

NPEC Liaison report to ASME NQA Standards Committee

Meeting N10-1 was held in Clearwater Beach, FL, on January 19 and 20, 2010, preceded by a meeting of the Administrative Sub-Committee, AdCom. This report summarizes those meetings.

AdCom meeting notes

Nuclear Standards Activities

1. Project Authorization Requests (PAR) for P344, P420
 - a. P344 was reviewed; it was the consensus of ADCOM to approve the PAR with Class 1E to be removed from the title, purpose and scope.
 - b. P420 was reviewed; it was the consensus of ADCOM to approve the PAR as submitted.
2. P1290 and P933
 - a. P933 revision to add nuclear facility to the title. The title should be revised to include "and other nuclear facilities." It was the consensus of ADCOM to approve the PAR with this change in title.
 - b. P1290 has been previously reviewed and commented on by ADCOM. It was the consensus of ADCOM to approve the PAR with comments.
3. ED&PGC requesting transfer to NPEC standard IEEE 690, IEEE Standard for the Design and Installation of Cable Systems for Class 1E Circuits in Nuclear Power Generating Stations. This is a design standard and if moved into NPEC it should reside in SC4. Further evaluation needed before consideration of moving it into NPEC SC4.
4. Corrigendum for P1023. The corrigendum is needed because it references a draft standard (P1586) that has been withdrawn. Therefore a corrigendum is needed to correct reference to a non-existent standard.
5. PAR for Joint IEC/IEEE Standard 62646, Computer Base Procedures was reviewed and commented on by ADCOM. It was the consensus of ADCOM to provide an action plan for update at this time. ADCOM will perform an electronic vote in the future when the document has been updated.
6. The following PARs have been approved by electronic vote: P379, P308, P338, P1289 and P1819

Unfinished/Old/Other Business:

- 1 Discussion relative to recent comments regarding PAR reviews
 - a. SC2 – P1682 will be reviewed at the next NPEC meeting.
 - b. SC3 – P577 going out to ballot in the near future. Work in progress for P1819 will be held at NPEC tomorrow. Balloting of P336 has recently closed.

- c. SC4 – IEEE 833 presently at end of five year and is looking a reaffirmation or a stabilized standard. Health or safety standard are not candidate for stabilized standards.
- d. SC5 – P1082 is being considered for a dual logo with IEC. An extension or reaffirmation is being considered. PAR P1289 has been submitted for revision. IEEE 845 is near the end of its five year cycle. Actions are needed for a reaffirmation before the end of the year. P1786 will be previewed at the next meeting.
- e. SC6 – P497 will be previewed at NPEC tomorrow.

NPEC meeting notes

1 Preview:

- 1.1 IEC 62582-1 Nuclear Power Plants – Instrumentation and control important to safety – Electrical equipment condition monitoring methods, Part 1: General
- 1.1.a IEC 62582-2 Nuclear Power Plants – Instrumentation and control important to safety – Electrical equipment condition monitoring methods, Part 2: Indenter modulus
- 1.2 IEC 62582-4 Nuclear Power Plants – Instrumentation and control important to safety – Electrical equipment condition monitoring methods Part 4: Oxidation induction techniques

A joint NPEC roll call was taken for IEC 62582-1, IEC 62582-2 and IEC 62582-4 and the vote was unanimous for proceeding with these standards to ballot.

- 1.3 P497 - Standard for Accident Monitoring Instrumentation for Nuclear Power Generating Stations

NPEC roll call vote was unanimous for proceeding with the ballot process after providing clarification of sub-clause 6.2 to address common cause failure for analog equipment.

2 Harmonization of IEEE and IEC Standards –

The presentation explained the dual-logo program between IEEE and IEC. The program allows for the adoption or joint development of IEC and IEEE standards. When the document goes through the final ballot process for approval within the organizations only the front matter of the standard can change.

There has been an amendment to the original joint development agreement signed by the organizations in 2002. The amendment allows for the joint development of documents for new projects and the revision of existing standards in either organization. There is also an agreement developed with IEC SC 45A to assist in its implementation.

Harmonization is an informal process that occurs when both organizations have a very similar document but because of some differences the two documents cannot become one document. Therefore, both organizations will have their own standards with similar contents.

3 Technical Presentations:

The following presentations were provided to NPEC:

3.1 Work in Progress: P1819 - Standard for Risk-Informed Categorization and Treatment of Electrical and Electronic Equipment at Nuclear Power Generating Stations and Other Nuclear Facilities

3.2 How to use seismic test specimen for application in NPP

3.3 IEC/SC 45A, Overview and collaboration with IEEE/NPEC

- Background on the history of International Electrotechnical Commission (IEC); Presently there are 67 countries who are members of IEC actively involved in the development of standards and 80 other countries that are affiliated. All IEC standards are recognized by the World Trade Organization.
- The IEC and International Organization for Standardization (ISO) are a joint organization with their standards common to both. IEC also has an agreement with standard development with both the International Atomic Energy Agency (IAEA) and IEEE. Further development of IEC SC 45A standards was provided in the presentation.

3.4 Reliability Of Onsite Emergency Power For The New Generation And Advanced Nuclear Power Plants

3.5 Plans for Update of IAEA Safety Guides for I&C and Electrical Power Systems

- The presentation provided background of IAEA being a standards organization which develops guidance standards in the area of atomic energy safety providing the position of the United Nations. IAEA also provides peer review services to member states. The IAEA Safety Guides have been incorporated into some member states regulations directly or as referenced.
- IAEA Safety Guides are in the areas of nuclear power plant design and quality assurance. These guides are available on the IAEA website at no charge.
- IAEA Safety Guides are top level standard documents being updated in the areas of I&C and Electrical. The electrical guide and associated Standards are presently being developed in the areas of computer security. The draft revision of IAEA Safety Guides is expected to be available in the summer of 2010. It is the IAEA hope that IEEE takes a role in performing a technical review of these draft guides before they are approved.

3.6 Work in Progress: P1786 – Human Factors Guide for Applications of Computerized Operating Procedure Systems at Nuclear Power Generating Stations and Other Nuclear Facilities