



**IEEE SUBCOMMITTEE ON QUALIFICATION  
IEEE/NPEC/SC-2 Meeting 09-02**

**Lido Beach Resort  
700 Ben Franklin Drive  
Sarasota, FL 34236  
Phone: 941-388-2161**

**November 10-11, 2009**

**Tuesday, November 10, 2009: 8:00 am to 5:00 pm**

**A. BUSINESS**

1. **Call to order** *J. Parello*

2. **Introductions, Approval of Agenda** *J. Parello*

2.1 Quorum Roll Call

The meeting was called to order at 8:00 am, with 38 members present. 76% of the membership was present.

2.2 Identification of Guests / Local IEEE Student Branch

None

2.3 Approval of Agenda and General Remarks

A motion was made by Walt Emerson to approve the meeting minutes. Nissen Burstein seconded the motion. The motion carried.

3. **Secretary's Report** *J. White*

3.1 Approval of Previous Meeting Minutes (SC-2/09-01)

It was noted that Tom Hency was misspelled within the action table. It was also noted that there were errors within the attendance list of the 09-01 meeting. These errors will be corrected and the record of attendance from the SC2-09-01 corrected. The meeting minutes as amended were unanimously approved. A motion was made by Nissen Burstein to approve the meeting minutes. Robert Queenan seconded the motion. The motion carried.

3.2 Status of Action Items

Item No.	Description	Responsible	Status
<b>Action Items from Meeting 07-2</b>			
AI-07-2-2	A PAR extension needs to be issued for P1682 (Fiber Optic Cables, Connectors, Splices).	Jan Pirrong	Closed

Item No.	Description	Responsible	Status
AI-07-2-3	Invite local IEEE chapter of the town in which we are meeting to an evening speech at the next meeting.	Nissen Burstein	Closed
AI—07-2-5	Check situation regarding joint logos and report back to SC and NPEC.	Nissen Burstein	Closed
AI-07-2-6	Verify ballot process w/NPEC, particularly regarding P-627 and P-1682	Nissen Burstein	Closed
<b>Action Items from Meeting 08-1</b>			
AI-08-01	Review P627 by 4-23-08 and send comments to Dave Horvath	All	Closed
AI-08-02	Preview P1682 at SC-2 08-02	Jan Pirrong	Closed
AI-08-03	Prepare revision to SC-2 O&P manual	SC-2 Vice-Chairman	Closed
<b>Action Items from Meeting 08-2</b>			
AI-08-03	Evaluate CM for Joint IEC/IEEE and Prepare PAR	Jim Gleason	Closed
AI-08-03	Evaluate EQ for Joint IEC/IEEE and Prepare PAR	Jim Gleason	Closed
<b>Action Items from Meeting 09-01</b>			
AI-09-01	WG presentation on P1682 status – preview All technical issues resolved	Jan Pirrong	Closed
AI-09-02	Preview P1682 at SC-2 09-02	Jan Pirrong	Closed
AI-09-03	Hotel information Germany, Paris, Frankfurt	Nissen Burstein	Closed
AI-09-04	Hotel information Sweden	Kjell Spang	Closed
AI-09-05	Hotel information in conjunction with SC 45A	Jim Gleason	Closed
AI-09-06	Hotel information Germany	Frank Drumm	Closed
AI-09-07	Hotel information London	Tom Hency	Closed
AI-09-08	Begin Reaffirmation process for IEEE 334	Bill Newell	Open
AI-09-09	Determine Host for 10-01 reception	James Parello	Closed
AI-09-10	Consider an update of IEEE 650 standard for UPS	Dennis Dellinger	Closed
<b>Action Items From Meeting 09-02</b>			
A1-10-01	Develop Par for revision of IEEE 334 to address Intermediate Duty Motors. The PAR will be issued by SC2 10-01 meeting.	James Dean	Open
A1-10-02	P1682 - Issue preview by SC2 10-01 meeting.	Jan Pirrong	Open



Item No.	Description	Responsible	Status
A1-10-03	Issue new procedure for working groups for base-line operating procedures. A draft for all working groups will be developed. A draft procedure will be provided prior to the SC2 10-01 meeting.	Nissen Burstein	Open
A1-10-04	Review condition Monitoring IEC documents and provide comments within the specified time period	ALL	Open
A1-10-05	Finalize meeting details for the SC2 11-01 meeting to be held in Sweden. Meeting location and hotel information need to be finalized	Kjell Spang	Open
A1-10-06	Develop Par for revision of IEEE 650 standard for UPS.	Dennis Dellinger	Open

### 3.3 Status of Membership

#### NPEC

The current NPEC membership is 35. There are 10 NPEC members that are also members of SC2. Included within these 10 members are 3 new members. The new members are Dennis Dillinger, Dirk Hopp and Mark Tengler.

#### SC-2

The current membership for SC-2 is 50. Jim is attempting to maintain the membership between 54 and 58. WG Chairs are requested to nominate members of their WG to SC-2. Nominations should be active WG members. The nominees should have a minimum of 2 years participation within the WG. This applies to both international and national members.

Charles Hill will be nominated as a SC2 member in 2010.

### 3.4 Report of SC -2 Financial Status/Alligator Fund

01/01/2009	Opening Balance	\$ 854.55
04/07-08/2009	Collected at Knoxville Meeting	\$1,890.00
	Total Cash on Hand	\$2,744.55
	Cost of Meeting	-\$1,037.88
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	Balance	\$1,706.67

Meeting fee SC2 09-02 is U.S. \$ 30



4. **Chairman's Report**

*J. Parello*

4.1 Summary of SC-2 ADCOM

The meeting minutes from NPEC were not issued prior to the SC2 09-02 meeting.

4.2 Summary of NPEC Meetings (N09-02)

None provided

4.3 2009-2010 Goals: NPEC's and SC-2

Jim Parello discussed the SC2 goals.

Approved Goals for 2010 from the ADCOM meeting are:

- Improve Standards development/revision cycle time with electronic resources (IEEE balloting - process and e-mail contacts/voting)
- Continue collaboration with IEC on standards work leading to harmonization and/or joint logo
- Define Standards needed to be revised or created to remain relevant to new equipment (e.g. digital systems)
- Identify new standards to support new plant designs
- Reward SC-2 and SC-2 WG members with appropriate IEEE and NPEC Awards
- Recruit new members to the NPEC/SC-2 and SC-2 Working Groups
- Update and maintain the NPEC/SC-2 website
- Encourage the use of electronic media for WG meetings
- Publish updated versions of IEEE SC-2 standards as identified in the attached table.

5. **Vice-Chairman's Report**

*J. Gleason*

5.1 Reception

The Reception will be held on Tuesday 11/10/09

5.2 Meeting Schedule

10-1	April - May 2010	Las Vegas, NV
10-2	October 2010	West Coast Area
11-1	May 2011	International location - Sweden

There was a discussion regarding have the SC2 10-02 meeting in Seattle, WA in conjunction with the IEC meeting. There was a discussion that requested that adequate time must be provided for the SC2 working group meetings that did not conflict with other meeting of the IEC. There was a concern that attendance will be low for the SC2 working groups.



The primary reason for attending this meeting is for SC 2.1 to have a joint meeting with the IEC. None of the other working groups should have any significant conflict. Due to room availability the WG meetings may need to occur later in the week. There was a concern that the October meeting might conflict with utility outages.

Vote on Seattle Meeting – (yes 18) (No 5). The meeting will be held in Seattle in October 2010.

### 5.3 Status of International Meeting Locations

Kjell Spang has offered to host a meeting in Sweden. This offer is for the May 2010 meeting. Kjell has funding for the meeting that would include the rooms and the reception. The highest cost for a room in Stockholm will be approximately \$200 including breakfast. Other locations would be slightly lower, approximately \$180. In further discussions Kjell could extend the invitation for 1 year.

A motion was made to have a voted on whether to have the meeting in Sweden or Las Vegas. A vote was taken to stay with Las Vegas as the meeting location (20 - Yes, 11- No). The meeting will stay in Las Vegas.

Discussion was had on if we wanted to have a meeting in Sweden for the 11-01 meeting. A vote was taken to proceed with a meeting in Europe (27 yes). The motion for the meeting passed. Other international locations considered (London, Paris, Germany). A vote to have the meeting in Sweden or Germany was taken.

Sweden – 21 yes

Germany – 13 Yes

The 11-01 meeting will be held in Sweden.

## 6. **Previews**

### 6.1 SC 2.15: IEEE P-1682 (FO Cable Qual)

*J. Pirrong*

Jan provided a status preview of P1862. The actual preview will occur at the SC2 10-02 meeting. The PAR for the project has been extended into 2012. The presentation is located in file “P1682 Status Update SC2 111009”.

### 6.2 SC 2.1: IEEE/IEC P62582 Series (Condition Monitoring)

*J. Gleason, K. Späng*

Kjell Spang presented the overall status of the project and the specific standards to be issued. It is anticipated that the standards may be provided to the SC2 membership as early as December 2009. It is the goal to have approval by SC2 by 12/16/09 and submit the documents for approval by NPEC in January of 2010. The presentation is located in “IEEE SC-2 update Nov 2009”



## B. DISCUSSIONS AND UPDATES

1. Status of IEEE 323 and IEC 60780 (Dual Logo) *J. Gleason, K. Spång*

Par approved early this year. A meeting was held on 11/09/2009 in conjunction with this meeting. The focus of the ongoing effort will be to resolve differences in the two standards. The group is focusing on the technical aspects of the standard not the administrative differences between IEEE and IEC. Condition Monitoring is being addressed in a new section of the document. The document will provide specific direction on how condition monitoring is applied and its relationship the accident scenario. The other new areas are EMI/RFI and digital equipment qualification.
2. Status of IEEE 535 Battery Qualification *J. Gleason*

The group realized that IEEE 535 had revised their standard independent of SC2. There was a difference in the mission time of the batteries. The difference is in the short duration requirements that are currently addressed and the long term SECY requirements of 72 hours for the new plant passive design.
3. W-AP1000 EQ Program Update *S. Channarasappa*

Mr. Channarasappa's presentation was not provided.
4. GE-ESBWR/ABWR EQ Program, Update *E. Mohtashemi*

All EQ testing is complete for EBWR. ESBWR DCD Rev 6 submitted to NRC in August 2009. With all RAIs addressed.
5. US EPR EQ Program, Update *N. Burstein*

Mr. Burstein presented the status of US EPR EQ. The presentation is contained in file "USEPR Environmental EQ Update"
6. Mixed Oxide (MOX) Fuel Fabrication Project *J. Gleason*

Mr. Gleason presented the status of MOX project. His presentation was based information contained on the MOX web site, and can be found at [www.moxproject.com/about/](http://www.moxproject.com/about/).
7. FORSMARK Lessons Learned *T. Koshy*

Mr. Koshy presented the FORSMARK lesson learned. His presentation is contained in file "IEEE-Forsmark- Lesson learned"
8. Discussion on recently released Regulatory Guides and Seismic Margin ISG *N. Burstein*

Mr. Burstein's presentation is contained in file "ISG-20 summary for SC-2-09-2 mtg.doc".
9. DIN-Rail Terminal Blocks Update *A. Offner*

Mr. Offner's presentation is contained in file " DIN-Rail - IEEE SC2 Presentation\_Nov\_2009".



### C. Working Group and Liaison Reports

1. SC 2.1: IEEE Std. 323 (Electric Equip EQ) *J. Gleason*  
 The working group is continuing to work on an IEC/IEEE joint logo standard and the condition monitor standards that are being developed with IEC. All PARS are in place and work is preceding.
2. SC 2.2: IEEE Std. 334 (Motors) *B. Newell, J. Dean*  
 The next PAR will introduce intermediate duty motors into the standard. The PAR will be issued next year
3. SC 2.3: IEEE Std. 382 (Valve Operators) *E. Mohtashemi*  
 A conference call will be held for the next working group meeting. This will occur later in the week of 11/8/09. The group will decide on when a PAR will be issued during this meeting. The working group is waiting on NRC comments.
4. SC 2.4: IEEE Std. 383 (Cables) *J. White*  
 A PAR for the revision of the standard has been issued.
5. SC 2.5 IEEE Std. 344 (Seismic) *J. Parello*  
 The presentation is contained in file "IEEE 344 Status Report 11\_2009 jp1"
6. SC 2.6: C37.98 (Relays Seismic Qual) *M. Nemier,  
S. Channarasappa*
7. SC 2.10: IEEE P-627 (Overall EQ) *D. Horvath*
8. SC 2.11: IEEE Std. 572 (Connectors) *W. Hadovski*  
 No activity
9. SC 2.13: IEEE Std. 650 (Battery Chargers) *D. Dellinger*  
 Standard is being revised to include UPS. Working group is also looking to expand.
10. SC 2.14: IEEE Std 649 (Motor Control Centers) *R. Francis*
11. SC 2.15: IEEE P-1682 (FO Cable Qual) *J. Pirrong*  
 Jan provided a status preview of P1862. The actual preview will occur at the SC2 10-02 meeting. The PAR for the project has been extended into 2012. The presentation is located in file "P1682 Status Update SC2 111009".
12. EPRI Liaison Report *C. Abernathy*  
 Get from chris.
13. ASME Liaison Report *G. Schinzel*  
 No report
14. IEEE/ASME NQA-1 Liaison Report *N. Burstein*  
 IEEE/ASME/QA Liaison report to SC-2/09-2, Sarasota. FL, 11/10, 2009  
 Mr. Burstein has not yet officially been accepted as a liaison member to the NQA-1 committee, but has been working on a project that should help to solidify the position.



Due to some procedural requirements, it appears that no new members, liaisons or otherwise, can be appointed prior to a general meeting, which occurred in October, 2009. Mr. Burstein has been submitted for membership. He is expected to be approved as a working group member. Particularly since he is an active member of a working group.

The WG is preparing Subpart 4.XXX to NQA-1, 2009, entitled "Application Guide on the Comparison of NQA-1A-2009, and International Atomic Energy Agency (IAEA) Safety Standard GS-R-3, The Management System for Facilities and Activities."

This is a new safety report to assist the global users of both requirements standards, NQA-1 and GS-R-3. As such, it is expected to fulfill the role that we have envisioned. For a US plant that must meet NQA-1, it provides guidance and a comparison for how an organization that conforms to GS-R-3, outside the US, can meet the NQA-1 requirements. Likewise, for an NQA-1 supplier, it provides guidance on how they can meet the requirements of GS-R-3 to effectively supply to a customer outside the US that needs to meet GS-R-3.

In other words, what a GS-R-3 supplier (e.g. Siemens) has to do to satisfy the requirements of an NQA-1 user (e.g. Duke Power). Alternatively, what an NQA-1 supplier (e.g. Rosemount) has to do to satisfy the requirements of a GS-R-3 user, such as OL-3.

The WG Chairman is from the USDOE

Project leader and Sponsor are with IAEA

Team members are from Germany, Slovenia, UK, Spain, and the US; representing Regulators, Utilities, equipment vendors, and NSSS Vendors.

The project deliverables and status is as follows:

#### NQA-1 and IAEA COMPARISON PROJECT

#### TASK & PUBLICATION SCHEDULE

JUNE 2009	Project planning & prepare 1st draft June 26th input to the introductory pages
JULY	Complete 1st draft July 1st telecon for discussion of input on introduction.
AUGUST	Release 1st draft via electronic administrative review & comment to NQA and BNCS and IAEA
SEPTEMBER	Prepare final draft for 1st ballot
OCTOBER	Oct. 4th - Release 1st ballot to NQA and BNCS for info Ballot close on Oct. 30th Notify IAEA staff Oct. ?? - Applications SC meeting to discuss major issues
NOVEMBER	2nd Ballot? BNCS Procedural Ballot
DECEMBER	ASME Publication
JAN. / FEB. 2010	2010 Addenda





A presentation was made in June to the ASME BNCS providing the status of the project. **The report is being made available as part of the meeting minutes/notes.**

15. ISA Liaison Report Bob Queenan  
Mr. Queenan's report is contained in file "ISA Liaison Report".
16. IEC Liaison Report Robert Wood

#### **D. WRAP-UP**

Motion made by Bob Queenan. Walt Emerson seconded the motion. The motion carried.

	Name/Company	Address	09-2 10/11	09-1 04/07	09-1 04/08
1	Abernathy, Chris Duke Energy Co. Tel: 704-875-4486 Email: <a href="mailto:cdabernathy@duke-energy.com">cdabernathy@duke-energy.com</a>	McGuire Nuclear Station M/C: MG05EE 12700 Hagers Ferry RD Hntersville, NC 28078	X	X	X
2	Akhtar, Saleem KCI Consultants Tel : 630-515-2650 x 20 Fax : 630-515-2654 Email: s.akhtar@comcast.net <a href="mailto:saleemakhtar@kciconsultants.com">saleemakhtar@kciconsultants.com</a>	1401 Branding Lane Suite 255 Downers Grove, IL 60515	X	X	X
3	Benson, D. Steven RCM Technologies, Engr Services Tel : 289-290-3647 Fax : 905-821-1613 Email: <a href="mailto:steve.benson@rcmt.com">steve.benson@rcmt.com</a>	6620 Kitimat Road, Unit 4 Mississauga, Ontario L5N 2B8 Canada	X	X	X
4	Brewington, T. (Tom) Wyle Laboratories Tel. (256) 716-4512 Fax (256) 837-3363 Email: <a href="mailto:tom.brewington@wyle.com">tom.brewington@wyle.com</a>	7800 Highway 20 West Huntsville, AL 35806	X	X	X
5	Burstein, N. M. (Nissen) – Chairman SC-2 AREVA NP, Inc. Tel. (434) 832-2501 Fax (434) 832-2683 Email: <a href="mailto:nmb@ieee.org">nmb@ieee.org</a>	3315 Old Forest Rd. M/C OF54 Lynchburg, VA 24506- 0935	X	X	X
6	Casadevall, S. (Steve) ASCO Valve Inc. Tel. (973) 966-2512 Fax (973) 966-2624 Email: <a href="mailto:scasadevall@asco.com">scasadevall@asco.com</a>	50 Hanour Road Florham Park, NJ 07932	X		
7	Channarasappa, S. (Suresh) Westinghouse Electric Co. Tel. (724)-733-6587 Email: <a href="mailto:channas@westinghouse.com">channas@westinghouse.com</a>	1760 Golden Mile Hwy. Monroeville, PA 15746	X	X	X
8	Dean, J. M. (James) SC 2.2 - 334 (co w/Newell) Applied Energy Services, Inc. Tel. (203) 888-1536 Fax (203) 888-1538 Email: <a href="mailto:jamesdean@aesnuclear.com">jamesdean@aesnuclear.com</a>	66 Chestnut Tree Hill Rd Oxford, CT 06478	X		

	Name/Company	Address	09-2 10/11	09-1 04/07	09-1 04/08
9	Dellinger, D. E. (Dennis) SC 2.13 - 650 Solidstate Controls, Inc. Tel. (614) 846-7500 Fax (614) 885-3990 Email: <a href="mailto:dennis.dellinger@Ametek.com">dennis.dellinger@Ametek.com</a>	875 Dearborn Drive Columbus, OH 43085	X		
10	DiBenedetto, Phil Email: <a href="mailto:Philip.didenedetto@shawgrp.com">Philip.didenedetto@shawgrp.com</a>				
11	Dougherty, M. (Mike) Rosemount Nuclear Emerson Process Tel: 208-865-1112 Fax: 208-865-1115 Email: <a href="mailto:mike.dougherty@emersonprocess.com">mike.dougherty@emersonprocess.com</a>	502 Fourth of July Creek Rd North Fork, ID 83466	X	X	X
12	Drumm, F. (Frank) Tyco Electronics Tel. +49-89-6089-567 Fax +49-89-6089-445 Email: <a href="mailto:fdrumm@tycoelectronics.com">fdrumm@tycoelectronics.com</a>	Tyco Electronics Raychem GmbH Finsinger Feld 1 85521 Ottobrunn, Germany	A		
13	Emerson, Walter Shaw Stone & Webster Tel. (617) 589-2686 Fax (617) 589-5501 Email: <a href="mailto:walter.emerson@shawgrp.com">walter.emerson@shawgrp.com</a>	100 Technology Center Dr Stoughton, MA 02072	X	X	X
14	Fargo, W. D. (Wells) Southern California Edison Co. Tel. (949) 368-9552 Fax (949) 368-9552 Email: <a href="mailto:wells.fargo@sce.com">wells.fargo@sce.com</a>	3214 Legendario San Clemente, CA 92673-3811			
15	Foley, Sean Email: <a href="mailto:sean.foley@afitele.com">sean.foley@afitele.com</a>		A	X	
16	Francis, R. L. (Robert) SC 2.14 - 649 Wyle Laboratories Tel. (256) 716-4315 Fax (256) 837-3363 Email: <a href="mailto:robert.francis@wyle.com">robert.francis@wyle.com</a>	7800 Highway 20 West Huntsville, AL 35806	X	X	X
17	Gleason, J. (Jim) SC 2.1-323/Sec'y SC-2 General Electric Hitachi Nuclear energy Tel. (910) 819-4786 Fax NA Email: <a href="mailto:jim.gleason@glseq.com">jim.gleason@glseq.com</a>	3901 Castle Hayne Rd, Wilmington, NC 28401	X	X	X
18	Gove, P. (Patrick) Black & Veatch Tel. (913) 458-7834 Fax. (913) 458-2491 Email: <a href="mailto:Govepa@bv.com">Govepa@bv.com</a>	11401 Lamar Overland Park, KS 66213		X	X

	Name/Company	Address	09-2 10/11	09-1 04/07	09-1 04/08
19	Hadovski, W. L. (William) SC 2.11 - 572 Westinghouse Electric Co. Tel. (860) 731-6258 Fax (860) 731-6256 Email: <a href="mailto:william.l.hadovski@us.westinghouse.com">william.l.hadovski@us.westinghouse.com</a>	2000 Day Hill Road Windsor, CT 06095	X		
20	Hencey III, T. (Tom) Scientech, division of Curtiss-Wright Tel. (727) 669-3047 Fax (727) 669-3100 Email: <a href="mailto:thencey@curtisswright.com">thencey@curtisswright.com</a>	1393 Indian Trail N. Palm Harbor, FL 34683	X	X	X
21	Hopp, Dirk C. Areva NP NLEC-G Tel. 49-9131-900-2766  Email: <a href="mailto:dirk.hopp@areva.com">dirk.hopp@areva.com</a>	Paul-Gossen-SHA00 Erlangen, 91052 Germany		X	X
22	Horvath, D. (Dave) SC 2.10 – P627 Advent Engineering Tel. (734) 930-7500 Fax (734) 327-7501 Email: <a href="mailto:dah@adventengineering.com">dah@adventengineering.com</a>	P.O. Box 555 24 Frank Lloyd Wright Blvd., Lobby C Ann Arbor, MI 48106		X	
23	Korsah, Kofi Email: <a href="mailto:korashk@ornl.gov">korashk@ornl.gov</a>				
24	Krause, Serena Trentec, Division Curtiss-Wright Tel. (513) 528-7900 x 121 Fax (513) 528-9292 Email: <a href="mailto:skrause@curtisswright.com">skrause@curtisswright.com</a>	4600 East Tech Drive Cincinnati, OH 45245			
25	Koshy, Thomas U.S. Nuclear Regulatory Commission Tel. 301-415-5828 Fax: 301-415-5074 Email: <a href="mailto:Thomas.koshy@nrc.gov">Thomas.koshy@nrc.gov</a>	USNRC Office of Research MS T-10M05 Washington, DC 20555	X	X	X
26	Lory, B. M. (Bruce) Stevenson & Associates Tel (847) 795-0500	4350 DiPaolo Center Suite H Glenview, IL 60025	X		
27	Martin, Darrin Email: <a href="mailto:darrin@synergyqualifications.com">darrin@synergyqualifications.com</a>			X	
28	Mikow, Daniel Email: <a href="mailto:Daniel.mikow@areva.com">Daniel.mikow@areva.com</a>		X	X	X
29	Mohiuddin, A. (Asif) Sargent & Lundy Tel. (312) 269-2752 Fax (312) 269-7041 Email: <a href="mailto:asif.mohiuddin@sargentlundy.com">asif.mohiuddin@sargentlundy.com</a>	55E. Monroe 23C41 Chicago, IL 60603	X	X	X

	Name/Company	Address	09-2 10/11	09-1 04/07	09-1 04/08
30	Mohtashemi, E. (Edward) GE Nuclear Energy Tel. (408) 925-1844  Email: <a href="mailto:edward.mohtashemi@ge.com">edward.mohtashemi@ge.com</a>	175 Curter Avenue M/C 788 San Jose, CA 95125	X	X	X
31	Mohr, Charles (Chuck) Enercon Tel. (678) 354-8354 Fax: Email: <a href="mailto:cmohr@enercon.com">cmohr@enercon.com</a>	1345 Ridgeland Pkwy Suite 130 Alpharetta, GA 30004	X	X	X
32	Nemier, Marie Email: <a href="mailto:mnemier@curtisswright.com">mnemier@curtisswright.com</a>		X	X	X
33	Newell, W. (Bill) SC 2.2 – 334 (co w/Dean) Electric Motor & Contracting Tel. (757) 487-2121 Fax (757) 487-5983 Email: <a href="mailto:wgnewell@att.net">wgnewell@att.net</a>	3703 Cook Blvd. Chesapeake, VA 23323	X	X	
34	Parello, J. (James) SC 2.5 – 344/Vice- Chair SC-2 Westinghouse Electric Co., LLC Tel. (724) 722-5545 Fax (724) 722-5497 Email: <a href="mailto:parellj@westinghouse.com">parellj@westinghouse.com</a>	1000 Westinghouse Drive New Stanton, PA 15672-9606	X	X	X
35	Pavsek, J. (Janez) Siemens Slovenija, I&S Tel. 044-39-746-221 Fax 044-1-474-6106 Email: <a href="mailto:janez.pavsek@siemens.com">janez.pavsek@siemens.com</a>	Bratislavska 5 S1-1000 Ljubijana, Slovenia	X		
36	Pegge, Chris Email: <a href="mailto:cpegge@strantech.com">cpegge@strantech.com</a>		X	X	X
37	Pirrong, Jan S. SC 2.15 – P 1682 CableLAN Tel. (617)-803-0489 Fax (508)- 384-7811 Email: <a href="mailto:jpirrong@cablean.com">jpirrong@cablean.com</a>	8 Sherwood Drive PO Box 196 Norfolk, MA	X	X	X
38	Queenan, Robert Scientech Tel. (208) 524-9311 Fax (208) 524-9238 Email: <a href="mailto:rqueenan@curtisswright.com">rqueenan@curtisswright.com</a>	200 S Woodruff Ave Idaho Falls, ID 83401	X	X	

	Name/Company	Address	09-2 10/11	09-1 04/07	09-1 04/08
39	Roy, F. (Fred) Parker Hannifin Corporation Tel. 256-885-3811  Email: fred.roy@parker.com	Instrumentation Products Division 1005 A Cleaner Way Huntsville, AL 35805		X	X
40	Sandberg, S. (Steve) Rockbestos-Surprenant W&C Tel. (860) 653-8360 Fax (860) 653-8412 Email: <a href="mailto:steve.sandberg@r-scc.com">steve.sandberg@r-scc.com</a>	20 Bradley Park Road East Granby, CT 06026	X	X	X
41	Schinzel, G. E. (Glen) South Texas Project Tel. (361) 972-7854 Fax (361) 972-7073 Email: <a href="mailto:geschinzel@stpegs.com">geschinzel@stpegs.com</a>	P.O. Box289 Wadsworth TX 77483		X	X
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43	Steinman, Rebecca Email: RLS@adventengineering.com		X	X	X
44	Tengler, M. (Marek) Stevenson & Associates Tel.+420 377-350 233 Fax +420 377-350 230 Email: <a href="mailto:tengler@stevenson.cz">tengler@stevenson.cz</a>	VEJPRNICKA 56 Pilsen 34800	X	X	X
45	Van Uffelen, M. (Marco) Tel. +32 14-33-2638 Fax +32-14-31-1993 Email: <a href="mailto:mvuffele@sckcen.be">mvuffele@sckcen.be</a>	Boertang 200 ANS-ARI Building BR3 B-2400, Mol, Belgium		X	X
46	Weber, C. E. (Carl) Pacific Gas & Electric Co. Tel. (805) 545-4084 Fax (805) 545-6928 Email: <a href="mailto:cew2@pge.com">cew2@pge.com</a>	Diablo Canyon Power Plant P.O. Box 56 Avila Beach, CA 93424	X		
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49	Wood, R. T. (Richard) Oak Ridge National Laboratory Tel. (865) 574-5578 Fax (865) 576-8380 Email: <a href="mailto:woodrt@ornl.gov">woodrt@ornl.gov</a>	Bethel Valley Road P.O. Box 2008 Bldg. 3500, MS 6010 Oak Ridge, TN 37831-6010	X	X	
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X = Attended

A = Alternate