



**IEEE Power & Energy Society (PES)
Nuclear Power Engineering Committee
N10-02 Meeting**

**Embassy Suites Lake Tahoe, South Lake Tahoe, CA
Wednesday, July 21, 2010**

1. Call to Order

J. MacDonald

The Chair, John MacDonald called the meeting to order at 8:00 AM and welcomed all members and guests to the NPEC N10-02 meeting in 2010 in South Lake Tahoe, CA. The Chair thanked Satish Aggarwal for his efforts in making the arrangements for the NPEC meeting and all the Subcommittee and Working Group meetings that occurred this week. Following the Chair's brief remarks, introductions were made by those present and their respective affiliations.

2. Introductions, Changes to Agenda

J. MacDonald

2.1 Quorum Roll Call

Quorum roll call was taken by the NPEC Secretary. 18 NPEC members out of 35 were in attendance. Therefore, a quorum has been established by have at least one-half of the members in attendance.

2.2 Approval of Agenda and General Remarks

The following changes were made to the draft NPEC N10-02 agenda:

- Item 3.4, delete the word "approximate"
- Item 4.1, Updates to Meeting Schedule
- Item 5.2, P1786 presentation will be given by Richard Browder
- Item 9.2, should read "N11-01 and N11-02"
- Item 11.1, NPEC Goals for 2010-11 assign to S. Aggarwal

The draft NPEC agenda was approved as amended.

2.3 Technical Council

PES Technical Council had a meeting on 7/2010. S. Aggarwal will be attending the PES Technical Council meeting representing NPEC. The NPEC Operating Procedure Manual is one of the items they will be voting on. PES has made organization changes to streamlining their processes. NPEC is considering future technical participation in the PES super session tentatively to occur in 2012 or 2013.

2.4 ADCOM

Details discussions held on the NPEC activities and goals and activities associate with IEC which will be discussed in other topics of this meeting.

2.5 NPEC Officers for 2011-2012

The Chair extended his heartfelt thanks to all the NPEC officers for their support over the past two years. The new NPEC officers starting in 2011 are:

- Satish K. Aggarwal, Chair
- George A. Ballassi, Vice-Chair
- James Parelo, Secretary
- Steve Fleger, Alternate Secretary
- Dan F. Brosnan, Awards Chair
- Nissen B. Burstein, Technical Sessions Coordinator
- John D. MacDonald, Past Chair
- Paul L. Yanosy, Standards Coordinator

3. **Secretary's Report**

G. Ballassi

3.1 Review and Approval of Previous Meeting Minutes

The minutes for NPEC Meeting N110-01 were approved by motion with the following corrections.

- a. Item 2.2.b, Name spelling correction: "Johnston" to "Johnson"
- b. Item 2.4.a, Delete the redundant wording "has been revised" in the sentence.
- c. Item 3.3.b, Name spelling correction: "Hop" to "Hopp"
- d. Item 12, Name spelling correction: "Cater" to "Carter"

3.2 Status of Action Items

See NPEC Action Items table for results.

3.3 Status of NPEC Membership (2010)

Presently we have 35 members.

3.4 Reptile Fund (Meeting fee N10-02, U.S. \$ 40)

Monies in NPEC account prior to the N10-01 meeting	\$1,656.84
Expenses accrued during meeting (including SC expenses)	\$1,463.01
Sub-balance of	\$193.03
Monies collected from N10-01 meeting:	
NPEC	\$740.00
ADCOM	\$550.00
Present total in NPEC account prior to NPEC 10-02 meeting	\$1,483.03

4. **Vice Chairman's Report**

S. Aggarwal

4.1 Meeting Schedule

11-01 Jan 2011 Dates: 1/24-1/26

Paradise Double Tree Hotel, Scottsdale, AZ

11-02 July 2011 Dates: 7/24-7/27

Marriott Hotel, Dana Pt, CA

12-01 Jan 2012 Dates: TBD

San Antonio, TX or a FL Location

12-02 May or June 2012 Dates: TBD

Orlando, FL (May) or San Antonio, TX (June)

To be held with the Human Factor (HF) Conference

The following schedule was proposed:

- WG & SC Meetings, Monday and Tuesday
- NPEC Meeting, Wednesday
- HF Conference, Monday through Wednesday

SC-2 is requested to meet in conjunction with NPEC at this meeting

4.2 Honors & Awards

D. Brosnan/S. Aggarwal

Gregg Riders was acting for Dan Brosnan. The following awards were presented.

- IEEE Technical Committee Working Group Recognition Award was issued to Working Group SC 2.5 (IEEE 344) Chair James Parelo and the working group members.
- IEEE Subcommittee Distinguish Service Award was issued to James Gleason.
- Letter will be issued to SC Chair later this year to identify all the IEEE awards available for recognition of member accomplishments.

4.3 Risk Coordinating Committee Report

S. Aggarwal

IEEE participates in the ASME/ANS Risk Coordinating Committee meetings. The goal of this committee is to determine how risk informed logic should be factored into their standards. This committee was formed after ASME and ANS organizations reached a formal working agreement to develop joint standards from a probabilistic risk assessment (PRA) prospective. The Risk Coordinating Committee meets 2-3 times a year.

IEEE Board was invited to join this joint arrangement but it was their decision was not to formally participate in the arrangement because standards with a joint logo (ANS/ASME/IEEE) arrangement would require administrative control which they presently do not have in place. IEEE keeps in contact as to the progress of the Risk Coordinating Committee through participation in the meetings through the NPEC Vice-Chair. George Ballassi will be taking over this responsibility in 2011. An ASME/ANS Risk Coordinating Committee report was pass around for information.

There will be a guest speaker at the next NPEC meeting to talk about PRA. Discussion will follow on how the IEEE standards which are mostly deterministic can use PRA and the advantages/disadvantages of doing so.

4.3 IEC Meeting S. Aggarwal

The IEC meeting will be held in Seattle, WA in the month of October 2010. This is a general meeting where all their technical and sub-committees will meet. NPEC normally deals with IEC TC 45. If any member wishes to participate in these meetings then please send an email to S. Aggarwal to attend the meeting as a guest. The list of potential guests will be transmitted to the American delegate (Bruce Cook) for his support in have our members attend as guests. SC-2 will be meeting in conjunction with the IEC TC 45 in the areas of harmonization of IEEE 323 and IEC 60780 and condition monitoring standards.

5. **Preview**

5.1 P1682 - Standard for Qualifying Fiber Optic Cables, Connections, and Optical Fiber Splices for Use in Safety Systems of Nuclear Power Generating Stations – Jan Pirrong

As a result of the presentation it was not noted that Section 3.1 the PAR will need to be revised to identify the P1682 document as a trial standard. Motion was made by J. Parello to accept the P1682 standard as written for trial use and approve to proceed to ballot. The roll call vote resulted in the motion carrying.

5.2 P1786 - Human Factors Guide for Applications of Computerized Operating Procedure Systems at Nuclear Power Generating Stations and Other Nuclear Facilities – Richard Browder

The P1786 standard is presently written to with considerations in being a harmonize document with an IEC standard which is also being written at this time. The IEC standard is presently under review. The future goal of the IEEE standard is to produce a dual logo standard with IEC.

Motion was made by S. Fleger to ballot the P1786 standard. The roll call vote resulted in the motion carrying.

6. **Technical Presentations**

6.1 Work In Progress (WIP) P338 - Standard Criteria for the Periodic Surveillance Testing of Nuclear Power Generating Station Safety Systems - Ted Riccio

6.2 "Tools of Design; A Standards-Guided Path to Nuclear Process Instrument Design," Weschler Instruments - Phil McClure

7. **Subcommittees' Reports**

7.1 SC2 J. Parello

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| 7.2 | SC3 | G. Schinzel |
| 7.3 | SC4 | G. Attarian |
| 7.4 | SC5 | S. Fleger |
| 7.5 | SC6 | D. Harmon |

8. **Liaison Reports**

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|-----|------|---------------|
| 8.1 | NRC | T. Koshy |
| 8.2 | ASME | Glen Schinzel |

See attached report.

IEEE is listed as a participant in the Risk Coordinating Committee ASME and ANS will be forming a joint committee with oversight from the ASME and ANS Standards Boards. They will be getting involved in PRAs in the nuclear area. There is a question on how IEEE will be involved. Jack Carter was requested to contact Don Spellman and request that he make an overview presentation to have a better understanding of the work being performed by ANS and ASME in the PRA area.

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| 8.3 | IEEE/ASME | Nissen Burstein |
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- See attached report.

9. **Nuclear Standards Activities**

Paul Yanosy

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|-----|---|
| 9.1 | Status of Balloting/ Standards Schedule |
| 9.2 | Previews/Work-in-Progress Reports for N11-01 and N11-02 |

10. **Unfinished/Old/Other Business**

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|------|------------------------------------|--------------|
| 10.1 | Liaison activities with IEC & ANS. | J. MacDonald |
|------|------------------------------------|--------------|
- See Section 8.2 for work being performed with ANS. Continue to work with IEC on joint logo standards.
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|------|----------------------------------|
| 10.2 | Status of NPEC Goals for 2009-10 |
|------|----------------------------------|
- There were four main goals
1. Continuous Improvement of NPEC's Role and Responsibilities
 - a. Up-date NPEC O&P Manual - Ongoing
 - b. O&P Manual training/awareness improvement – Ongoing
 - c. Use electronic techniques
 - d. Improve Standards development/revision time cycle with electronic resources
 - e. Increase use of the NPEC website

- f. Recruit new members to the NPEC organization
 - g. Reward active SC and WG members with appropriate IEEE and NPEC Awards.
- 2. Increase International Participation
 - a. Continue IEC joint logo work
 - b. Recruit international members
 - c. Up-date IEEE/IEC Standards diagram
- 3. Maintain and Revise Standards in-line with emerging Technologies
 - a. Identify the need for new IEEE NPEC Standards
- 4. Stay current with nuclear industry technology and processes.
 - a. Participate with Nuclear Risk Management group
 - b. NPEC meetings will include at least 2 technical presentations per year
 - c. NPEC standards on CD
- 10.3 Nuclear Energy Standards Coordinating Cooperative (NESCC) Activities

NESCC was originally form by DOE, NRC, and NIST. NESCC was developed to support nuclear standards organizations and stack holders. NESCC looks to improve the communications between organizations. NESCC is looking for gap or overlaps between existing industry standards and new standards. Not a directing committee. Look at standards in concrete and poly ethylene piping in the area of new or changing technology.

11. **New Business**

S. Aggarwal

11.1 NPEC Goals for 2010-11

- 1. Concentrate efforts in revising and updating all NPEC standards.
 - a. Purpose is to bring the NPEC standards up to date so we can be competitive in the market.
 - b. The goal is to revise all standards earlier then 2007 resulting in all NPEC standards being updated by 2012. This is a target to be achieved.
- 2. Develop new standards in the instrumentation & control area, including digital.
 - a. Companies overseas have made advancements in I&C area more so then companies in the U.S.
 - b. New standards are needed to support the new technologies and hardware in I&C area. Looking to define what I&C standards are needed to be generated.

4. Publish a minimum of eight joint-logo International Electrotechnical Commission (IEC) /Institute of Electrical and Electronic Engineers (IEEE) standards. Continue efforts in harmonizing nuclear safety standards, including close coordination with the International Atomic Energy Agency (IAEA) on safety guides.
 - a. The goal eight joint-logo standards is to be reached by the end of 2010
4. Solicit participation by technical experts in working groups and subcommittees from those with nuclear expertise outside the U.S. to make NPEC a truly international technical committee.
5. Solicit participation from young engineers in working groups and/or subcommittees.
 - a. Looking to obtain new young engineers and train them and bring them up to speed.

A show of hands was given to vote on accepting the NPEC Goals for 2010-11. The overwhelming majority accepted the NPEC Goals for 2010-11.

12. **Recap of Action Items** G. Ballassi
13. **Passing of the Gavel**
14. **Adjournment**

NPEC Action Items

Action Item No.	Assigned To	Description	Due	Status
N05-1-4	J. MacDonald	Continue review NPEC website mechanics for public versus private access.	01/2009	Open
N07-2-3	S. Aggarwal	Pursue coordination with IEC aggressively	07/2009	Open
N10-2-1	D. Brosnan	Issue letter will be issued to SC Chair identifying the awards available at different IEEE levels for recognition of membership accomplishments.	12/2010	Open
N10-2-2	J. Carter	Contact Don Spellman and request an overview presentation be made to NPEC for on the work being performed by ANS and ASME in the PRA area.	12/2010	Open