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Subject Approval of Project - PC37.68

15 June 2007

Michael Wactor
Powell Electrical Systems, Inc.
8550 Mosley Drive
Houston, TX 77075
mwactor@powl.com

Re: PC37.68 - Guide for the Requirements for Microprocessor-Based Controls for Distribution Pole-Mount and Padmount Switchgear Rated above 1kV up to 38kV

Dear Michael:

I am pleased to inform you that on 07 June 2007 the IEEE-SA Standards Board approved the above referenced project until 31 December 2011 with the acceptance of the following amendment:

Item 6.1b - answer changed to 'No' and explanatory text removed

A copy of the file can be found on our website at
<http://standards.ieee.org/board/nes/projects/C37-68.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 s.hampton@ieee.org no later than 05 September 2007.

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 +1 732 562 6003 or by email at s.hampton@ieee.org.

Sincerely,

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PAR Request Date: 10 April 2007**PAR Approval Date:** 07 June 2007**PAR Signature Page on File:** Yes**Type of PAR:** New IEEE Standard**Status:** PAR for a New IEEE Standard**Root Project:****1.1 Project No.:** **C37.68****1.2 Type of Document:** Guide**1.3 Life Cycle:** Full-Use**1.4 Is this document in ballot now?** No**2.1 Title**

Guide for the Requirements for Microprocessor-Based Controls for Distribution Pole-Mount and Padmount Switchgear Rated above 1kV up to 38kV

3.1 Working Group Name [Guide for the Application of Electronic Controls to Pole Mounted and Padmounted Switchgear](#)**Working Group Chair**[Parker, Donald M](#)
Phone: 205-257-4247
Email: dmparker@southernco.com**Working Group Vice Chair****3.2 Sponsor** [IEEE Power Engineering Society Switchgear \(PE/SWG\)](#)**Sponsor Chair**[Burse, Ted](#)
Phone: 713-948-4599
Email: tburse@powl.com**Name of Standards Liaison Representative (if applicable)**[Wactor, Michael](#)
Phone: 713-948-4918
Email: mwactor@powl.com**3.3 Joint Sponsor****4.1 Type of Ballot:** Individual**4.2 Expected Date of Submission for Initial Sponsor Ballot:** June 2009**4.3 Projected Completion Date for Submittal to RevCom:** December 2009**5.1 Approximate number of people expected to work on this project:** 20

5.2 Scope: This guide presents basic considerations for design, testing and application of microprocessor-based controls to distribution switchgear rated above 1kV up to 38kV. Such equipment is typically mouted on power poles or in padmounted switchgear enclosures, and is used with overhead and underground electric utility distribution lines. The microprocessor-based controls often include protective functions as well as control functions. This guide includes considerations, test and application principles for: environmental factors, vibration, harmonics, grounding, electromagnetic interference, functional requirements, and voltage disturbances including lightning and switching surges. This guide does not apply to power system protective relays which are covered in the IEEE C37.90 ("Standard for Relays and Relay Systems Associated with Electric Power Apparatus") and related standards. This guide does not apply to microprocessor-based devices employed in high voltage circuit breakers (IEEE C37.04 "Standard Rating Structure for AC High-Voltage Circuit Breakers") or metal-enclosed switchgear (IEEE C37.20.2 "Standard Metal-Clad Switchgear" and IEEE C37.20.3 "Standard for Metal-Enclosed Interrupter Switchgear").

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

5.4 Purpose: The evolution of distribution line device controls from the hydraulic and the electro-mechanical controls to microprocessor based controls has also led to these controls being mounted on power poles or in padmounted switchgear. These locations have exposed the microprocessor based controls to the harsh environmental and electrical conditions of the electric utility distribution lines. The apparatus used in overhead pole applications and in padmounted applications is typically subject to adverse environmental conditions, such as high winds, potentially heavy precipitation, high solar radiation levels, and extreme ambient temperatures (very high and very low). These installations are often exposed to extreme voltage disturbances, both due to location in areas of high lightning activity and due to poorer protection from lightning surges. These installations often have poor (or no) auxiliary voltage supply and may be subject to extended durations of voltages below the normal operating range. This guide is intended to discuss design measures, application guides, and testing that is appropriate to the special conditions of use of such microprocessor-based controls devices.

5.5 Need for the Project: This guide provides information which leads to more robust control designs, to improved installation specifications, and improved operation and maintenance procedures. These enhancements improve the reliability and extend the life of the controls. It will also improve the service reliability of the customers served by these devices.

5.6 Stakeholders for the Standard: Microprocessor based Control Design Engineers, Application Engineers, Reliability Engineers, Distribution operations and maintenance personnel.

6.1.a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board? Yes Presented Date: 2006-10-05

If no, please explain:

6.1.b. Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

6.1.c. Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

7.1 Are there other standards or projects with a similar scope? No

If yes, please explain:

Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

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

Technical Committee Name and Number:

Contact person:

Contact person Phone Number:

Contact person Email Address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? Yes

This guide will address the grounding methods to be utilized with the control. Improper grounding of the control could create an opportunity for operators or maintenance technicians to be exposed to higher than expected voltages.

7.4 Additional Explanatory Notes:

8.1 Sponsor Information:

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

If no, please explain: