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23 September 2005

Jeffrey G Gilbert
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Re: PC37.234 - Guide for Protective Relay Applications to Power System Buses

Dear Jeffrey:

I am pleased to inform you that on 22 September 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/C37-234.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 21 December 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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International Stds Programs and Governance
Standards Activities
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PAR FORM

PAR Status: New PAR

PAR Approval Date: 2005-09-22

PAR Signature Page on File: Yes

1. Assigned Project Number: PC37.234

2. Sponsor Date of Request: 2005-07-15

3. Type of Document:

4. Title of Document:

Draft: Guide for Protective Relay Applications to Power System Buses

5. Life Cycle: Full-Use

6. Type of Project:

6a. Is this an update to an existing PAR? No

6b. The Project is a: New Standard

7. Working Group Information:

Name of Working Group: PC37.234: Develop Bus Protection Guide - PSRC K14

Approximate Number of Expected Working Group Members:19

8. Contact information for Working Group Chair:

Name of Working Group Chair: Bogdard Kasztenny

Telephone: 905-201-2199 **FAX:** 905-201-2098

Email: Bogdan.Kasztenny@GE.com

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: Stephen P Conrad

Telephone: 505-241-2642 **FAX:** 505-241-2363

Email: sconrad@pnm.com

10. Contact information for Sponsoring Society or Standards Coordinating Committee:

Name of Sponsoring Society and Committee: IEEE Power Engineering Society Power System Relaying

Name of Sponsoring Committee Chair: Philip B Winston

Telephone: 404-608-5989 **FAX:** 404-506-2021

Email: pbwinsto@southernco.com

Name of Liaison Rep. (if different from the Sponsor Chair): Jeffrey G Gilbert

Telephone: 610-774-4321 **FAX:** 610-774-5177

Email: jggilbert@pplweb.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:** September 2008**12. Projected Completion Date for Submittal to RevCom:** November 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:**

Concepts of power bus protection are discussed in this guide. Consideration is given to availability and location of breakers, current transformers and disconnectors as well as bus switching scenarios, and their impact on selection and application of bus protection. A number of bus protection schemes are presented; their adequacy, complexity, strengths and limitations with respect to variety of bus arrangements are discussed; specific application guidelines are provided. Breaker failure protection is discussed as pertaining to bus protection. Means of securing bus protection schemes against corrupted relay input signals are also included.

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

No

14. Purpose of Proposed Project:

The purpose of the guide is to assist utility, industrial and commercial plant engineers in selecting and engineering proper bus protection.

15. Reason for the Proposed Project:

Bus faults may have catastrophic consequences on substation equipment by releasing fault energy within the substation perimeter, and as such, should be cleared as fast as possible. On the other hand inadvertent operation of a fast bus protection scheme could drastically change topology of the power system jeopardizing system stability and/or causing large-scale interruptions in power delivery. Proper application of bus protection requires high level of expertise, proportional to the complexity of the bus arrangement. Power system upgrades and new bus designs make the busbar arrangements more complex calling for more sophisticated protection schemes. Electrical engineers and technologists working with electric power utilities or industrial and commercial plants and facilities, consultants and manufacturers in general and those working in designing, selecting and ensuring a reliable, dependable, and safe protection systems would benefit from the information provided in this guide.

16. Intellectual Property:

- a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR? Yes 2005-05-24
- 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)