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Meeting: SP67.04, Setpoints for Safety-Related Instrumentation Used in Nuclear Power Plants
Co-Chairmen: Jerry Voss and Bob Fredricksen
Recorder: Eliana Beattie
Date/Time: Monday, 11 July 2007, 8:00 a.m. – 5:00 p.m.; Tuesday, 12 July 2007, 8:00 a.m. – 5:00 p.m.,
Wednesday, 13 July 2007, 10:00 a.m. - noon
Location: Sheraton Station Square Hotel, Pittsburgh, Pennsylvania
Distribution: SP67.04 and SP67 Members

Attendees

Bob Fredricksen, Co-Chair
Jerry Voss, Co-Chair
Lionel Bates
Greg Casne
Matt Cerrone
Fred Chenot
Mike Dougherty
Michael Eidson
Robert Florian
Hukam Garg
Jim Hartman
Tom Hokemeyer
Bob Hunter
Aaron Hussey
Ron Jarrett

Robert Mann
Bob Queenan
Ted Quinn
Kori Ragan
Chuck Rupp
Mahendra Shah
Brent Shumaker
Carl Sossman
Jeff Suggs
Dinesh Taneja
Rick Tuley
Timothy Tully
Pete VandeVisse
Brad Waybright
Dave Willis

1. Call to Order

Jerry Voss called the meeting to order at 8:00 a.m.

2. Introductions and Welcome

The attendees introduced themselves and Co-Chairs Jerry Voss and Bob Fredricksen welcomed everyone to the meeting.

3. Review of Previous Minutes

There were no minutes available to circulate from the 14 November 2006 meeting in Albuquerque, NM.

4. Review of Agenda

The agenda was accepted as written.

5. Liaison Reports

S&P Board - The 15 October 2006 S&P Board minutes are included as Attachment A.

S&P – No report.

SP67 – Tim Hurst was not in attendance at the time to provide a report. SP67 will meet Wednesday.

IEEE – Bill Sotos was unable to attend the meeting.

NRC – No report.

EPRI – No report.

NEI – Bob Fredricksen reported that NEI will meet during POWID on Wednesday. Jerry Voss noted that part of Wednesday's meeting would be to discuss whether NEI should expand the task force. The task force, set up to work with the NRC, is in its 4th year. The problem for new plants is that there is no forum for discussing problems or to track problems that occur in the new plants. Wednesday's meeting will look at where NEI should be headed.

ANS – No report.

BWROG – No report.

WOG – No report.

BWOG – Mike Eidson noted that this working group is now named PWROG. They met in January and will again in July, which will be a three-day meeting. They will focus on emerging I&C issues, hardware, reliability, and equipment replacement. Another important topic for the July meetings is project authorization for I&C systems.

IEEE – Mike Dougherty reported that IEEE 627 is being updated but there are no technical issues. Bob Queenan is the ISA liaison and has been tasked with providing the definitions relating to margin. IEEE 323 and 324 were recently reissued. The motors and cables standards have also been reissued.

IEC – No report.

6. Summary of Subcommittee Activities

Jerry Voss noted that, following the main meeting, attendees would break up into working groups to review the recently completed sections.

7. Membership Changes

Two individuals requested to join SP67.04 but were not in attendance, Brad Waybright as a voting member for First Energy Corporation and Blane Thompson as an information member. Mr. Thompson was added but Mr. Waybright would need to be in attendance before SP67.04 could vote. Dinesh Taneja asked to be added as an information member. Jeff Suggs requested to be the voting member from GE. Brent Shumaker asked to be changed from an information member to a voting member. Bob Queenan made a motion to accept Jeff's and Brent's requests, Carl Sossman seconded the motion. The motion was approved by SP67.04.

The roster was circulated so that attendees could update their information.

8. New Topics

Revision to ISA-TR67.04.09 – Bob Fredricksen noted that questions were raised on ASME section 11 accuracy of ISI/IST testing. There is an acknowledgment that a plant can have a graded approach, but the issue is that no one knows what that should be. Permission is also given for relaxed standards, but again no one knows what that is. According to the NRC, everything is a 1.105 calculation unless specified otherwise.

Jerry Voss asked the attendees if they are satisfied with ISA-TR670409 as it stands today or whether it needs revision. If so, who offers to work on it. He pointed out that there is nothing incorrect about the technical report as it exists. Bob Queenan made a motion not to withdraw the existing technical report, Carl Sossman seconded, and SP67.04 approved the motion. Pete VandeVisse said SP67.04 needs to decide whether the material should remain in a technical report or become a standard.

Carl Sossman suggested having a task group to study if there is any way to determine gradation levels. Mike Eidson stated that it is for each plant to determine their own approach and provide their own guidelines. Ron Jarrett remarked that the problem is that the regulatory requirements are not always clear. Lionel Bates noted that what would be good for plants is guidance on what is going on with their indicators and what to do with those indications. Pete VandeVisse made a motion for a working group to be created, Carl Sossman seconded, and SP67.04 approved the motion. The following volunteered to participate in the working group: Pete VandeVisse, Rick Tuley, Ted Quinn, Hukam Garg, Tim Hartman, Lionel Bates, Bob Fredericksen, and Carl Sossman.

ISA-TR67.04.03 – Bob Queenan noted that the majority of the work of ISA-TR670403 is not under SP67.04. If work was to begin again on the technical report, SP67.04 should go to SP67 and say that the work needs to be done but should be under another subcommittee. Jerry Voss made a motion to take the issue to SP67, Carl Sossman seconded, and SP67.04 approved the motion.

Bob Queenan made a motion that he be changed to a voting member on SP67.04, which was seconded and approved by the subcommittee. As Brad Waybright was now in attendance, Bob Fredericksen made a motion to add him as a voting member, Bob Queenan seconded, and SP67.04 approved the motion.

Tim Hurst noted that he was changing the Wednesday SP67 meeting to start at 8:00 am. SP67.04 would follow beginning at 10:00 a.m. The NEI meeting would be held 1:00 to 5:00 p.m. Wednesday.

Pete VandeVisse noted that there is an NRC digital controls steering committee, which is going to request digital accuracy. Tim Hurst is on the committee and Pete made a motion that Tim be the SP67.04 liaison to the committee, Carl Sossman seconded, and SP67.04 approved the motion.

Brent Shumaker brought up that there is an EPRI document on acceptance criteria that could be used as an annex. Jerry Voss remarked that approval would be required from EPRI to use their document. Lionel Bates said he has a paper that he is presenting in the nuclear session that could also be used as an annex.

8. Working Group Development

SP67.04 broke up into working groups to work on the following sections.

Annex B – Carl Sossman, Fred Chenot

Annex C – Pete VandeVisse, Mahendra Shah

Annex E – Ted Quinn, Rick Tuley, Bob Queenan

Annex G – Brent Shumaker

Calculations - Robert Mann

Level - Chuck Rupp

Annex I – Kori Ragan, Mike Dougherty

DP, Flow – Hukam Garg

Radiation Calculations – Klemme Herman, Bob Hunter

Pressure Calculations – Ron Jarrett

Subclauses 7.1, 7.2 – Mike Eidson

Tuesday, 12 June 2007

Attendees

Bob Fredricksen, Co-Chair

Jerry Voss, Co-Chair

Yogi Dayal

Mike Dougherty

Michael Eidson

Bob Fredricksen

Hukam Garg

Klemme Herman

Tom Hokemeyer

Bob Hunter

Robert Mann

Wayne Marquino

Bob Queenan

Kori Ragan

Mahendra Shah

Brent Shumaker

Carl Sossman

Jeff Suggs

Dinesh Taneja

Ricky Tuley

Timothy Tully

Pete VandeVisse

Jerry Voss

Dave Willis

SP67.04 working groups met from 8:00 a.m. until 2:00 p.m., when the full subcommittee reconvened to begin discussion of the revised material. SP67.04 adjourned at 5:30 p.m.

Wednesday, 13 June 2007

Attendees

Bob Fredricksen, Co-Chair

Jerry Voss, Co-Chair

Greg Casne

Fred Chenot

Yogi Dayal

Mike Dougherty

Hukam Garg

Klemme Herman

Tom Hokemeyer

Bob Hunter

Tim Hurst

Robert Mann

Ted Quinn

Carl Sossman

Dinesh Taneja

Rick Tuley

Pete VandeVisse

SP67.04 met to continue review of revised material.

In response to a request for material to be posted on the SP67.04 web page rather than distributed in e-mails, Jerry Voss stated that he will post all of the revised materials on the SP67.04 page shortly after 8 July. A web meeting will be scheduled for mid- to late July. There is a possibility that an SP67.04 meeting will be held during the week of ISA EXPO (2-4 October 2007) in Houston. The meeting adjourned at noon.

Attachment A

ISA Meeting Minutes

Meeting: Standards and Practices Department Board
Chairman/Facilitator: Ian Verhappen
Recorder: Lois Ferson
Members Present: Ron Jones, Klaus-Peter Lindner, Vic Maggioli, Tom McAviney, Gordon McFarland, Hisashi Sasajima, Nick Sands, James Tatera, Ian Verhappen, Robert Webb, Warren Weidman, and Marty Zielinski
Members Absent: Farshad Amir, David Bishop, Mark Coppler, Bernard Dumortier, Wayne Holland, Erwin Icyan, Al Iverson, Al McCauley, Ron Reimer, Ted Schnaare, Joe Weiss, and Marge Widmeyer.
Guests: Ken Baker, Diana Bouchard, Lois Ferson, Jim Jamison, Chip Lee, Dan Lee, Charley Robinson, and Ed Vodopest
Date/Time: Sunday, 15 October 2006 8:00 – 11:30 am.
Location: Hyatt Regency, Houston, Texas
Distribution: S&P Board, Guests, Staff

<i>Item #</i>	<i>Description</i>
1	Call to Order Ian Verhappen called the meeting to order at 8:05 am.
2	Review & Approval of Agenda <ul style="list-style-type: none"> ▪ <i>Moved by Jones, seconded by Webb, and approved that the agenda of the 15 October 2006 meeting of the Standards and Practices Board be approved.</i> Motion approved. It was agreed that several agenda items would be considered out of order to accommodate the schedule of visitors and Directors with conflicting meetings.
3	Approval of Minutes <i>Moved by Jones, seconded by Maggioli, and carried that the April 2006 meeting minutes be approved.</i> Motion approved.
4	Discuss and Resolve any S&P Board Ballots There were no negative ballots or ballots with comments to be addressed.
5	Review Changes to MOP Resulting from ANSI Audit Following a discussion of the proposed changes to the MOP those present agreed in principal that the MOP should be revised as proposed. <i>Wiedman moved and Zielinski seconded that a confirming ballot on the MOP be circulated to the full Board.</i> Motion approved.
6	Approve Changes to ISA-SP12 Scope <i>Moved by Zielinski and seconded by Webb that the ISA-SP12 Scope statement be revised to read as follows: "To formulate standards, recommended practices and technical reports for safe and practical use of equipment in hazardous (classified) locations, and for equipment used for the detection of combustible gases."</i> Motion approved.

7	<p>Approve Revision to ISA-SP101 Scope and Purpose <i>Moved by Sands, and seconded by Webb, that the following scope and purpose statements be approved for ISA-SP101</i></p> <p><i>Scope to read: "The standards, recommended practices, and/or technical reports developed by ISA-SP101 will be directed to those responsible for designing, implementing, using, and/or managing human-machine interfaces in industrial applications.</i></p> <p><i>The areas covered within ISA-SP101's work will include: menu hierarchies, screen navigation conventions, graphics and color conventions, dynamic elements, alarming conventions, security methods and electronic signature attributes, interfaces with background programming and historical databases, popup conventions, help screens and methods used to work with alarms, program object interfaces, and configuration interfaces to databases, servers, and networks to formulate standards, recommended practices and technical reports for safe and practical use of equipment in hazardous (classified) locations, and for equipment used for the detection of combustible gases."</i></p> <p><i>Purpose to read:" The ISA-SP101 Committee will establish standards, recommended practices, and/or technical reports pertaining to human-machine interfaces in industrial applications."</i> Motion approved.</p>
8	<p>Discuss Liaison Categories There has been no change in status since the April meeting. Existing Department liaisons will be approved by the Department Board at this meeting. Verhappen noted that the Board would need to circulate any proposed modifications to the Board for approval and then forward the recommendation to the ISA Department Board for final review and approval.</p>
9	<p>Establishment of USTAG for IEC SC65E Asset Management Ferson reported that the reorganization of TC65 had been approved and ISA is the new USTAG Administrator for IEC SC65E Asset Management. The USTAG will be initially established based on membership from existing ISA USTAGs. The Secretary of the new Subcommittee is also from the United States: Mr. Lee Neitzel, Fisher-Rosemount.</p>
10	<p>Standards Proposals Received via Web Input Verhappen referred the Board to Annex A. Considerable discussion followed during which Jones noted this typically falls under piping systems work effort and as such might be more appropriate for another organization since it is a combination of instrumentation and mechanical work. Vodopost noted that SP42 has considered this effort in the past but reached the conclusion this was best left to individual vendors to establish. Others noted this could be a code issue within the nuclear industry. The consensus was that if the work were to proceed it would likely be best developed as a Technical Report, possibly as a working group under ISA-SP42. Vodopost agreed to head up a survey group under SP42 with potential liaisons to SP67.</p>
11	<p>Note Current Status of SAMA Standards and Ongoing ISA Activities Weidman stated that industry users are having difficulty obtaining reference copies of earlier SAMA standards that had in the past been available from ISA. Ferson stated that ISA had recently been asked by SAMA and MCAA to no longer provide copies but instead refer potential users to the MCAA web site for information. While ISA does have a collection of the SAMA standards in the ISA library these are no longer being distributed. McAviney added that under an earlier agreement ISA does have SAMA's permission to incorporate portions of the SAMA documents into ISA standards such as ISA-5.1.</p>
12	<p>Department, Liaison, or Managing Directors Reports See Annex B.</p>

13	<p>International Report</p> <p>Ferson noted that TC65 and its Subcommittees had recently met in Berlin. In addition to the establishment of a new Subcommittee SC65E as noted earlier, SC65B, Devices, and SC65D, Analytical Equipment, were also merged. The US continues to hold the SC65B Secretariat and ISA will continue to manage the SC65B USTAG. The intent is to just merge the existing SC65D TAG under the USTAG for SC65B with Tatera serving as a deputy TA. Tatera will handle the analytical work formerly under SC65D. Sasajima noted that Japan will be hosting the next major IEC Plenary meeting in 2008. He offered to work with TC65 and other committees of interest to ISA to secure their participation at this meeting.</p>
14	<p>IEC General Meeting in USA 2010</p> <p>Verhappen and Ferson briefly reviewed the efforts underway to secure funding for the IEC General Meeting to be held in Seattle in 2010. Based on ISA's heavy involvement in several IEC Technical Committees, those present concurred it would be appropriate for ISA to support this effort. <i>Zielinski moved and Sands seconded that the S&P Board recommend that ISA commit \$25,000 to support the IEC General Meeting in 2010.</i> Motion approved. NOTE: The S&P Department Board's recommendation was subsequently approved by the ISA Department Board.</p>
15	<p>ISA Forum – France 2007</p> <p>On behalf of Dumortier, Verhappen informed the Board that the French Section of ISA was presenting a forum on 9 and 10 May 2007 with a major focus on ISA standards committees, specifically ISA-SP88, ISA-SP95, ISA- SP100, ISA-SP101, ISA-SP103, ISA-SP104. A number of committee leaders have been invited to make presentations.</p>
16	<p>ISA-SP100 Wireless Systems for Automation Report</p> <p>Zielinski briefly reviewed the results of the recent call for proposals meeting held at ISA in September. During this meeting ISA-SP100.11 and ISA-SP100.14 heard over 25 proposals but the major focus seems to be coalescing around two major industry efforts. Sands, Jamison and others noted it is a very dynamic and active committee. Zielinski reported that the established SP100 classes 0-5 have been universally accepted and the future focus will be on merging the two existing working groups (.11 and .14) and then moving forward with a combined effort to achieve consensus. Zielinski noted he is continuing to work with the committee leadership to avoid the commercial influences that arose around the fieldbus standardization work and to keep the work moving forward.</p>
17	<p>ISA-SP101 Human Machine Interface Report</p> <p>In addition to the scope and purpose statements approved earlier; Sands noted that ISA-SP101 has received a lot of good publicity and is well-staffed with volunteers. They anticipate a good meeting in Houston and while the work has gotten off to a slow start it can be attributed to the effort to reach consensus on the overall goals and objectives.</p>
18	<p>ISA-SP102 High-Power Research & Development Electrical Systems Report</p> <p>Webb reported for Widmeyer noting that recent management and staffing changes at the national labs providing technical support for this project had resulted in schedule delays. However, there is still strong interest and the work is expected to continue.</p>
19	<p>ISA-SP103 Field Device Tools and ISA-SP104 Electronic Device Description Language Report</p> <p>Webb noted that both committees are staffed and work is expected to begin on ISA-SP104 this Fall. Lindner noted the IEC work is not yet at a stage where the ISA-SP103 committee can begin. Lindner anticipates the IEC draft will be at the Committee Draft for Vote stage by mid 2007 at which time the corresponding ISA committee will become more active.</p>

20	<p>Update on SCC and CSA Activities</p> <p>Verhappen referred those present to the material on CANEENA which had been provided by Reimer. While working through CANEENA may be an option at some point in the future, those present supported working with CSA as a first step to help introduce ISA standards into the future curriculum for technicians throughout Canada. The Board noted the good results that have already been achieved in Ontario through the efforts led by an individual member, Berny Portolesi. As a result of the discussions, <i>Sands moved and Maggioli seconded that the Department pursue a relationship with CSA that would help promote the acceptance and usage of ISA standards within the technician training curriculum throughout Canada.</i> Motion approved.</p>
21	<p>New Venture Covering Standards Compliance</p> <p>Verhappen reported that there has been strong support for ISA to continue efforts in support of standards compliance specifically in certain areas such as security, safety and potentially wireless. He noted that the Executive Board had approved funding for this new venture in September.</p> <p>New Venture Development Acceleration & Promotion –</p> <p>Verhappen noted that the New Venture funding had been used to promote and accelerate the development of standards such as ISA’s SP99 security and SP100 Wireless Systems activity. This support will continue through 2007.</p>
22	<p>Update on Discussion with UL Relative to ISA-SP12.13 and ISA-SP92 Efforts</p> <p>Verhappen and Ferson reported for Coppler and informed the Board of recent concerns raised by UL related to ISA PINs on the 92 series. Several Directors noted this is a continuation of issues going back to the original ANSI/ISA 12.13 series and the duplication with UL2075. Those present agreed Coppler should pursue efforts to resolve these issues with UL while maintaining ISA’s ongoing standards work in the 92 and 12.13 series.</p>
23	<p>Update on ISA 20/Namur Activity</p> <p>No report was given.</p>
24	<p>Review of Committee Resources for 2007-2008</p> <p>No changes were proposed to the existing committee support or list of active committees.</p>
25	<p>S&P Board Director Assignments</p> <p>Verhappen and McAviney will be reviewing the Managing Director assignments and making changes to accommodate the transition for the 2006-2007 Society year. NOTE: new Directors nominated and appointed to the S&P Board for the 2007 Society year are: James Jamison and Donald Dunn.</p>
26	<p>ISA Standards Endowment</p> <p>Verhappen introduced Baker and asked him to discuss the standards endowment concept. Baker thanked the Board for the Department’s progress and efforts over the years and noted that as a result ISA is recognized globally as a leading standards development organization. The concept of a standards endowment will be to use money generated by the Society reserves to not only ensure the standards development process continues to be fully funded but also to provide an additional member benefit for the free downloading of ISA standards. He noted that other activities such as the compliance institute are also furthering the role of the Society in support of standards. The Board supported the concept but several Directors noted the Society has gone back and forth over the years on providing standards as a membership benefit and urged a long-term, consistent approach. Moved by McAviney seconded by Zielinski that <i>the S&P Board support the free electronic distribution of standards to members as a member benefit and further the Board strongly recommends the creation of a standards endowment as a funding mechanism to ensure continuity of this benefit.</i> Motion approved. NOTE: ISA’s Executive Board subsequently approved the availability for free of ISA developed standards in downloadable format to ISA members and designated funds from excess Society reserves to support standards and the other key ISA competencies.</p>

27	<p>Any Other Business</p> <p>McAvinew thanked Verhappen for his leadership and expertise in serving as Department Vice President. He noted the many accomplishments such as the NAMUR liaisons, the approval of new activities, and the progress in key areas such as security during his term. Verhappen thanked the Board and acknowledged the strong support he had received during his term. He expressed his intent to continue to support the Department's ongoing standards work and desire to remain actively involved in the future.</p>
28	<p>Plans for the Next Meeting and Adjournment</p> <p>Verhappen and McAvinew stated that there would be a tentative conference call of the Board in January or February. The next face-to-face meeting of the Board will occur in conjunction with the President's Spring Meeting in Scottsdale June 23-26, 2007. Weidman moved and Webb seconded that the meeting be adjourned. Motion approved.</p>

Annex A –

NEW STANDARDS PROJECT PROPOSAL	
Project Number (Assigned by ISA Staff) 2006-1	
Proposer (Individual/Division)	Date of proposal 10/2006
ISA Committee Number (if any)	Managing Director (Assigned by ISA)

A proposal for a new standards project shall be submitted to the ISA Technical Services Department, to the attention of the S&P Board Secretary. The Proposal will be circulated to the ISA S&P Board for consideration and approval. The proposer may be an individual, an ISA Standards Committee, Section, Division, or District.

The proposal (to be completed by the proposer)

Title of proposal : Standard for Quality Impulse tube works at field with double compression SS fittings .	
Scope of work : <ol style="list-style-type: none"> 1. How to do correct Impulse tube works of SS with double compression fittings. 2. How to inspect the impulse tube works during pre commissioning of a plant . 	
Purpose and justification for this activity (Attach a separate sheet or proposed draft, as applicable.) : No relevant standard exists for such activity . It is very difficult for the construction engineer to assure right quality . There is no world wide inspection procedure also . Different vendors recommend different activities . There is even lack of awareness in Engineering construction companies also . It is quite important for Chemical / Toxic / nuclear fuel handling plants to have such standards . Leaks from impulse connections are loss and threat to society . Piping standards are quite stream lined today , but the instrumentation impulse connection is yet to be developed . Target date (Date by which industry needs this document) _____	
Relevant National and International Standards to be considered : BS 4368	
Relationship to other standards committees (both national and international) and/or other ISA activities : Relevant in accuracy and safety for all Instruments that work on impulse connection .	
Liaisons that should be established	Required coordination (Inter/Intra-Society)
Preparatory documentation <input type="checkbox"/> A draft is attached <input type="checkbox"/> An outline is attached and it will be possible to supply a draft by (date): _____ <input type="checkbox"/> It is not possible to supply a draft or an outline	
Concerns known patented items <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, provide additional details as an attachment	Signature, address, telephone, and telefax of the proposer (Please print): Nilanjan Mukhopadhyay . Sr. Manager , Haldia Petrochemicals Limited . India .Fax : 0091 3224 274013 . email : Nilanjan.Mukhopadhyay@hpl.co.in



Annex B – Department, Liaison, or Managing Directors Reports

ISA SP12 report to board 10/15/06.

The SP12 committee and its subcommittees continue to develop and maintain standards related to electrical equipment for use in hazardous locations. Their last meetings were held September 25 thru 29 with three sessions daily from 7:30am till 5:30pm and two evening sessions in order to avoid running beyond one week.

Currently, there are 36 documents under the ownership of this group and about 10 of those are under development or being updated.

The committee continues to follow and support a number of proposals that they and their members have submitted to NFPA for the next (2008) revision of the National Electrical Code. Discussion also included status of the IEC Ex scheme, which many of the members are active in.

The USNC IEC TAGS also meet in conjunction with the SP12 meetings. They are currently doing active maintenance on more than 18 documents. It seems they were successful in convincing IEC to let TC31 lead the way to addressing non-electrical sources of ignition in hazardous locations.

In the latest Chairman's Advisory Group meeting, Ted Schnaare reviewed the flowchart of the UL/ISA harmonization scheme. Things seem to be working well.

The next meetings of the SP12 committee will be held the week of March 26, 2007 in St Petersburg, Fla.

The SP12 committee requests that the board approve the proposed revision of the committee scope to align with the changes in IEC TC31 scope and that we address problems created by UL2075, which overlaps the scope of ISA S12.13.01 (61779-1).

Current Status of SP84 and SP91 submitted by V J Maggioli September 25, 2006

SP84 (Chair: William H. Johnson)

*ANSI/ISA S84.00.01 – 2004 (IEC 61511 mod) Parts 1, 2, and 3: Functional Safety: Safety Instrumented Systems for the Process Industry Sector:
(leader: W H Johnson)*

There are two international efforts underway that will impact this standard in the future. They are:

1. IEC61508 maintenance is at the CD stage and it is being worked on to achieve CDV status. This standards major impact is its impact on the design and manufacture of safety-related devices.
2. IEC61511 maintenance began in May 2006. It is focused on updating IEC 61511 based on changes to IEC 61508 and comments from user/owners on the existing IEC 61511 standards.

IEC61508 is implementing an accelerated meeting program in an effort to meet their maintenance schedule. The maintenance team is split into two groups, one dealing only with software and the other with all other issues. Meetings in Vienna and Geneva have been held. A very interesting byproduct of these meetings will include proposed modifications to the safe failure fraction (SFF) and combining two channels on one chip.

IEC61511 had its meeting in Rome. The 1st meeting was dedicated to a complete review of the normative session by all committee members. A preponderance of editorial comments resulted, although SFF was discussed in this meeting as well.

ISA TR84.00.02 – Parts 1, 2, 3, 4, and 5: Safety Instrumented Functions (SIF) – Safety Integrity Level (SIL) Evaluation Techniques (Leaders: Angela Summers and Larry Suttinger):

Maintenance on this TR was begun at the Orlando meeting. Initial goal is to try to reduce the number of parts and to clarify SIF quantification approaches.

ISA TR84.00.03 -2002: Guidance for Testing of Process Sector Safety Instrumented Functions (SIF) implemented as or within Safety Instrumented Systems (SIS): (Leader: K. V. Gandhi)

This TR is due for its five year maintenance cycle. Two key issues were addressed in Orlando, as follows:

1. Staffing the maintenance team with necessary talent to address this complex problem
2. Ensure harmonization with ISA SP96 addressing the developing safety valve standard.

ISA TR84.00.04 – Parts 1 and 2: Guidelines for the Implementation of ANSI/ISA 84.00.01-2004(IEC 61511 mod): (Leader: Angela Summers)

ISA TR84.00.04, Part 1 (Guideline on the Implementation of ANSI/ISA 84.00.01-2004 (IEC 61511 mod)) and Part 2 (Example of the Application of ANSI/ISA 84.00.01-2004 (IEC 61511 mod)) are complete and are available as ISA Standards.

ISA dTR84.00.05 - The Application of ANSI/ISA 84.00.01-2004 Parts 1-3 (IEC 61511 mod) for Safety Instrumented Functions (SIF) in Burner Management Systems (BMS): (Leader: Dennis Zetterberg)

dTR 84.00.05 committee is reviewing and responding to comments to its draft TR.

Draft copies of the TR are presently being consolidated and edited for issue as a new TR draft>

New TR draft version will be issued to SP84 for an official vote.

ISA dTR 84.00.06 - Safety Field-bus Design Considerations for Process Industry Sector Applications: (Leader: Robert Adamski):

The scope of the dTR84.00.06 is to:

- a) Develop guidelines and/or technical reports to assist users implementing any and all field-bus technologies in safety instrumented systems. Guidance and good engineering practice recommendations cover the application of both safety field-bus protocols and safety field bus devices.
- b) Review the use of field-bus technologies and develop additional requirements not included in ISA 84.00.01-2004 (IEC 61511 mod),

- c) Recommend changes or additions to developing guidelines for existing process sector functional safety standards (e.g. ISA 84.00.01-2004 (IEC 61511 mod)),
- d) Recommend future upgrades (i.e., during maintenance cycles) to newly issued functional safety standards (e.g., IEC 61511) based on these requirements,

Status: Draft version is presently issued for SP84 ballot.

Working Group 4 (WG 4) – Develop a Technical Report on Electro-Magnetic Compatibility (EMC) issues for Safety Instrumented Systems. (Chairman is Tim Layer):

The previous status provided has not change. WG 4 has been collecting information on current industry practices on this issue. Progress has been slow since team members with good engineering practices have been unable to meet to share their data.

Working Group 5 (WG 5) – Develop a Technical Report on Software Quantification for Safety Instrumented Systems. (Leader: Janet Flynt)

This subject shall be addressed in TR84.00.02 maintenance.

Working Group 6 (WG 6) – Fire and Gas (FGS). (Leaders: Michael D. Scott and Robert Seitz)

WG 6 is a spin-off of the BMS effort (dTR84.00.05).

The Orlando meeting resulted in the following:

The FGS sub-committee has been actively working on developing a reliability model to address the differences between preventative and mitigative instrumented functions. This model was presented to the S84 committee at the President’s Meeting in Orlando, FL.

Based upon the S84 committee’s notice to proceed with our current direction, the FGS sub-committee has held several subsequent meetings in Houston, TX to forward development of sample calculations based upon the reliability concepts developed to date. A sample calculation for fire scenario has been developed. This sample calculation and supporting text shall be issued to the working group for review / comment at the upcoming ISA EXPO.

Based upon working group members feed back, we envision subsequent development of sample calculations for combustible and toxic gases to be tackled as our next step towards overall completion of the TR.

On a side note, the working group is also attempting to coordinate with NFPA with regards to performance based Fire System Designs. Surprisingly enough, NFPA has endorsed performance based design concepts and actually has issued several standards that support this effort.

NFPA 550: Guide to Fire Safety Concepts Tree (Has a reliability model in included that matches what the working group developed on our own!!)

NFPA 551: Guide for the Evaluation of Fire Risk Assessments

The working group is very nicely aligned with the direction traditional fire design is heading with regards to performance based designs for schools, hospitals, hotels, etc. which is a very pleasant surprise. Thus, WG 6 simply need to overlay current process industry direction on performance based designs with the traditional fire system performance based concepts and WG 6 should be able to extract the best of both positions in our TR efforts.

The working group is also coordinating with CCPS and has agreed to review a concept book they are in the process of developing entitled “Placement of Remote Sensors to Detect Catastrophic Chemical Release”.

SP91 (Chair: Richard R Dunn)

ISA TR 91.00.01 – Identification of Emergency Shutdown Systems and Controls That Are Critical to Maintaining Safety in Process Industries: (Leader: Richard R Dunn)

This Technical Report is due for its five year maintenance.

ISA-SP67 Committee Report to S&P Board Submitted by William G. Sotos

ISA67 Committee Status – Chairman W. Sotos

The committee last met on June 6, 2006 in San Jose, CA. The primary focus of this meeting (similar to other recent meetings) was an ongoing issue with the Nuclear Regulatory Commission regarding the calculation of allowable values that SP67.04 is addressing, 67.04 activity, the status of SP67.03, subcommittee membership and subcommittee vacancies.

Klemme Herman and Tom Burton were added as voting members of the committee.

The ISA67 committee plans to next meet in Pittsburgh, PA during the ISA POWID Conference to be held June 10-15, 2007.

Subcommittee Status

ISA67.01 *Transducer and Transmitter Installation for Nuclear Safety Applications*
Chairman – Vacant

The existing standard will go out for reaffirmation next year (2007).

ISA67.02 *Instrument Sensing Line Piping and Tubing Standards for Use in Nuclear Power Plants*
Chairman – Vacant

The existing standard is out for reaffirmation. A chairman will be named should a revision be required. There have been some comments regarding tubing slope that require resolution. Jerry Voss has volunteered to assist in resolving these comments.

ISA67.03 *Reactor Coolant-Pressure-Boundary Leak Detection*

Chairman – Vacant

The basic point of interest is Reactor Coolant System (RCS) Leak-Detection. A revision was prepared several years ago but no action taken. However, because of recent industry events, interest in this standard has increased. The SP67 committee has determined that there is a need for this standard and therefore is reactivating the committee with the intention of issuing a revised, updated standard.

Ivan Sturman, the past chairman of this committee, expressed interested in restarting and working through Hukam Garg's (NRC reviewer and member of SP67) comments on this document. As a result he has been elected as chairman once again. Bruce Rauch was elected as Vice Chairman and is expected to assist in leading this committee. Ivan Sturman was also added to the SP67 committee roster.

ISA67.04 *Setpoints for Safety-Related Instrumentation Used in Nuclear Power Plants*
Co-Chairmen – J. Voss and R. Fredricksen

Since the last report, the chairmanship has changed. Bob Queenan has stepped down after successfully getting the revised standard approved and published. Bob has been replaced by two Co-Chairmen – Jerry Voss and Bob Fredricksen.

This is the most active committee right now. ANSI/ISA-67.04.01-2006 has been published as of May, 2006. This was a significant revision because it removes the concept of Allowable Values and replaces them with performance based acceptance criteria.

The subcommittee has been charged with revising recommended practice 67.04.02 to ensure that it is reflective of the latest revisions made to standard 67.04.01. A draft is to be ready for ballot by June, 2007. In order to meet this aggressive goal, revisions to the recommended practice will be minimized to only address issues related to the newly revised standard. There are numerous other issues beyond this that will need to be discussed further but will be addressed after the recommended practice is revised next year. Several teleconferences and face-to-face meeting will be scheduled to work on the revision.

A revised Scope and Purpose statement for the recommended practice was approved by the subcommittee and will be forwarded on for the necessary approvals. The revised Scope and Purpose will be sent out via email for approval by the SP67 committee.

We are also considering splitting the subcommittee into two separate subcommittees, one for the standard and one for the recommended practice. No decision on that has been made at this time.

ISA67.06 *Response Testing for Nuclear Safety-Related Instrument Channels in Nuclear Power Plants*
Chairman – J. Redmon

This committee is currently not active however the standard is to be sent out for reaffirmation next year (2007). There are some issue that may require addressing but these have not yet been clearly identified. It is intended that the balloting process handle any new issues.

ISA67.14 *Qualification and Certification of Instrument and Control Technicians in Nuclear Power Plants*
Chairman – Vacant

All US nuclear power plants use other guidance for training and qualification of their I&C technicians. Some non-power nuclear facilities may still use the standard but this is a very small group. Based on previous meeting discussions and recent feedback, it has been decided that the standard will be formally balloted for withdrawal. Several SP67 members have objected to the withdrawal of this standard so the balloting process will determine whether or not we keep this standard current (including ANSI approval), keep the standard but let the ANSI approval lapse, or withdraw the standard. We intend to ballot this in late 2006.

ISA67.16 *Safety Related, Digital Based System Upgrades at Nuclear Power Plants*
Chairman W. Sotos

The committee is inactive including all working groups.

ISA67.17 *Installation of Non-Conductive Fiber Optic cable in Nuclear Power Plants*
Chairman - Open

This committee is still in the formative stage. It intended to have its first meeting in San Diego (June, 2002) but was unable to meet due to the chairman's unavailability (work related). Further activity is on hold until such time a new chairman is found and a viable committee formed. Interest appears to be minimal at this writing.

Other Items

The topic of new plants and new standards was discussed. The SP67 committee will likely form a subcommittee or working group to address these issues. Rick Tuley has volunteered to take the lead in this.