

**IEEE/PES  
Nuclear Power Engineering Committee (NPEC) Meeting Minutes**

Meeting N20-01: Wednesday January 29, 2020

9:00 AM- 5:00 PM

Holiday Inn City Center, Charlotte, NC

NPEC Officers (2019-2020)

Chair: Daryl Harmon

Vice Chair: John White

Secretary: Mark Bowman

Treasurer: Keith Bush

Standards Coordinator: Greg Hostetter

Awards Chair: Mark Bowman

**1. Call to Order**

D. Harmon

The meeting was called to order at 9:00 am. A roll call was taken to establish a quorum. Twenty-nine (29) out of forty-three (43) total members were present. A quorum was thereby established for the meeting (67%).

The IEEE Patent Policy was reviewed in accordance with Clause 6 of the IEEE-SA Standards Board Bylaws; the foregoing information was provided by review of the Patent Policy Slides 1 through 4, as provided by IEEE-SA staff. The Chair provided an opportunity for attendees to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which an attendee was personally aware and that may be essential for the use of a standard. No responses were given by the attendees.

**2. Introductions, Approval of Agenda and General Remarks**

D. Harmon

The attendees introduced themselves, each identifying their company/organization affiliation and stating their NPEC membership credentials as appropriate.

The proposed agenda was reviewed by the Chair. A motion was made to approve the agenda (K. Miller, 2nd: S. Channarasappa). The motion passed (unanimous).

**3. Welcome & Opening Remarks**

D. Harmon

The Chair thanked the NPEC officers and also John White for assistance with securing this venue and hotel for the meeting. The Chair also thanked NPEC Treasurer, Keith Bush, for his hard work in setting up the PES Registration system, 123 Signup, which is being used at this meeting for registration and fee collection.

The Chair recognized new NPEC member, Jacob Kulangara. The Chair noted the retirement of Ted Riccio. The Chair noted the resignation of Greg Hostetter and requested any volunteers for Standards Coordinator.

## 4. Chair's Report

D. Harmon

### 4.1 ADCOM Meeting Summary

The Chair discussed several pertinent items from the A20-01 ADCOM meeting:

- Joint Meeting(s) with SC-2 / PES JTCM: ADCOM has decided to hold a joint meeting with SC-2 in a strategic attempt to bring all the subcommittees together in the future. M. Bowman will be coordinating a tentative date/location with SC-2 by the 20-02 meeting, with June 2021 being a likely option. ADCOM has also decided to hold the upcoming 21-01 meetings as part of the PES Joint Technical Committee Meeting (JTCM) series (along with most of the other PES technical committees).
- NPEC has established a Category A Liaison between IEEE-SA and IEC SC45A (Gary Johnson).
- Based on a previous request, NPEC has sent a formal letter to NRC to inform them which NPEC standards should be prioritized for endorsement. The Chair informed the group that NPEC has received positive feedback from NRC concerning the letter along with their expected schedule of endorsement.
- ADCOM received some feedback and items of interest from the PES Tech Council retreat in November 2019. Most notably: we need to come into compliance with the expectations for 123Signup as the official rostering and attendance records for our meetings; and also, we are not making use of the many services available from PES for marketing, strategy, and information sharing, such as the PES Resource Center. Shana Pepin of PES is the point contact for these services and made a presentation to ADCOM about this. ADCOM plans to have a similar presentation at the NPEC 20-02 meeting.
- NPEC Meeting "Days of the Week" Survey: The results of the recent survey initiated by the Chair to gauge NPEC's preference(s) for which days of the week to hold meetings showed a clear preference for meeting on Tuesday through Thursday, by a 4:1 ratio. ADCOM has decided to make this the target for future meetings: WG meetings on Tuesday (Monday can be an overflow day), SC and ADCOM meetings on Wednesday, NPEC meeting on Thursday.

## 5. Secretary's Report

M. Bowman

### 5.1 Review and Approval of Previous Meeting Minutes

The Secretary provided a final review of the N19-02 meeting minutes to those present. A motion was made to approve the minutes (T. Crawford, 2nd: K. Miller). The motion passed (unanimous).

### 5.2 Status of Action Items

The action items from the N19-02 meeting were reviewed. Each item was discussed and the status was determined (see Action Items below for updated status). There are no remaining action items at this time.

## 6. Vice Chair's Report

J. White

### 6.1 Meetings Schedule

The Vice Chair discussed plans for future NPEC meetings, which are as follows:

N20-02: Mystic, CT, July 14-16

The Vice Chair will be arranging and coordinating the meeting at this location for the week of July 13<sup>th</sup> 2020 ("Tuesday through Thursday" schedule).

N21-01: meet with the PES JTCM, New Orleans, LA, January 12-14

This meeting is organized and coordinated by IEEE Services. Each attendee must register for the PES JTCM through the PES site.

N21-02: Joint meeting with SC-2, TBD, potentially June 2021

This meeting will be coordinated by M. Bowman.

### 6.2 Honors & Awards

M. Bowman

The Awards Chair presented the following awards:

- 2019 NPEC Outstanding Standard Award: WG 4.2.2 – Std 2420-2019  
*For outstanding work in the development of this new standard which provides much needed criteria for Combustion Turbine Units Applied as Standby Power Supplies*
- 2019 NPEC Prize Paper Award: Dr. Abdelrahman Karrar, et.al.  
*"Estimating the Effects of Small Voltage and Frequency Changes on Industrial Induction Motor Loading"*

## 7. Treasurer's Report

J. White/K. Bush

Opening Balance N19-02	\$ <u>6,929.44</u>
Income	
CC Members/Guests	\$ 3,950.00
Cash Members/Guests	\$ 2,035.00
Subcommittees	\$ 890.00
Total	\$ <u>6,875.00</u>
Meeting Expenses N19-02	\$ 5,317.98
Banking Fees thru Dec 2019	\$ 292.75
Banking Interest thru Dec 2019	\$ 40.05
Opening Balance N 20-01	\$ <u>8,233.76</u>

## 8. Previews/Works in Progress

The following Previews/Works in Progress were presented to the group. A roll-call vote was held for each Preview. (Presentations available in iMeet Central)

8.1 Deleted

8.2 Preview of P1023: “IEEE Guide for the Application of Human Factors Engineering to Systems, Equipment, and Facilities of Nuclear Power Generating Stations” WG 5.1

A motion to proceed to ballot passed by roll-call vote (28 Yes, 0 No, 1 Abstain)

8.3 WIP of P833: “IEEE Recommended Practice for the Protection of Electric Equipment in Nuclear Power Generating Stations from Water Hazards” WG 4.8

8.4 WIP of P2421: “Guide for Designing and Developing Computer-Based Displays for Monitoring and Control of Nuclear Facilities” WG 5.2

8.5 WIP of P2411: “Human Factors Engineering Guide for the Validation of System Designs and Integrated Systems Operations at Nuclear Facilities” WG 5.1

## 9. Technical Presentations

Technical presentations were made as follows:  
(Presentations available in iMeet Central)

9.1 Estimating the Effects of Small Voltage and Frequency Changes on Industrial Induction Motor Loading A. Karrar (UTC)

9.2 ANS Special Committee on Advanced Reactor Policy Report S. Arndt (NRC)

9.3 Enabling the Modern Nuclear Plant S. Lopez (EPRI)

9.4 IEC Standards for SMRs G. Johnson

## 10. Nuclear Standards Activities

D. Harmon

The Chair informed the group that Greg Hostetter will be resigning as Standards Coordinator due to a job change.

10.1 Standards Status Report (available in iMeet Central)

The Standards Coordinator had previously provided a draft Standards Status Report for review. This report shows the status of each NPEC standard, including lifecycle, PAR lifecycle, and the expected schedule for future previews and ballots. The Chair discussed the overall state of NPEC standards, focusing on any standards or PARs that are in jeopardy of expiring near-term. Any updates should be sent to the Chair until a new Standards Coordinator is appointed.

## 10.2 Previews/Work-in-Progress Expected for N20-01

The Standards Coordinator previously provided the expected schedule for future Previews and Works-in-Progress. Any updates should be sent to the Chair until a new Standards Coordinator is appointed.

## 11. New Business

### 11.1 IEEE-SA MyProject – Updated Interface

M. Zaman

Malia Zaman discussed the updated interface for the IEEE-SA MyProject application.

## 12. Subcommittee Reports

The following subcommittee reports were given:  
(Reports available in iMeet Central)

### 12.1 SC2

J. Cornelius

### 12.2 SC3

T. Crawford

### 12.3 SC4

K. Miller

### 12.4 SC5

D. Desaulniers

### 12.5 SC6

R. Ayala

## 13. Liaison Reports:

The following liaison reports were given:

### 13.1 NRC

K. Miller

### 13.2 CNRA

W. Odess-Gillett

### 13.3 Risk Coordinating Committee Report

Not given

### 13.4 ASME

Not given

### 13.5 IEC

G. Johnson

### 13.6 NEI

Not given

### 13.7 ANS

D. Harmon

### 13.8 IAEA

A. Duchac

## 14. Recap of Action Items

M. Bowman

The Secretary reviewed all outstanding action items and any new action items identified in this meeting (see below for final Action Item status).

## 15. Adjournment

D. Harmon

The meeting was adjourned around 5:00 pm. (T. Crawford, 2<sup>nd</sup> K. Miller)

**NPEC Action Items (following N20-01 Meeting)**

Action Item No.	Assigned To	Description	Due	Status
N18-02-01	M. Bowman and SC Chairs	SC-4 requests NPEC to send a letter to NRC emphasizing the importance of their “endorsement” of our standards. This should include a list of NPEC standards to be given priority, with specific basis. Each SC should provide a list of any standards needing priority for near-term endorsement. SC-4 has chosen the following standards as having priority: 741-2017, 387-2017.	2/19	Closed
N20-01-01	M. Bowman K. Bush	Establish a convenient and easily usable method for posting public meeting information (e.g. presentations, information sharing) for all meeting participants, including guests	N20-02	Open