

# PAR FORM

**PAR Status:** New PAR (Unapproved PAR)

**PAR Approval Date:** 0000-00-00

**PAR Signature Page on File:** Yes

**1. Assigned Project Number:** 1675

**2. Sponsor Date of Request:** 2004-04-26

**3. Type of Document:** Standard for

**4. Title of Document:**

**Draft:** Standard for Broadband over Power Line Hardware

**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:** Broadband over Power Line Working Group

**Approximate Number of Expected Working Group Members:**30

**8. Contact information for Working Group Chair:**

**Name of Working Group Chair:** Terrence Burns

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**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 Power System Communications

**Name of Sponsoring Committee Chair:** John E Newbury

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**Name of Liaison Rep. (if different from the Sponsor Chair):** Miriam P Sanders

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**Name of Co-Sponsoring Society and Committee:**

**Name of Co-Sponsoring Committee Chair:**

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

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**11. The Type of ballot is:** Individual Sponsor Ballot

**Expected Date of Submission for Initial Sponsor Ballot:** 2005-11-01

**12. Fill in Projected Completion Date for Submittal to RevCom: 2006-05-01**

**Explanation for Modified PAR that completion date is being extended past the original four-year life of the PAR:**

**13. Scope of Proposed Project:**

The scope of this standard will be to provide testing and verification standards for the commonly used hardware, primarily couplers and enclosures, for Broadband over Power Line (BPL) installations, and provide standard installation methods to ensure compliance with applicable codes and standards. This project will not cover repeater/node hardware, data transmission, protocols, or other aspects of BPL related to the internal workings of this technology.

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

**14. Purpose of Proposed Project:**

The Broadband over Power Line (BPL) industry in the United States is in its infancy. For this technology to become widespread, standards must be put in place that will enable utilities to quickly develop a BPL program without the tedious task of investigating every possible hardware solution for safety and useability. A BPL standard will give both the utilities and the BPL industry the ability to confidently pursue a BPL installation. In addition, because of the nature of BPL, non-utility personnel will be working in close proximity to areas that are commonly considered off-limits to all personnel except for qualified linemen. This standard will provide the boundaries of what is strictly the working area for linemen only in the utility environment, and detail construction practices that will provide adherence to applicable codes and standards.

**14a. Reason for the standardization project:**

There are multiple problems this Standard will solve. Utilities require testing and verification of hardware installed on distribution lines for the safe operation of the system and the protection of personnel. Non-utility workers will be working with equipment connected to distribution equipment and require a safe working environment. The target users will be electric utilities, BPL equipment manufacturers, and ISP's who will use the BPL technology to reach customers.

**15. Intellectual Property:**

**Has the sponsor reviewed the IEEE patent policy with the working group?** Yes

**Is the sponsor aware of copyrights relevant to this project?** No

**Is the sponsor aware of trademarks relevant to this project?** No

**Is the sponsor aware of possible registration of objects or numbers due to this project?** No

**16. Are there other documents or projects with a similar scope?** No**Similar Scope Project Information:****17. 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, please answer the following questions:**

**Which International Organization/Committee?**

**International Contact Information?**

**18. If the project will result in any health, safety, or environmental guidance that affects or applies to human health or safety, please explain in five sentences or less.**

This standard will define guidelines for communications equipment that will be installed on or in proximity to electric power system equipment. The standard will provide information on installation of BPL equipment in adherence to NEC, NESC, and other sources.

**19. Additional Explanatory Notes: (Item Number and Explanation)**



**Terrence.Burns@aps.com**

06/15/2004 01:23 PM

To: j.haasz@ieee.org, Ken.hanus@ieee.org, p.nikolich@ieee.org, jestey@sandc.com, j.carlo@ieee.com, w.b.dietzman@tuelectric.com, c.tom@ieee.org, j.e.newbury@open.ac.uk

cc:

Subject: PAR P1675 - BPL Standard

Concerning the subject PAR I would like to make following comments on behalf of the BPL Study Group.

1. The issue of Safety. During our meeting in Denver on Tuesday morning, we resolved this issue to the satisfaction of IEEE-SA. Jodi was present and helped us out. We did two things, we removed the words "and Personnel Safety" from the title, and added the text in part that stated, "The Standard will provide information on installation of BPL equipment in adherence to NEC, NESC and other sources.

2. Broad Scope. The group discussed at length the observation the scope is too broad and would like to make the following comments. The hardware involved in a BPL installation to be covered by the standard is quite limited, consisting of couplers, both inductive and capacitive, and an enclosure which houses the repeaters/nodes. Note the repeaters/nodes themselves are specifically labeled as being out of the scope of the document. Below is a very preliminary draft of the outline of Standard, which shows the issues intended to be covered by the Standard.

- 4. Component Standards
  - 4.1 Capacitive Couplers
  - 4.2 Inductive Couplers
- 5. Cabinets and Enclosures
- 6. Grounding and Bonding

The vendors/manufacturers throughout the BPL industry have indicated time and again that this is precisely what is needed at this time to allow a quick and easily executable installation of BPL by utilities or ISPs new to the technology. So there is a tremendous support for the proposed Standard as written.

3. Delay of PAR. Any delay of this PAR for whatever reason would be detrimental to the momentum built up and the enthusiasm displayed by the group members. The representatives of the industry who are part of this group, or have knowledge of it, will ultimately be the determiners of future Standards, and they have indicated that there would be no benefit served by holding up this Standard based on the outcome of the impending task force results. Regardless of what other standards needs will be determined in the future, this standard is needed today and work on it should proceed in all haste.

If you have further concerns or comments, please let me know.

Terry Burns  
Arizona Public Service Co.  
Chair - BPL Standards Study Group