

# PAR FORM

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

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

**PAR Signature Page on File:** No

**1. Assigned Project Number:** 1775

**2. Sponsor Date of Request:** 2005-02-01

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

**4. Title of Document:**

**Draft:** Standard for Broadband over Power Line Networks: Medium Access Control and Physical Layer Specifications

**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:** BPL PHY/MAC Working Group

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

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

**Name of Working Group Chair:** Jim Mollenkopf

**Telephone:** 301-515-7617 x212 **FAX:**

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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:** Jean-Philippe Faure

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

**Name of Sponsoring Society and Committee:** Communications Society Standards Committee

**Name of Sponsoring Committee Chair:** Raouf Boutaba

**Telephone:** 519-888-4820 **FAX:** 519-885-1208

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

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**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:** Entity Sponsor Ballot**Expected Date of Submission for Initial Sponsor Ballot:** 2006-08-00**12. Projected Completion Date for Submittal to RevCom:** 2007-02-00**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 project will develop a standard for high speed communication devices via alternating current electric power lines, so called Broadband over Power Line (BPL) devices. This standard will be usable by all classes of BPL devices, including BPL devices used for the first-mile/last-mile connection to broadband services as well as BPL devices used in buildings for LANs and other data distribution. This standard will focus on the balanced and efficient use of the power line communications channel by all classes of BPL devices, defining detailed mechanisms for coexistence and interoperability between different BPL devices, and ensuring that desired bandwidth and quality of service may be delivered. This standard is limited to the physical and medium access layers, as defined by the International Organization for Standardization (ISO) Open Systems Interconnection (OSI) Basic Reference Model.

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

No

**14. Purpose of Proposed Project:**

New modulation techniques offer the possibility to use the power lines for high speed communications. This new high speed media is open, and locally shared by several BPL devices. Without an independent, openly defined standard, BPL devices serving different applications will conflict with one another and provide unacceptable service to all parties. The standard will provide a minimum implementation subset which allows the fair coexistence of the BPL devices. The full implementation will provide the interoperability among the BPL devices. It is also the intent of this effort to quickly progress towards a robust standard so powerline applications may begin to impact the marketplace.

**15. Reason for the Proposed Project:**

Coexistence of the BPL devices on the same power lines is a basic need of the BPL market. Devices from different vendors should continue to operate properly while using the same power lines. Interoperability will support the growth of the emerging BPL market. It will benefit the consumer market, enabling consumers to use devices from different vendors and warranting the

availability of lower cost equipment. Interoperability will also benefit the access market, allowing low cost extensions of the services in the houses. It also will benefit the electric utility industry, allowing deployment of low-cost devices that improve the efficiency and reliability of the distribution of electricity.

**16. Intellectual Property:**

- a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR?** Yes 2005-01-28
- 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)**

Items 8 and 9. Faure and Mollenkopf will serve as interim co-chairs of this Working Group.