Tuesday Morning, January 22, 2013
Orlando, FL

Members Present:	George Ballassi	Jacob Kulangara
	John Beatty	Jim Liming (Chair)
	Tom Carrier	Jim Parello
	Suresh Channarasappa	Vish Patel
	Tom Crawford (Secretary)	Ted Riccio
	Sharon Honecker	Rebecca Steinman
	Dave Horvath	John Stevens
	Steve Hutchins	Yvonne Williams (Vice Chair)
	Peter Kang	
Members Absent:	Gopal Aravapalli	Joe Napper
	Hamid Heidarisafa	Glen Schinzel
	Bob Lane	Zdenko Simic
	Kirk Melson	John Taylor (Corresponding)
Guests:	Marie Cuvelier	Tom Worrell
	John Erinc	Malia Zaman (IEEE)
	Sheila Ray	
	Walter Sun	

1.0 Introduction

- **Opening Remarks and Meeting Agenda**

Jim called the meeting to order at 08:00. After introductions around the table, the group congratulated George on being the first NPEC Chair to come out of SC-3. Jim reviewed the proposed agenda. Marie Cuvelier was added to the WG-3.2 Agenda item to give the P692 Preview presentation. Dave Horvath moved to approve the agenda, as amended; and Tom Carrier seconded. The motion passed by acclamation.

2.0 Secretary's Report

- **Approval of SC-3 12-2 Meeting Minutes**

Tom reviewed the draft minutes which had been previously distributed. He noted that we do have a quorum present (17 of 24 members) for general business and standards action. A motion was made by Dave Horvath to accept the minutes as amended, seconded by George, and passed by acclamation.

- **SC-3 Membership**

  The rolling attendance report attached to the minutes was reviewed for the attendance of SC-3 members.

  Bob Lane has resigned from the SC and WGs due to work conflict.

  Singh Matharu has moved to SC-4.

  Hamid has been moved to "Corresponding Member" status.

  Sheila Ray, of the NRC Office of Research, indicated her interest in membership and will likely be confirmed as an SC-3 member next meeting.

- **Alligator Fund**

  The status of the alligator fund was reviewed and we concluded that funds are adequate at the present time. Jim Parello recommended keeping the fund below $1,000 in light of IEEE's reporting requirements. We agreed that there would be no collection for this meeting. The Alligator Fund status is contained in Attachment 3.

- **Action Item Status**

  The status of the action items was reviewed; the action item list is provided in Attachment 4.

  *SC-3 Name Change (**AI-11-2-C**)* – the subcommittee name change to "Operations, Maintenance, Aging, Testing, & Reliability" was discussed. It was identified that the NPEC P&P / O&P will have to be updated. Dave and Jim Parello stated that changes were always in progress, it just takes time to get them through. Jim Liming has the action to submit a request for the change, which he subsequently submitted in Attachment 9.

  *Thank You Letter to Bob Lane (**AI-12-1-A**)* – Action remains open to write a letter thanking Bob for donating the projector. Jim Liming has the action.

  *Strawman for gap analysis for SC3 standards (**Action 12-2-B**)* – Development of a Template / Strawman for gap analysis for the SC3 standards remains open and is assigned to Yvonne.

  Jim Parello commented that NPEC is making an effort to better use the website. They plan to set up public and private areas and want to communicate what activities are ongoing with each standard.

3.0   Chair's Report

- **Leadership Review / Succession Planning**

  The succession planning for SC-3 was reviewed by Jim. Jim Liming is the Chair, Yvonne is the Vice-Chair, and Tom Crawford is the Secretary. Jim stated his intentions to run the 13-02 meeting and then turn over to Yvonne for the 14-01 meeting. Joe Napper has accepted the position of Assistant Secretary.

- **Leadership Telecons**

  Leaderships telecons have been sporadic and it was noted that they should be more regular, to ensure proper coordination of the SC-3 activities. One telecon was held between the 12-2 and 13-1 meetings.

- **PAR / Standards Status**

  PAR / Standards Status was reviewed and updated on the SC-3 Standards Status Spreadsheet provided in Attachment 5. The updates were subsequently passed on to Paul Yanosy for the overall NPEC status list.

4.0   Post-Fukushima Issues

Jim Liming discussed the Near Term Task Force Recommendations in response to ***Action 12-2-C:*** *Add a summary of post-Fukushima issues to the agenda.*

Recommendations 2.1 & 2.3 address seismic events and external flooding, recommending that plants develop component lists then walk down anchorages and assess the status of equipment. A subsequent report to the NRC is required.

Recommendation 2.1 addresses development of a logic tree for different levels of analysis and assessment. Seismic margins assessments should be updated or seismic PRA analysis conducted for Spent Fuel Pools and Fuel Storage Areas.

Jim also discussed the NRC's 50.54f letter of 03/12/12.

This completes ***Action 12-2-C.***

5.0   Working Group Reports

- **WG-3.1**

  Yvonne reported that standards status is per the Status Report.

  Currently the WG is continuing to prepare the initial version of IEEE P1819. The PAR for this new standard was approved 25 March 2010 and expires 31 December 2014.

Telecons are being used between formal WG meetings (prior to NPEC meetings) to focus and progress the work. Yvonne indicated that it is likely we will need to extend this PAR.

- **WG-3.2**

Dave Horvath introduced Tom Worrell (WG-3.2 Vice Chair) and Marie Cuvelier (WG-3.2 Secretary).

Dave and Marie ran through the P692 Preview and requested permission to present it to NPEC. The PowerPoint slides are provided in Attachment 10. Dave moved approval to present; Ted seconded; and the motion was passed by acclamation.

- **WG-3.3**

Sharon reviewed the WG 3.3 status as follows:

- IEEE 352 is being actively revised and would be worked on during the WG meeting later this day, primarily to review comments on the current draft.

- IEEE 577 was approved on 10/19/2012 and has been distributed to the WG members.

- IEEE 933 recirculation ballot has closed and there were three editorial comments to be resolved.

- **WG-3.4**

Rebecca reviewed the status of P1205. The WG has pushed NPEC preview of this standard out until July 2013 (N13-02). The approved PAR expires December 31, 2015, but the current activities should allow for publication prior to PAR expiration.

6.0 Liaison Reports

Liaison reports were provided as follows:

- NRC – Peter Kang had nothing new to report.

- ASME – Glen Schinzel was absent, so there was no update.

- NRMCC – George Ballassi had no new information; however, the next telecon is scheduled for February.

7.0 Old and New Business

Development of a Master Schedule for SC-3 Standards was discussed. Ted agreed to lead a group to develop a template for the schedule *(AI-13-1A)*.

As a result of the complexities in using the IEEE standards template and understanding the Style Guide, it was agreed that a tutorial led by an IEEE staff member would be helpful. This is particularly of concern when moving an existing standard into the current template. Malia has the action to try and arrange a tutorial during the 13-2 meetings in Mystic *(Action 13-1-B)*.

The group recognized Jacob Kulangara as a Senior Life Member of IEEE and congratulated him on this achievement.

Shortly after this week's meetings, we received a set of slides from IEEE regarding Patent Claims that might have any relationship to IEEE activities. Since we will not meet again until July, the slides are being included as Attachment 11 and will be discussed further during the 13-2 meeting in Mystic. Action is assigned to Jim Liming *(Action 13-1-C)*.

A motion for adjournment was made at 11:30 by Ted, seconded by Jim Parello and passed by acclamation.

Prepared by Tom Crawford, SC-3 Secretary.

SC-3 Website information:

> http://grouper.ieee.org/groups/npec/private/sc3/sc-3.html
> login name: ▮▮▮   password: ▮▮▮▮▮

ATTACHMENTS

Attachment 1 Agenda	Attachment 2 Rolling Attendance	Attachment 3 Alligator Fund
Attachment 4 Action Items	Attachment 5 NPEC SC-3 Standards Status Spreadsheet	Attachment 6 ASME Liaison Report (None)
Attachment 7 NRC Liaison Report (None)	Attachment 8 NRMCC Liaison Report (None)	Attachment 9 SC-3 Name Change Request
Attachment 10 P692 Preview Presentation	Attachment 11 IEEE Patent Slides	

Agenda – Meeting 13-1

NPEC Subcommittee SC-3, *Operation, Maintenance, Aging, Testing and Reliability*

Meeting Date/Time:	Tuesday, 1/22/2013 0800-1200 ET	**Chairman :** **Vice Chair:**	James Liming Yvonne Williams

Desired Outcomes:	1. Review status/activities of each SC Working Group 2. Update SC3 standards master schedule 3. Understand proposed changes for revision to IEEE Standards

WHAT (content)	WHO	WHEN (minutes)
Welcome, Review Desired Outcomes • Meeting logistics • Introductions	J. Liming All	0800-1815
Chairman's Introduction • Opening remarks • Review/approve agenda	J. Liming	0815-0830
Secretary's Report • Approval of SC3 12-2 Meeting Minutes • Action Item review/status • SC3 membership review • Alligator fund report • OPM Report	T. Crawford	0830-0900
Chairman's Report • SC3 Leadership review – succession planning • Leadership telecons • PAR status • NPEC meeting preparations	J. Liming	0900-0930
Post-Fukushima Issues • Review of identified Post-Fukishima actions.	J. Liming	0930-0940
BREAK	All	0940-1000
Working Group Reports • WG-3.1 (Testing) • WG-3.2 (Security) (includes P692 Preview presentation review) • WG-3.3 (Reliability) • WG-3.4 (Aging)	Y. Williams D. Horvath / Marie Cuvelier S. Honecker R. Steinman	1000-1010 1010-1030 1030-1040 1040-1050
Liaison Reports • NRC Report • ASME Report • NRMCC Report	P. Kang G. Schinzel G. Ballassi	1050-1110
Old Business • Master schedule for Std review/updates	All	1110-1135
New Business • As identified during this meeting	All	1135-1145
Review of Action Items	T. Crawford	1145-1155
Next meeting date/location	J. Liming	1155-1200
Meeting closeout/adjournment	J. Liming	1200

Attendance at SC-3 Meetings

Last	First	2011-1	2011-2	2012-1	2012-2	2013-1
Aravapalli	**Gopal**	x	x			
Ballassi	**George**	x	x	x	O	X
Beatty	**John**	x	x	x		X
Carrier	**Tom**	x	x	x	X	X
Channarasappa	**Suresh**	x	x	x	X	X
Crawford	**Tom**	x	x	x	X	X
Cuvelier	Marie					X
Goedeke	Scott		x	x		
Heidarisafa	**Hamid**					Correspond
Honecker	**Sharon**	x	x	x	X	X
Horvath	**Dave**	x	x		X	X
Hutchins	**Steve**		x	x		X
Kang	**Peter**		x		X	X
Kulangara	**Jacob**	x			X	X
Lane	Bob	x	x			Resigned
Liming	**Jim**	x	x	x	X	X
Matharu	**Singh**	x	x	x	X	Moved SC-4
Melson	**Kirk**	x	x	x		
Napper	**Joe**	x			X	
Parello	**Jim**	x	x	x	O	X
Patel	**Vish**		x	x	X	X
Ray	Sheila					X
Riccio	**Ted**	x	x	x	X	X
Schinzel	**Glen**	x			X	
Simic	**Zdenko**		Half	x		
Steinmann	**Rebecca**	x	x	x		X
Stevens	**John**				X	X
Williams	**Yvonne**	x	x	x	X	X
Worrell	Tom					X
Members are shown in **bold** and colored as of end of 13-1 meetings.						
TOTAL PAYING ATTENDEES		20	21	17	15	20
TOTAL NON-PAYING ATTENDEES		1	0	0	2	0

NPEC Subcommittee SC-3

Operating, Maintenance, Aging, Testing and Reliability

Alligator Fund

The Alligator Fund is made up of voluntary contributions from SC-3 members to defray the cost of meeting rooms, refreshments, etc.

Meeting	Beginning Balance	Meeting Contributions	Expenses	Ending Balance
S05-1	$312.14	$207.18	$359.82	$159.50
S05-2	$159.50	$240.00	$0.00	$399.50
S06-1	$399.50	$220.00	$178.67	$440.83
S06-2	$440.83	$160.00	$335.00	$265.83
S07-1	$265.83	$200.00	$201.70	$264.13
S07-2	$264.13	$600.00	$340.87	$523.26
S08-1	$523.26	$300.00	$347.80	$475.46
S08-2	$475.46	$320.00	$386.26	$409.20
S09-1	$409.20	$180.00	$12.00	$577.20
S09-2	$577.20	$210.00	$92.54	$694.66
S10-1	$694.66	$220.00	$380.90	$533.76
S10-2	$533.76	$425.00	$474.90	$483.86
S11-1	$483.86	$200.00	$14.00	$669.86
S11-2	$669.86	$430.00	$480.50	$619.36
S12-1	$619.36	$340.00	$203.00	$756.36
S12-2	$756.36	$150.00	$0.00	$906.36
S13-1	$906.36	$0.00	$0.00	$906.36

NPEC Subcommittee SC-3
Operating, Maintenance, Aging, Testing and Reliability
Action Items List

Item No.	Subcommittee 3.0 Actions	Owner	Due Date	Closure Comments
11-2-C	SC-3 name in NPEC needs to reflect reliability	Jim Liming	Next AdCom mtg	Bring up at AdCom meeting 11-2. 12-1 mtg: more complicated - Jim to bring up at 12-1 AdCom meeting to make sure what is required and then get those actions started. 13-1 mtg: Will affect NPEC P&P and O&P. Malia confirmed that it could be handled as an editorial change. It just will take time to process. Jim to bring up to ADCOM. Preferred name is: "Operations, Maintenance, Aging, Testing, and Reliability". Request Submitted 01/22/13; see S13-1 Meeting Notes, Attachment 5.
12-1-A	Send a formal thank-you letter to Bob Lane from SC-3 for the projector donation	Jim L / Yvonne	shortly after 12-1 mtg	Still open as of 13-1 meeting.
12-2-B	Develop a Template / Strawman for gap analysis for SC3 standards	Yvonne	13-2 mtg.	Still open as of 13-1 meeting.
12-2-C	Add a summary of post-Fukushima issues to the next meeting agenda.	Jim Liming	13-1 mtg.	Post-Fukushima issues discussed in SC-3 and NPEC meetings -- Action Closed.
13-1-A	Lead a group to prepare a Master Scheduling Template for the SC-3 WG's.	Ted	13-2 mtg.	Initial discussions held 01/22/13.
13-1-B	Request a tutorial on the Style Guide and use of the Standards Template, particularly addressing the movement of an older standard into the new template.	Jim L / Malia	13-2 mtg.	Jim to coordinate with Malia.
13-1-C	Discuss IEEE Patent Claims slides.	Jim Liming	13-2 mtg.	

SC-3 "Operations, Maintenance, Aging, Testing & Reliability"

Chair: Jim Liming

PROJECT	Year	Re-Affirmation	PAR Expiration	TITLE	Working Group	Chair	Cycle Year	N12-1	N12-2	N13-1	N13-2	N14-1	N14-2	Status/Comments
336	2010			IEEE Standard Installation, Inspection, and Testing Requirements for Power, Instrumentation, and Control Equipment at Nuclear Facilities	1	Y. Williams	3							Revision approved by the StdBd on June 17, 2010
338	2012			IEEE Standard Criteria for the Periodic Surveillance Testing of Nuclear Power Generating Station Safety Systems	1	Y. Williams	1							Std approved by SB Feb. 6, 2012
352	1987	2009	Dec-16	IEEE Guide for General Principles of Reliability Analysis of Nuclear Power Generating Stations and Other Nuclear Facilities	3	S. Honecker	4		WIP					Reaffirmation approved by StdBd March 17, 2010. PAR approved by ADCOM 1/25/2011. PAR approved by NesCom 3/29/12.
577	2012			IEEE Standard Requirements for Reliability Analysis in the Design and Operation of Safety Systems for Nuclear Power Generating Stations	3	S. Honecker	1							Approved by SASB Aug. 30. 2012. Published on 10/19/2012.
692	2010		Dec. 2016	IEEE Standard Criteria for Security Systems for Nuclear Power Generating Stations	2	D. Horvath	3			Preview				Published in 2010, PAR 692a to amend 692-2010 approved 9-10-2011. Changes found too significant for an amendment. PAR 692 to revise 692-2010 approved 12-5-2012. Preview to SC-3 & NPEC in Jan 2013. Expect ballot in 2013. Current PAR is active until 2016.
933	1999	2004	Dec-2013	Guide for Definition of Reliability Program Plans for Nuclear Generating Stations and Other Nuclear Facilities	3	S. Honecker	9							Ballot closed Mar. 2011. PAR extended to 2013. Recirculation ballot closes 1/21/13.
1205	2000	2007	Dec. 2015	IEEE Guide for Assessing, Monitoring, and Mitigating Aging Effects on Class 1E Equipment used in Nuclear Power Generating Stations	4	R. Steinman	6				Preview			Reaffirmation approved by Std Bd March 22, 2007 PAR approved by ADCOM 1/25/2011
P1819			Dec. 2014	Standard for Risk-Informed Categorization and Treatment of Electrical Equipment in Nuclear Facilities	1	Y. Williams	0				WIP			PAR electronicaly approved by ADCOM and submitted to NesCom for Jan 2010 meeting. PAR approved by StdBD March 25, 2010.

From:	████████████████████
Sent:	Tuesday, January 22, 2013 11:47 AM
To:	████████████████
Cc:	Parello, James; ████████████ Tom Crawford
Subject:	IEEE NPEC SC3 Name Standardization

Follow Up Flag:	Follow Up
Flag Status:	Flagged

Over time, we, on IEEE NPEC Subcommittee 3, have noted inconsistencies in the name of our subcommittee within NPEC and other IEEE documents. We respectfully request that the SC3 name be standardized across NPEC documentation, as early as is practical, to be "Operations, Maintenance, Aging, Testing, and Reliability." Thank you.

Best regards,

Jim Liming
Chair, SC3

James K. Liming
Senior Consultant
ABSG Consulting Inc. (ABS Consulting)
████████████████████████
USA

Ballot Preview Presentation – P692

January 23, 2013 (NPEC Mtg 13-1)

By Marie-H. Cuvelier (WG-3.2 Secretary)

"Standard Criteria for Security Systems for Nuclear Power Generating Stations"

SC-3 Preview – P692
Presentation Contents

1. P692 PAR Summary
2. Working Group Membership
3. Approach
4. P692 Table of Contents
5. Summary of Changes
6. Comments Received on Draft D3c and Approach
7. Schedule
8. Conclusion

SC-3 Preview – P692

1. PAR Summary

History of IEEE Std 692

- Revised and Published in February 2010
- NRC comments received in January 2011
- PAR 692a for amendment approved September 10, 2011
- WG-3.2 meeting with NRC in April 2012
- New PAR for full revision requested July 13, 2012
- New PAR approved December 5, 2012
- Completed Draft D3c in December 2012
- Previewed to SC-3 in January 2013

SC-3 Preview – P692

1. PAR Summary

Scope of Proposed Standard: The standard provides criteria for the design, testing, and maintenance of security system *electrical, instrumentation, and control equipment* for nuclear power generating stations.

- Such equipment includes permanently or temporarily installed systems, subsystems, and components used by the security force for physical protection of the station against security threats.

- It includes equipment for security-related detection, assessment, surveillance, access control, communication, and data acquisition.

SC-3 Preview – P692
1. PAR Summary (Continued)

Purpose of Proposed Standard:

- This standard establishes criteria for the design of an integrated security system for nuclear power generating stations.

- These criteria assist in the selection and application of equipment to detect, monitor, display, and record security conditions and events.

SC-3 Preview – P692

1. PAR Summary (Continued)

Need (Purpose) for the Revision Project:

- Address industry feedback from stakeholders resulting from recent changes in security approaches

- Clarify scope to be "security system *electrical, instrumentation, and control* equipment"

- Maintain consistency with any other ongoing industry and regulatory initiatives

- Consider any relevant technological developments

- Review and incorporate any other user feedback

SC-3 Preview – P692
2. Working Group Membership

Now 10 members and 4 other major contributors.
[Owner (6), Consultant (5), Regulator (1), Manufacturer (2)]

Dave Horvath – Chair (Consultant)
Tom Worrell – Vice Chair (Owner)
Marie-H. Cuvelier – Secretary (Consultant)

New!

Frank Carpency (Consultant)
William Drake (Owner)
Randy Flowers (Owner/NEI Liaison)
Brian Linde (Manufacturer)
Paul Phelps (Owner)
James Vaughn (NRC)
Ray Yeager (Manufacturer)

New!

Other Contributors:

Dave Axt (Owner)
Cliff DuBord (Owner)
RV Rao (Consultant)
Sara Seamans (Consultant)

SC-3 Preview – P692

3. Approach

- Meet with NRC to clearly understand comments and made assignment for resolution

- WG-3.2 met again to review proposed resolutions and to make refinements

- Identified and addressed other areas for improvement based on user feedback:

  - Typical security area figure

  - Typical single line power supply figure

  - Security power supply discussion

- Considered new technology for perimeter intrusion

SC-3 Preview – P692

4. P692 Table of Contents

Major clause titles remain the same:

1. Scope & purpose, 2. references, 3. definitions,
4. integrated security system
5. perimeter intrusion alarms,
6. security lighting,
7. video surveillance,
8. access control,
9. interior intrusion detection,
10. data acquisition, processing, and display,
11. voice communications,
12. line supervision,
13. duress alarms,
14. power supplies, and
15. maintenance and testing.

SC-3 Preview – P692
5. Summary of Changes

- Updated the Introduction

- Updated or simplified 5 definitions (cyber security, remote access, remote control, safeguards, secondary alarm station)

- Added definition for "*single act*" and deleted "*legitimate access*"

- Revised Clause 4 for consistency with definitions

- Added references for guidance in Clause 4 on design and cyber security issues

- Redrew Figure 3 "Typical Security Area" and Figure 4 "Single Line Typical Power Supply" for clarity

SC-3 Preview – P692
5. Summary of Changes (cont'd)

- Revised Clauses 5 & 6 to credit technology improvement
  - Allowed the use of "*fiber optics*" for perimeter intrusion in Clause 5
  - Downgraded certain prescriptive lighting requirements when credit for increased sensitivity video surveillance is used

- Added requirement in Clause 5 to monitor unattended openings.

- Provided additional informative text on security power supply in Clause 14

- Reviewed & updated bibliography to confirm relevance

SC-3 Preview – P692
6. Summary of Comments on D3c

- NRC: Applicability to other nuclear facilities
- Tom Koshy, Mike Waterman, Nissen Burstein:
  - Rearrangement of wording to clarify requirements
  - Rearrangement of wording for improved compliance with IEEE Style Guide
  - Deletion of 2 definitions: Remote Access & Remote Control because not used
  - Addition of 1 definition: line supervision
  - Additional clarification of 3 definitions (single act, intrusion alarm, cyber security)

SC-3 Preview – P692
6. Approach to Resolve Comments on D3c

- Clarified in introduction that certain aspects of 692 requirements may apply to nuclear fuel cycle, HLW, and nuclear weapons facilities

- Made editorial changes to improve compliance with Style Guide

- Accepted and incorporated comments where the suggested changes are consistent with nuclear security industry practices

→ Result is a new draft D4a!

SC-3 Preview – P692
7. Schedule

- January 2013:
  - Completed preview of Draft 3c at SC-3 meeting and was granted permission to preview to NPEC.
  - Preview at NPEC; request permission to ballot.
- March 2013: Form ballot pool and editorial review.
- June 2013: Complete ballot.
- July 2013: WG-3.2 meets to resolve ballot comments.
- October 2013: Complete recirc ballot if needed.
- December 2013: Review by IEEE NeSCom.
- Year 2014: Publication!

SC-3 Preview – P692

8. Conclusion

■ WG-3.2 has developed a draft revision 4a to IEEE Std 692-2010, which meets the requirements of the approved PAR and comments to date.

■ Request NPEC permission to ballot of P692 draft D4a.

Instructions for the WG Chair

The IEEE-SA strongly recommends that at each WG meeting the chair or a designee:

- **Show slides #1 through #4 of this presentation**
- **Advise the WG attendees that:**
  - The IEEE's patent policy is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*;
  - Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;
  - There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.

- **Instruct the WG Secretary to record in the minutes of the relevant WG meeting:**
  - That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) were shown;
  - That the chair or designee provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard
  - Any responses that were given, specifically the patent claim(s)/patent application claim(s) and/or the holder of the patent claim(s)/patent application claim(s) that were identified (if any) and by whom.

- The WG Chair shall ensure that a request is made to any identified holders of potential essential patent claim(s) to complete and submit a Letter of Assurance.
- It is recommended that the WG chair review the guidance in *IEEE-SA Standards Board Operations Manual* 6.3.5 and in FAQs 12 and 12a on inclusion of potential Essential Patent Claims by incorporation or by reference.

  Note: **WG** includes Working Groups, Task Groups, and other standards-developing committees with a PAR approved by the IEEE-SA Standards Board.

25 March 2008 (updated January 2012)

◆IEEE

(Optional to be shown)

Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy.

- **Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:**
  - **"Shall inform the IEEE (or cause the IEEE to be informed)" of the identity of each "holder of any potential Essential Patent Claims of which they are personally aware" if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents**
    - **"Personal awareness" means that the participant "is personally aware that the holder may have a potential Essential Patent Claim," even if the participant is not personally aware of the specific patents or patent claims**
  - **"Should inform the IEEE (or cause the IEEE to be informed)" of the identity of "any other holders of such potential Essential Patent Claims" (that is, third parties that are not affiliated with the participant, with the participant's employer, or with anyone else that the participant is from or otherwise represents)**
- **The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group**
- **Early identification of holders of potential Essential Patent Claims is strongly encouraged**
- **No duty to perform a patent search**

25 March 2008 (updated January 2012)

◆IEEE

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6

IEEE-SA Standards Board Operations Manual

http://standards.ieee.org/develop/policies/opman/sect6.html#6.3

Material about the patent policy is available at

http://standards.ieee.org/about/sasb/patcom/materials.html

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit http://standards.ieee.org/about/sasb/patcom/index.html

This slide set is available at https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt

IEEE

25 March 2008 (updated January 2012)

Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
  - Either speak up now or
  - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
  - Cause an LOA to be submitted

◈IEEE

Other Guidelines for IEEE WG Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**

  - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**

  - **Don't discuss specific license rates, terms, or conditions.**

    - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.

      - Technical considerations remain primary focus

  - **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**

  - **Don't discuss the status or substance of ongoing or threatened litigation.**

  - **Don't be silent if inappropriate topics are discussed … do formally object.**

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.

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