Email This Letter

15 September 2006

Paul R Croll
Computer Sciences Corporation
5166 Potomac Drive
King George, VA 22485-5824
pcroll@csc.com

Re: P1012 - Standard for System and Software Verification and Validation

Dear Paul:

I am pleased to inform you that on 15 September 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/1012.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 14 December 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 +1 732 562 6003 or by email at s.hampton@ieee.org.

Sincerely,

Sherry Hampton
Administrator, Governance
Standards Activities
Phone +1 732 562 6003
FAX +1 732 875 0695
Email: s.hampton@ieee.org

CC: Roger.Fujii@ngc.com

PAR Request Date: 02 August 2006

PAR Approval Date: 15 September 2006

PAR Signature Page on File: Yes

Type of PAR: Revision to IEEE Standard

Status: Revision to an Existing IEEE Std 1012-2004

Root Project:

1.1 Project No.: **P1012**

1.2 Type of Document: Standard

1.3 Life Cycle: Full-Use

1.4 Is this document in ballot now? No

2.1 Title	**Old Title**
Standard for System and Software Verification and Validation	IEEE Standard for Software Verification and Validation

2.1 Amendment/Corrigenda Title

3.1 Working Group Name	Systems and Software Verification and Validation Working Group
Working Group Chair	Fujii, Roger U Phone: 310 831 0611 X2420 Email: Roger.Fujii@ngc.com
Working Group Vice Chair	
3.2 Sponsor	IEEE Computer Society Software & Systems Engineering Standards Committee (C/S2ESC)
Sponsor Chair	Croll, Paul R Phone: 540-644-6224 Email: pcroll@csc.com
Name of Standards Liaison Representative (if applicable)	
3.3 Joint Sponsor	

4.1 Type of Ballot: Individual

4.2 Expected Date of Submission for Initial Sponsor Ballot: December 2008

4.3 Projected Completion Date for Submittal to RevCom: July 2009

5.1 Approximate number of people expected to work on this project: 12

5.2 Scope: This standard defines the verification and validation processes that are applied to system, software, and hardware development throughout the system life cycle including acquisition, supply, development, operations, maintenance, and retirement. This standard applies to system, software, and hardware being acquired, developed, maintained, or reused. Software includes firmware, microcode, and documentation.	**Old Scope:** The scope of the proposed project does not change from the original scope of the standard. Software V&V is an technical discipline of the systems engineering process. IEEE Std 1012-1986 was a product standard defining the contents of the Software V&V Plan. IEEE Std 1012-1998 was a process standard defining the verification and validation processes in terms of specific activities and tasks. This proposed project will retain the standard as a process standard and will revise and update the definition of the activities and tasks to be consistent with industry usage. The updates are contained to selected sections and the project is scheduled to complete its work in a year with balloting in early 2004.

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

5.4 Purpose: The purpose of the standard is to: o Establish a common framework of V&V processes, activities, and tasks in support of all system, software, and hardware life cycle processes o Define the V&V tasks, required inputs, and required outputs in each life cycle process o Identify the minimum V&V tasks corresponding to a four-level system/software integrity scheme o Define the content of the System and Software Verification and Validation Plan	**Old Purpose:** The purpose is to correct duplication detected during its usage over the past 5 years, make all references consistent with revised standards (IEEE and ISO), and incorporate user changes detected during operational use of the standard.

5.5 Need for the Project: The revision of the standard addresses the shortcomings of the existing standards to address the following: • Define the minimum processes, activities and tasks for system level V&V and element V&V for hardware, software and other elements throughout the system lifecycle, focusing primarily on software intensive systems. o Expand the Software Integrity Level schema accordingly • Describe the application of V&V for various lifecycle models. This standard will use a generic lifecycle model for demonstration purposes. The annexes will use examples of specific, well-known lifecycle models. These models are of an informative nature and will not be presented as a recommendation of a particular lifecycle. These annexes are intended to help practitioners from different industries identify with and use the standard. • Maintain conformance to International and IEEE standards. We will use ISO/IEC 12207 and ISO/IEC 15288 as framework standards and IEEE 1220 and INCOSE System Engineering Handbook as references.

5.6 Stakeholders for the Standard: The stakeholder include all federal and government agencies, and industries with critical systems and software applications.

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:** 2004-11-12
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? ? Yes
Technical Committee Name and Number: ISO/IEC JTC1 TC1 SC7 WG7
Contact person: James W Moore
Contact person Phone Number: +1 703 983 7396
Contact person Email Address: james.w.moore@ieee.org

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

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: