



**IEEE SUBCOMMITTEE ON QUALIFICATION
IEEE/NPEC/SC 2 Meeting 10-2**

**Marriott Renaissance Seattle Hotel
515 Madison Street Seattle, Washington 98104 USA**

Phone: (206) 583-0300

October 5-6, 2010

MEETING MINUTES

Tuesday, October 5, 2010: 8:00 am to 4:00 pm PST

A. BUSINESS

1. Call to order

J. Parello

The meeting was called to order at 8:10 am

2. Introductions, Approval of Agenda

J. Parello

2.1 Quorum Roll Call

Attendance

The meeting was called to order with 38 members in attendance. The members present were sufficient for a Quorum.

2.2 Identification of Guests

The members and guests were identified.

2.3 Approval of Agenda and General Remarks

A motion was made by Nissen Burstein to approve the meeting agenda. Robert Francis seconded the motion. The vote for approval was unanimous. The meeting agenda was approved.

3. Secretary's Report

J. White

3.1 Approval of Previous Meeting Minutes (SC-2/10-1)

There was no discussion on the previous meeting minutes.

A motion was made by Nissen Burstein to approve the meeting minutes. Robert Francis seconded the motion. The vote for approval was unanimous. The meeting minutes were approved.

3.2 Status of Action Items

3.3 Status of SC 2 Membership

The SC 2 membership stands at 52.

**3.4 Report of SC 2 Financial Status/Alligator Fund
(Meeting fee SC-2 (10-2): approx. U.S. \$ 40)**



The financial status of IEEE SC-2 at the end of the 10-1 meeting in Las Vegas was:

Collected at the meeting - \$3,340.00

Total Cash on Hand – \$5,537.80

Cost of Meeting from Rio All-Suite Hotel and Casino – \$3,358.18

Balance on 4/21/10 - \$2,179.62

This is the balance transfer to the incoming chairman, J. Gleason, in Oct. 2010.

4. **Chairman's Report**

J. Parello

4.1 Summary of SC 2 ADCOM

Future meeting locations were specifically addressed. A meeting in Europe is still being discussed, and will be discussed in detail during the Vice-Chairman's report.

See the attached Adcom meeting minutes for detailed information.

4.2 Summary of NPEC Meetings (N10-02)

Two members were added to NPEC; Suresh Channarasappa and Robert Francis.

Highlights of the meeting were:

Jim Gleason received the PES distinguished service award.

The OMP manual for NPEC has been approved.

There was a significant discussion on how SC2 may be able to reach local student groups. John White will work with Jodi Haaz to develop strategies on how to reach local student populations.

NPEC has established 5 new goals:

See attachment NPEC goals for 2011

See attachment NPEC10-2 Summary Meeting Notes

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

J. Gleason

5.1 Reception

The Reception is being sponsored by Westinghouse, Wyle, Black and Veatch, Kinectrics, Stevenson and Associates, Emerson, ASCO, RNII and Curtiss-Wright (QualTech).

5.2 Meeting Schedule

11-1 May/June 2011

Stockholm, Sweden or Germany

The proposed dates and locations were discussed:

Kjell – Central Goteborg – 180 US dollars – The host will cover meeting rooms, breakfast and lunch. Stockholm – Room On your Own – The host will cover meeting rooms and lunch. Goteborg is approx. 500 Km to Stockholm. The cost for the hotel will be approx. \$300 in Stockholm.

D. Hopp – Erlangen, Germany - Hotel approx. \$150



Goteborg – Was approved. The proposed dates are May 30, 31 and June 1. The second set was June 13, 14, 15. Kjell was to provide dates within the next two weeks. Kjell did this and the final dates of the meeting are established as June 15, 16 and 17, 2011

11-2 November 2011 – Washington DC

12-1 May/June 2012 Orlando, FL – Human Factor Conference
Requested to meet with NPEC

12-2 October/November 2012 - TBD

6. Work in Progress

6.1 SC 2.6: C37.98 (Relays Seismic Qualification) S. Channarasappa, M. Nemier

Get notes from Suresh – he will email

6.2 Condition-Based Qualification, IAEA T. Koshy

Get presentation.

6.3 NRC Inspections Matt McConnell

Matt provided the following:

In June/July 2010, the NRC performed an Inspection Procedure (IP) 37002 inspection focused on Tennessee Valley Authority's (the applicant) refurbishment program for Watts Bar Unit 2. Most of the equipment at Watts Bar Unit 2 was installed during the original construction period. Since layup activities were terminated for a period of time after 2001, it is necessary to ensure the equipment is still capable of meeting its required specifications. In order to address this concern, the applicant established a refurbishment program to identify the scope of equipment in the program, and perform appropriate activities to assure design standards are met (including environmental qualification of equipment). The applicant's general program procedure for refurbishment, 25402-000-GPP-0000-TI216, Watts Bar Unit 2 Completion Project Refurbishment Program, was submitted to NRC on July 8, 2009 and reviewed by the Office of Nuclear Reactor Regulation. This resulted in issuance of the NRC Safety Evaluation Report (SER) dated July 2, 2010. In general the SER review found the program to be acceptable. The general program did not specify specific components, structures, and commodities in detail to be covered. This inspection reviewed detailed scoping procedures and activities and selected actual implementation activities to confirm components, structures, and commodities were adequately covered. See Integrated Construction Inspection Report 05000391/2010606 for additional details (http://adamswebsearch2.nrc.gov/idmws/doccontent.dll?library=PU_ADAMS^PBNTAD01&ID=102300189).

In August 2010, the NRC performed an IP 71152 annual sample focused on environmental qualification (EQ) of electrical equipment at the Oconee Nuclear Station. The inspection covered one week of onsite inspection by a team of two Regional inspectors, two Nuclear Reactor Regulation representatives, and 1 Nuclear Regulatory Research representative. The team utilized



NRC Temporary Instruction 2515/76, "Evaluation of Licensee's Program for Qualification of Electrical Equipment Located in Harsh Environments" for general guidance. The team identified numerous findings which will be documented in an inspection report in a few weeks. The inspection report numbers will be 05000269/2010004, 05000270/2010004, 05000287/2010004.

The Inspection Report is now available and can be viewed at the following web address:

http://adamswebsearch.nrc.gov/idmws/DocContent.dll?library=PU_ADAMS^pbntad01&LogonID=e84271587a985e11367b808622b895fc&id=103060052

B. DISCUSSIONS AND UPDATES

1. NPEC Goals J. Parello

See attachment "NPEC Goals for 2011"

2. Status of IEEE/IEC P62582 Series (Condition Monitoring) K. Späng

The Chairman has requested that a flow chart and a working schedule be submitted to the the subcommittee

See attachment "SC-2Seattle KS.ppt"

3. Status of IEEE 323 and IEC 60780 J. Gleason, R. Wood

4. W-AP1000 EQ Program Update S. Channarasappa

See attachment "AP1000 Status – SC2 Meeting – october2010.ppt"

5. GE-ESBWR/ABWR EQ Program, Update E. Mohtashemi

6. US EPR EQ Program, Update N. Burstein

See attachment "USEPR environ update for SC-2-10-02"

7. Mixed Oxide (MOX) Fuel Fabrication Project J. Gleason

8. Valve Position Indication Greg. Merrifield, TopWorx
Emerson Process Management

9. Status of EGS Generation 3 QDC Qualification Darryl Deist, Scientech
Business Unit of Curtiss-Wright
Flow Control Company

See attachment "Gen 3 QDC Qualification Status Presentation"

Wednesday, October 6, 2010: 8:00 am to 11:30 am PST



B. DISCUSSIONS AND UPDATES (Continued)

10. Overview of International Cable WG Activities/Results *T. Koshy*
11. Management of EQ programs a Mochovce NPP Units 3/4 in the Slovak Republic *M. Tengler*

C. Working Group and Liaison Reports

1. SC 2.1: IEEE Std. 323 (Electric Equip EQ) *J. Gleason*
The harmonization with 60780 is continuing. This effort will continue throughout the week. Work is also ongoing with the Condition Monitoring IEC documents.
2. SC 2.2: IEEE Std. 334 (Motors) *J. Dean, B. Newell*
Par request submitted in September. A par should be issued by the end of the year.
3. SC 2.3: IEEE Std. 382 (Valve Operators) *E. Mohtashemi*
4. SC 2.4: IEEE Std. 383 (Cables) *J. White*
Work is continuing with the issuance of the PAR. There as been considerable discussion on the title of the document. The title will be resolved over the next couple of months.
5. SC 2.5 IEEE Std. 344 (Seismic) *J. Parello*
See Attachment "IEEE 344 Status Report 10_2010.ppt"
6. SC 2.6: C37.98 (Relays Seismic Qualification) *S. Channarasappa, M. Nemier*
7. SC 2.10: IEEE 627 (Overall EQ) *D. Horvath*
17 members on working group. The process was completed in approximately 30 months. The standard was published on June 4, 2010.
8. SC 2.11: IEEE Std. 572 (Connectors) *F. Roy*
Reaffirmation of the standard should be completed by the end of the year.
9. SC 2.13: IEEE Std. 650 (Battery Chargers) *D. Dellinger*
The working group will proceed with the request for a new PAR.
10. SC 2.14: IEEE Std 649 (Motor Control Centers) *R. Francis*
The reaffirmation process began this summer. During the ballot approximately 30 comments were reviewed, most of which were outside of the reaffirmation process. An editorial error was identified during the ballot process. The WG is working with IEEE to resolve the error and hopes to be completed by the end of the year.
11. SC 2.15: IEEE P-1682 (FO Cable Qualification) *J. Pirrong*
Document has been sent to the technical editors. The white paper for the document should be



completed in the next year and a half.

12. *EPRI Liaison Report*

C. Abernathy

Bill Newell discussed qualification efforts for motor insulation

13. *ASME Liaison Report*

G. Schinzel

See attachment "ASME Liason Report 1010_SC2.doc"

14. *NRC Liaison Report*

T. Koshy

See attachment "liaison report-2010-Oct.docx" Richard Wood also discuss the EPRI database for I&C digital systems in use.

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

N. Burstein

See attachment ASME liaison report to SC-2 10-2" - A comparison of the documents will be provided at the next meeting.

D. WRAP-UP

1. *Old Business*

None

2. *New Business*

Submit BIOs to Fred.

3. *Next Meeting*

June 15, 2011 – Goteborg Sweden

4. *Passing of the Gavel*

5. *Adjournment*

A motion was made by N. Burstein to adjourn the meeting, seconded by R. Francis. The motion carried.