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16 March 2006

Lawrence J Kotewa
Community Energy Cooperative
2125 W. North Avenue
Chicago, IL 60647
larryk@energycooperative.org

Re: P1704 - Utility Industry End Device Communications Module

Dear Lawrence:

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/1704.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
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PAR FORM

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

1. Assigned Project Number: P1704

2. Sponsor Date of Request: 2005-11-07

3. Type of Document: Standard for

4. Title of Document:
Draft: Utility Industry End Device Communications Module

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: End Device/Telemetry Interface Unit Subcommittee
Approximate Number of Expected Working Group Members:15

8. Contact information for Working Group Chair:
Name of Working Group Chair: Richard D Tucker
Telephone: 704/888-2634 **FAX:**
Email: richardaet@aol.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: Avygdor Moise
Telephone: +1 403 616 8634 **FAX:**
Email: avy@fdos.ca

10. Contact information for Sponsoring Society or Standards Coordinating Committee:
Name of Sponsoring Society and Committee: SCC31-Automatic Meter Reading and Energy Management Automatic Meter Reading and Energy Management
Name of Sponsoring Committee Chair: Lawrence J Kotewa
Telephone: 773-486-7600x108 **FAX:** 773-486-7643
Email: larryk@energycooperative.org
Name of Liaison Rep. (if different from the Sponsor Chair):
Telephone: **FAX:**
Email:

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: November 2006

12. Projected Completion Date for Submittal to RevCom: June 2007

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 document defines the physical interface between IEEE P1377 end devices (such as meters or distribution automation devices) and communication modules. The communication modules are described as being attachable and removable to/from the end device. Included in this standard are the physical dimensions, electrical connections, and module positioning which involves the secure physical mounting, weather elements, and communications propagation considerations. This standard serves as the extension of the proposed standards, IEEE P1703, MC12.22-2006, and ANSI C12.22-2006 in regard to the communications module description and specification.

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

This standard is an extension of the proposed standards, IEEE P1703, MC12.22-2006, and ANSI C12.22-2006 in regard to the communications module description and specification.

14. Purpose of Proposed Project:

Utility end devices such as meters are becoming utilized as remote metering devices in Automatic Meter Reading systems. The purpose of this standard is to describe uniform physical characteristics for the communications devices which will be attaching/detaching to the utility end devices.

15. Reason for the Proposed Project:

The direction of the utility vendors with respect to Automatic Meter Reading and the means of communications from the end device meters varies. This includes retrofitting old rotating disk meters, new electronic meters attached with internal/external communications devices, and external communications devices separate from the meter. The communications technologies available for AMR are growing at a rapid pace. To avoid obsolescence in a meter population utilizing a "built in" communications device, this standard shall specify the physical interface of communications devices (com modules) which may be of any new or old technology. The meter population will then be independent of the communications technology utilized at the time of meter installation and allow the utility to change communications technologies if the need to do so is encountered. Also, with this standard in conjunction with proposed (IEEE P1703, MC12.22-2006 and ANSI C12.22-2006), the communications modules may be produced independent of the utility end device (meter) vendors. The utilities will have opportunity for an end device and ancillary device multi-source and "plug and play" environment. The stakeholders for this work will be the meter manufacturers, awaiting communications modules manufacturers, and the utilities who have previously purchased and installed hundreds of thousands of meters with "built in" communications methodologies which became obsolescent within a fraction of the life expectancy of the meter itself. Also, the stakeholders may include the utilities who have not been stung yet with this expensive proposition.

16. Intellectual Property:

- a. **Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR?** Yes 2005-07-29
- 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)

Item #13 - This standard is actually dependant upon ANSI C12.22-2006 which is the network standard which "by agreement" is proposed IEEE PAR 1703 and MC12.22. ANSI C12.22 has already gone to ballot with March 6, 2006 as the last date for ballot submittal. It is expected to be successful, however, we will soon have the results.

By letters of agreement, ANSI, IEEE, and Measurement Canada have worked in unison to develop the ANSI C12.19-1997 and the "soon to be balloted" -2006 standard, therefore, ANSI C12.19-2006 is exactly the same as IEEE PAR 1377 and MC12.19-2006. Because of the need to mention all three standards bodies who have identical work, the explanation is confusing, however, necessary.

As indicated in the scope, the physical interface is indeed to be implemented with "End Devices" which include "Water, Gas, and Electricity" meters. ANSI C12.19 - 1997 is an established standard which describes the data structures which the compliant end devices utilize and is the primary standard with a suite of complimentary lower layer communications standards. ANSI C12.22/IEEE PAR 1703/MC12.22 is one of the complimentary lower layer communications standards. ANSI C12.19 - 2006 is soon to be balloted and of course is an updated version of the 1997 existing standard. The end devices which will utilize the physical interface described by IEEE PAR 1704 are referred to in the scope as "IEEE P1377, ANSI C12.19 - 2006 and MC12.19-2006 End Devices". These proposed congruent standards "by agreement" are the primary standards of a suite of standards which describe the entire communications protocol of the compliant end devices. And as being the primary standard in the suite, they were used as the descriptor for the end devices utilizing this suite of standards of communications protocol for North American utility end devices.

Titles of the documents referenced are as follows:

P1377 - Utility Industry Metering Communication Protocol Application Layer Standard (End Device Data Tables)

ANSI C12.19-2006 - Utility Industry End Device Data Tables

MC12.19-2006 - Utility Industry End Device Data Tables

P1703 - Local Area Network/Wide Area Network (LAN/WAN) Node Communication Protocol to complement the Utility Industry End Device Data Tables

MC12.22-2006 - Protocol Specification for Interfacing to Data Communication Networks

C12.22-2006 - Protocol Specification for Interfacing to Data Communication Networks