



## IEEE NPEC SC2 Fall Meeting 16-02

November 6-11<sup>th</sup>  
Clearwater Beach Sheraton Sand Key

### **SC-2 Rate \$182/night Includes Free Internet**

IEEE NPEC SC2 Fall Meeting 16-02 (OR copy and paste the following link into a web browser)  
<https://www.starwoodmeeting.com/events/start.action?id=1608247332&key=1F506839>

### **Hotel Address and Phone:**

1160 Gulf Boulevard Clearwater Beach, FL 33767

Phone: (800) 456-7263

<http://www.starwoodhotels.com/sheraton/property/overview/index.html?propertyID=914>

### **Airport Transportation**

<http://www.starwoodhotels.com/sheraton/property/area/transportation.html?propertyID=914>

**Sunday November 6<sup>th</sup>: ADCOM**

**3 PM - 6 PM: Coquina/3<sup>rd</sup> Floor** - SC-2 Officers/Past Officers and WG Chairs

**Monday November 7<sup>th</sup>: Working Group Meetings**

**8 AM - Noon: Cardita/5<sup>th</sup> Floor** - IEEE 344 (SC 2.5) Seismic

**9 AM - Noon: Conch/6<sup>th</sup> Floor** - Conformity Assessment Invitation Only

**Noon - 1:00 PM: Lunch** – Not Provided

**1 PM - 5 PM: Cardita/5<sup>th</sup> Floor** - IEEE 627 (SC 2.10) Overall EQ

**1 PM - 5 PM: Conch/6<sup>th</sup> Floor** - Conformity Assessment Invitation Only

**Tuesday November 8<sup>th</sup>: Working Group Meetings**

**8 AM - 11AM: Cardita/5<sup>th</sup> Floor** – IEEE P2425 (SC 2.16) EMI/EMC

**9 AM - Noon: Conch/6<sup>th</sup> Floor** – IEEE 1682 (SC 2.15) Fiber Optic

**10 AM - Noon: Sundial/4<sup>th</sup> Floor** – IEEE 649 (SC 2.14) Motor Control ?

**Noon - 1:00 PM: Lunch** - Rusty's Dining Room **(Included)**

**1 PM - 2 PM: Cardita/5<sup>th</sup> Floor** - 60780-323 (SC 2.1) EQ White Paper

**2 PM - 3 PM: Cardita/5<sup>th</sup> Floor** - IEEE 383 (SC 2.4) Cable EQ White Paper

**3 PM - 5 PM: Cardita/5<sup>th</sup> Floor** - IEEE 572 (SC 2.11) Connectors

**1 PM - 5 PM: Conch/6<sup>th</sup> Floor** - IEEE 382 (SC 2.3) Actuators

**1 PM – 5 PM: Sundial/4<sup>th</sup> Floor** - TBD

Reception 6 pm to 8 pm: Pool Deck Weather Permitting (Beach Room Otherwise):  
Open Bar & Hors D'oeuvres

**Wednesday November 9<sup>th</sup>: SC-2 Meeting**  
**8:30 AM - 5:00 PM: Sand Key Room**

**A. BUSINESS**

**Call to order – Ed Mohtashemi (Filled in for absent Robert Konnik)**

• **Introductions – Ed Mohtashemi**

Safety brief regarding the event in nuclear safety for the day. Lesson learned-  
Reminder of IEEE patent slides

**a. Roll Call - J. Cornelius**

30 of 44 members present, quorum met

**b. Identification of Guests - E. Mohtashemi**

**c. Approval of Agenda and General Remarks – E. Mohtashemi**

Motion moved to approve. See Attachment 1.

**d. Meeting Fee - \$50 - Includes all WG meeting room fees**

Collected at the break

• **Secretary's Report – J. Cornelius**

**a. Approval of Previous Meeting Minutes –**

Posted on the website- Motion moved to approve.

**b. Status of Action Items**

Suggestion from floor to add action to investigate meeting fee payment via PayPal

**c. Status of Bio Book Update: Rebecca Steinman**

Send in any updates of photos or information updates to Rebecca Steinman - check against current member list to verify all members included

**d. Report of SC 2 Financial Status/Alligator Fund**

SC-2 (16-1) Meeting April 2016 Seattle, Washington

Balance Prior to Meeting: \$3657.70

Collected at 16-1 Meeting: \$2940.00

Cost of 16-1 Meeting: \$328.22

Balance (9/12/16): \$6272.53 (Includes 3.05 acquired int.)

### 3. Chairman's Report – E. Mohtashemi

#### a. Summary of SC 2 ADCOM

Topics discussed were:

- PayPal
- 17-01 meeting location
- New secretary Marie Nemier
- Awards submitted to NPEC
- New NPEC membership applications being reviewed
- Recognition of past chairs
- Liaison requested for NQA-1 and ASME with IEEE
- Update working group rosters by chair
- Waiting to update SC-2 procedures after NPEC complete
- Working groups should identify vice chair

#### b. Summary of NPEC Meeting

Topics discussed were:

- Next NPEC meetings are:
  - 17-01 New Orleans, LA February 7-8, 2017
  - 17-02 Niagara Falls/Buffalo, NY July 2017
- Cybersecurity task force
- IEEE definitions
- Plan presented for awards
- Modernizing (digital) of fleet - IEEE 603
- DNP-efficiency, value
- New proxy procedures
- IAEA technical presentation on evolution of safety guidance (acceptable solution for RPC, 3 phases)
- Discussion of failure modes-open phases conditions, new plant electrical separation-making more fault tolerant electrical system, failure of one train does not impact others
- New officers Tom Koshy - Chair, Darryl Harmon – Vice Chair, John White - Secretary
- My Project redesign project to be complete in April 2017-Malia will have presentation at next meeting

#### c. Status of Required Project Revisions

Last page of the agenda provides status and working group chairs will provide status later in agenda

#### d. Awards

See previous discussion under Adcom meeting

#### 4. Vice-Chairman's Report – E. Mohtashemi

##### a. Meeting 17-1: Week of April 30<sup>th</sup> San Diego Marriott

Link sent prior to the meeting today

##### b. Meeting 17-2: Around Week of November 6<sup>th</sup>

Note: ICC Oct 29-Nov 1 in Hollywood, FL per Ed Moldanato

An attempt will be made to meet with NPEC.

#### 5. Previews

##### a. None

#### B. 10:30 AM – Noon: Working Group and Liaison Reports

##### a. SC 2.1: IEEE Std. 323 (Electric Equip EQ) J. White

White paper in process, award received from NPEC at next meeting

##### i. IEEE/IEC 62582-6 K. Spång

Kjell providing update since Seattle there was one meeting regarding insulation resistance measurements during LOCA, 2<sup>nd</sup> draft for comment to be approved by group to be issued for approval-not voting just comments

Discussing new standard on insulation resistance

##### b. SC 2.2: IEEE Std. 334 (Motors) J. Dean/B. Newell

No update, expires in 2022

##### c. SC 2.3: IEEE Std. 382 (Valve Operators) E. Mohtashemi

New PAR to be issued in March meeting

**d. SC 2.4: IEEE Std. 383 (Cables)** R. Konnik

White paper drafted and in process

**e. SC 2.5: IEEE Std. 344 (Seismic)** J. Parello

Many guests present, process in white papers, PAR drafted to develop a joint logo with IEC 60980

**f. SC 2.6: C37.98 (Relays Seismic Qual)** S. Channarasappa/  
M. Nemier

No activity, expires in 2023

**g. SC 2.10: IEEE 627 (Overall EQ)** R. Steinman

Not working on standard, no activity

**h. SC 2.11: IEEE Std. 572 (Connectors)** G. Elam

- Draft PAR requires approval from working group then present to NPEC
- Identify proposed working group membership, identify what areas of the standard that are going to be updated
- Is there a possible joint logo standard? Not enough time to harmonize due to time needed to complete. Sven suggested that there is no IEC active standard currently.
- Suggestion to add chemistry to list in PAR
- Adding reference to IEEE 1682
- Need a flow chart for PAR approval and standard approval steps

**i. SC 2.13: IEEE Std. 650 (Battery Chargers)** D. Dellinger

Developing preview for next NPEC meeting, SC-2 approved by electronic review

**j. SC 2.14: IEEE Std. 649 (Motor Control Center)** R. Francis

Assembling working group members to draft PAR, preview at SC-2 17-01.

**k. SC 2.15: IEEE 1682 (Fiber Optic Cable)** J. Pirrong

Reviewing comments and working on white paper

Is this a possible consideration for joint with IEC?

**I. SC 2.16: IEEE P2425 EMI/EMC**

S. Channarasappa

PAR approved in May and working group met, 27 guests and members present

**m. Conformity Assessment Committee**

J. White

Met with IEEE mgmt., increase overall nuclear safety, working with legal team on how to proceed, scheduled to be brought up in front of board of governors (BOG), 10 people went thru ISO 17025 training, audit delayed in Q2 2017 then mfgs, add link to white paper

**Noon - 1:00 PM: Lunch Rusty's Dining Room  
Sponsored by RSCC Wire & Cable LLC**



**n. EPRI Liaison Report**

Chris Abernathy

Chris was unable to attend the meeting-no report available

**o. NRC Liaison Report**

Tom Koshy

- Severe accident rulemaking-need to consider the loss of off-site and diesels but DC power supplies and inverter power is still available.
- ACRS meeting next week
- Awaiting NuScale application
- IEC-IEEE 60780/323-2016 will be used to update Reg Guide 1.89
- OPC issue enforcement ruling awaiting
- Using new term-augmented quality-nothing safety related
- NuScale approval based on NUREG-0800 for SMRs

**p. ISA Liaison Report**

Bob Queenan

Bob was unable to attend the meeting-no report available

**q. ASME Liaison Report**

Open

No report

**r. IEEE/ASME NQA-1 Liaison Report**

Open

No report

**s. IEEE ICC Liaison Report**

Art Maldonado

See attached presentation.

**C. 2:00 PM to 4:45 PM: Presentations**

**a. Motor Lead Cable**

Eric Rasmussen-RSCC

**b. EMI/RFI Considerations For Nuclear Power Plant Upgrades-**

Chad Kiger-AMS

**D. 4:45 PM to 5:00 PM: Wrap-Up**

**a. Old Business**

None

**b. New Business**

None

**c. Next Meeting – May 2017**

Ed Mohtashemi - Chairman

Johnathan Cornelius - Vice-Chair

Marie Nemier - Secretary

**d. Adjournment**

Approved

**Thursday November 10<sup>th</sup>: IEEE/IEC 62582 Meeting**

**8:00 AM - 5:00 PM: Coquina/3<sup>rd</sup> Floor**

**IEEE/IEC 62582-6 IR**

**Friday November 11<sup>th</sup>: IEEE/IEC 62582 Meeting**

**8:00 AM - 5:00 PM: Coquina/3<sup>rd</sup> Floor**

**IEEE/IEC 62582-6 IR (Continue If Required)**

**Review & Determine If Revision Needed:**

**IEEE/IEC 62582-1 General**

**IEEE/IEC 62582-2 Indenter**

**IEEE/IEC 62582-4 OIT**



# If needed can pick appropriate standards to discuss what is needed in revision

## IEEE PES NPEC SC2 Standards

SC 2. Standard	Title	Status	Par Exp.	Expires
1	IEEE/IEC 60780-323: 2016	White Paper	NA	31-Dec-26
1	62582-1	Start?	NA	31-Dec-21
1	62582-2	Start?	NA	31-Dec-21
1	62582-2-am1	Published 2015	NA	31-Dec-21
1	62582-3		NA	31-Dec-22
1	62582-4		NA	31-Dec-21
1	62582-5	Published 2015	NA	31-Dec-25
1	P62582-6	In Process	31-Dec-19	
2	IEEE <a href="#">334-2006</a> R2012		NA	31-Dec-22
3	IEEE <a href="#">382-2006</a>		31-Dec-09	31-Dec-18
4	IEEE <a href="#">383-2015</a>	PAR	NA	31-Dec-25
5	IEEE <a href="#">344-2013</a>	IEC Harmonize PAR	NA	31-Dec-23
6	C37.98-2013		NA	31-Dec-23
10	IEEE <a href="#">627-2010</a>	In Process	31-Dec-20	31-Dec-20
11	IEEE <a href="#">572-2006</a> R2011	PAR	NA	31-Dec-21
13	IEEE <a href="#">650-2006</a>	NPEC February	31-Dec-17	31-Dec-18
14	IEEE <a href="#">649-2006</a> R2011	Start?	NA	31-Dec-21
15	IEEE 1682 - 2011	White Paper	NA	31-Dec-21

16	P2425	Standard for Electromagnetic Compatibility Testing of Electrical and Instrumentation and Control Equipment at Nuclear Power Generating Stations and Other Nuclear Facilities	In Process	31-Dec-20	
----	-------	--	------------	-----------	--