

[Email This Letter](#)

31 March 2006

Anne-Marie Sahazizian
Hydro One Inc.
483 Bay St. (TCT13)
Toronto, Ontario M5G 2P5
AM.Sahazizian@HydroOne.com

Re: P1689 - Trial Use Standard for Cyber Security of Serial SCADA Links and IED Remote Access

Dear Anne-Marie:

I am pleased to inform you that on 30 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/1689.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 28 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
Program Manager
International Stds Programs and Governance
Standards Activities
Phone +1 732 562 6367
FAX +1 732 875 0695
Email: j.haasz@ieee.org

CC: hannaessa.abdallah@aps.com, j.t.tengdin@ieee.org, stds-pes-scc@ieee.org

PAR FORM

PAR Status: New PAR

PAR Approval Date: 30 March 2006

PAR Signature Page on File: Yes

1. Assigned Project Number: P1689

2. Sponsor Date of Request: 2006-02-01

3. Type of Document: Standard for

4. Title of Document:

Draft: Trial Use Standard for Cyber Security of Serial SCADA Links and IED Remote Access

5. Life Cycle: Trial-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: Committee 3, Task Force 3

Approximate Number of Expected Working Group Members:20

8. Contact information for Working Group Chair:

Name of Working Group Chair: John T Tengdin

Telephone: 949-361-9595 **FAX:** 949-361-9595

Email: j.t.tengdin@ieee.org

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: IEEE Power Engineering Society Substations

Name of Sponsoring Committee Chair: Hanna E Abdallah

Telephone: 602-371-6524 **FAX:** 602-371-6829

Email: hannaessa.abdallah@aps.com

Name of Liaison Rep. (if different from the Sponsor Chair): Anne-Marie Sahazizian

Telephone: 416-345-6657 **FAX:** 416-345-6965

Email: AM.Sahazizian@HydroOne.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: November 2006

12. Projected Completion Date for Submittal to RevCom: May 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 trial use standard defines the general requirements to protect serial communications between master stations and remote terminal units from cyber attack, and remote access to maintenance ports in Remote Terminal Units (RTUs) and other Intelligent Electronic Devices (IEDs). This standard defines the requirements to retrofit existing communications in such a manner as to minimize the changes needed to existing equipment and software. The test plan defines specific tests and evaluations that should be performed to ensure that the cyber security mechanisms are working properly.

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

14. Purpose of Proposed Project:

Utilities will use the cyber security requirements as part of a procurement specification to retrofit existing communications to protect against cyber attack. Vendors will use the cyber security requirements to build open system cyber security devices that protect existing asynchronous serial communications and dial-up communications from cyber attack.

15. Reason for the Proposed Project:

Presently, serial SCADA links and the maintenance ports of RTUs and other IEDs are not secure. The American Gas Association has prepared a report AGA 12-1 which addresses these concerns from a gas industry perspective. Many engineers with an electric power background participated in the preparation of that report. This project will adapt that report to more particularly satisfy the needs of the electric utility industry. Please note that the AGA 12-1 report is not copyrighted, and there is no objection to an IEEE adaptation. The document is proposed to be a trial use, to be updated in two years or less, as there is little field experience with the methods proposed. The stakeholders are the engineers at electric utilities and consultants/system integrators who are seeking solutions for the existing unsecured SCADA links and remote access ports, and manufacturers who may design products addressing these cyber security gaps.

16. Intellectual Property:

- a. **Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR?** Yes 2005-04-13
- 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? Yes

As noted above, Report AGA 12-1 has a similar scope, but it is focused on the needs of the gas pipeline and distribution industries.

Similar Scope Project Information:

SimSP: American Gas Association SimProjNo: AGA 12-1 SimProjD: to be published early 2006 SimTitle: Cryptographic Protection of SCADA Communications - General Recommendations

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)