection related products may reduce the heat transfer characteristics associated with the ampacities provided in IEEE Std 835-1994 and NEMA WC51-1991/ICEA P-54-440. Hence, ampacity testing to determine ampacity derating of fire-protected cable systems is necessary. The stakeholders for this project are architectural engineers, cable manufacturers, the Nuclear Regulatory Commission and any power plant operation or manufacturing site (or other type of user) using high amperage lines.

16. Intellectual Property:

- a. **Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR?** Yes 2005-04-17
- 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)

The titles of the documents referenced in the PAR are as follows: IEEE Std 835-1994, IEEE Standard Power Cable Ampacity Tables; IEEE Std 634-2004, IEEE Standard for Cable-Penetration Fire Stop Qualification Test; NEMA WC51-1986(R1991)/ICEA P-54-440, Ampacities of Cables in Open-Top Trays