



ANSI-NIST
Nuclear Energy Standards
Coordination Collaborative

Meeting Report

Tuesday, March 1, 2011: 9:00 am - 5:00 pm

NIST Headquarters

100 Bureau Drive, Stop 1070
Building 101 Employee Lounge
Gaithersburg, MD 20899-1

Agenda Item 1 Opening Remarks and Introductions

Dr. Ambler Thompson, NIST, opened the meeting by thanking all attendees, both those attending in-person and those participating via teleconference. All attendees were asked to introduce themselves and state the organization they represented. A complete list of attendees is available as attachment 1 of this report.

**Agenda Item 2 Approval of the Minutes of the November 22, 2010 Meeting –
(NESCC 11-001)**

The meeting report was approved as written and contained in NESCC 11-001.

**Agenda Item 3 Nuclear Plant Cable Aging Management in the U.S. with
Regard to Standards (NESCC-11-004)**

Mr. Gary Toman, EPRI, offered the presentation contained in NESCC-11-004. At the conclusion of the presentation, Mr. Toman was asked about the percentage of pipes that are buried under ground in nuclear power plants. He explained that off-site pipes are usually buried, but in plants, only much older pipes tend to be buried. This presentation tied directly into the following agenda item on cable performance challenges.

**Agenda Item 4 Cable Performance Challenges in Nuclear Industry
(NESCC 11-003)**

Mr. Thomas Koshy, NRC, offered the presentation contained in NESCC-11-003.

At the conclusion of the presentation, it was noted that the Brookhaven Test has shown that flame retardant chemicals sprayed on cables reduce cable life by 10 to 15 years.

Agenda Item 5 IEEE Nuclear Standards Qualification Process: Aging and Performance of Cables (NESCC 11-016)

Mr. James Gleason, IEEE, offered the presentation contained in NESCC-11-016.

It was noted that the four dual-designated standards are for condition monitoring during situational testing. Debates are on-going as to the best way to monitor overall conditioning.

Agenda Item 6 Structural Repair of Existing Nuclear Reactors, Need for Standards (NESCC 11-021)

Mr. Nate Sauer and Mr. Paul Tourney, both of the Structural Group, offered the presentation contained in NESCC 11-021.

NACE and ACI are working together on the effects of corrosion on concrete, and are considering establishing a Task Group to do further work. It was suggested that Task Group may be under the umbrella of the ACI 349 (Code Requirements for Nuclear Safety-Related Concrete Structures) work. Mr. Tourney agreed that this was possible, and this idea would be discussed further at the upcoming ACI meeting in Tampa.

Agenda Item 7 ANS Standards Assessment (NESCC 11-007)

Mr. Donald Spellman, Oak Ridge National Laboratory, offered the presentation contained in NESCC 11-007.

Mr. Spellman suggested that this work may be best suited for the Department of Homeland Security. The intent of developing a priority list is to communicate the needs of the nuclear industry to all SDOs in an effort to reduce the competition between them.

The SDOs present were asked if they had an objection to such a list being created, and most had no objection. It was noted that a model for this work should be the ASME, IEEE, ANS Joint Committee on Risk, which was created after much work and cooperation by all parties involved. The NRC, noting how well this committee works, suggested that the government shouldn't be involved if the SDOs are able to work together without its involvement. The NRC also believes that the Standards Database under development in the NESCC could serve the same purpose as the priority list suggested in this presentation.

Mr. Spellman explained that one of the outcomes of developing a priority list could be the identification of funding for standards development. Grant money may be easier to acquire if an SDO can point to a standard on the priority list that needs work.

ANSI reminded delegates that it does not delegate work to its members. A high-level meeting of the relevant SDOs should be convened to address the concerns of priorities and development. The NESCC will never dictate solutions to the SDOs. ANSI further informed attendees about a workshop on competition would be convened on May 12, 2011 by NIST and ANSI to discuss overlap and duplication in standards development and assured the group that an invitation would be sent to the NESCC distribution list.

ACTION: ANSI will work with ANS, ASTM, ACI and ASME to discuss the concerns raised about the duplication of work by SDOs in the nuclear industry.

Agenda Item 8 Task Group Proposals and Reports
Concrete Task Group Report (NESCC 11-008, NESCC 11-020)

Ms. Clarissa Ferraris, NIST, offered the report contained in NESCC 11-008 and the report of the Concrete Task Group contained in NESCC 11-020.

ACTION: A call for comments will be issued by the NESCC Secretary on the Concrete TG Report contained in NESCC 11-020.

Discussion ensued as to why ACI was not responsible for the report contained in NESCC 11-020. ACI noted that they were members of the Task Group and participated actively in the development of the report. The report will be forwarded to the ACI task groups that are responsible for standards suggested for improvement, and any decisions on suggested actions will be up to the task groups. As stated earlier in the meeting, the NESCC cannot force any SDO to do any development or revision work.

The SDOs present also expressed their frustration with the NRC endorsement process. Much frustration stems from NRC endorsing outdated versions of standards, which doesn't encourage SDOs to update its standards because they are unclear as to the best and most expeditious way to have standards endorsed. Currently, the endorsement process is lengthy and not clear to many SDOs in the NESCC. The SDOs present noted it would be most beneficial to have the standards development process and the NRC endorsement process be better aligned.

ANSI noted that this problem is not restricted to the nuclear industry. Many industries have a problem with regulatory endorsement. The one industry that seems to have solved this problem is the Smart Grid Industry, and it would be ideal to have someone present to the next meeting NESCC meeting on its best practices for regulatory endorsement.

ACTION: ANSI will invite a member of the Smart Grid community to speak at the July 2011 NESCC meeting on regulatory standards endorsement.

Database Task Group Report (NESCC 11-011)

Mr. Tom Boyce, NRC, offered the report contained in NESCC 11-011.

At the conclusion of the presentation, it was inquired as to which organization will provide the maintenance to the database. Mr. Boyce explained that this is still being discussed.

It was further noted having SDOs input their standards into the database may be a way to speed up the NRC endorsement process, as the NRC will be informed of all work being undertaken.

Polymeric Piping Task Group Report (NESCC 11-022)

Mr. Aaron Forster, NIST, offered the report contained in NESCC 11-022.

It was noted that this some NESCC members had expressed concern that this Task Group would duplicate work that had been undertaken by other organizations. The Convener informed attendees that this is no longer the case, as other SDOs are doing development work that will require more time to complete.

Proposal for a TG on Structural Steel Certification (NESCC 11-010, NESCC 11-014)

Mr. Daniel Kaufman, AISC, offered the presentation contained in NESCC 11-014.

At the conclusion of the presentation, Mr. Kaufman noted that the AISC could do this work with an internal Task Group, but would like to have some assurance that the outcome would be accepted by the NRC. The NRC could not say how much value its acceptance would add to the work.

It was noted that the establishment of a certification process was discussed in IEEE many years ago. At that time, IEEE decided that the requirements contained in ASME NQA-1 (Quality Assurance Requirements for Nuclear Facility Applications), which had been endorsed by the NRC, were adequate. ASME is still using this standard for endorsement, which was published in 1999 but has a 2009 addenda that includes a clarification on how to meet the 18 point criteria contained in the standard. Mr. Kaufman explained that AISC is aware of the use of NQA-1 and its addenda, but still feels that things could be clarified further.

The NESCC Chair noted that NQA-1 is being examined by the MDEP Task Group. The NESCC is unable to make any decision at this time, but requested that this topic be included on the next NESCC agenda for further discussion.

ACTION: The NESCC Secretary will ensure that this topic is on the agenda for the July 2011 NESCC meeting.

Proposed TG on Risk Informed Design Process for Light Water Reactors (NESCC 11-019)

Mr. Donald Spellman, Oak Ridge National Laboratory, offered the presentation contained in NESCC 11-019.

The development of standards for light water reactors has to be done quickly as vendors are already working on products needed for the market. It was noted that a Small Modular Reactor PRA workshop was scheduled for the end of April, and that the NRC could suggest a development schedule for a standard to that group. If the standards are already far along in their PRA development for INCITS, this will be a mute point.

Mr. Spellman explained that a major benefit to developing this task group is that the standard could be technology neutral. The possibility of such development was questioned by some attendees. It was agreed that this topic will be included on the next NESCC agenda for further discussion.

ACTION: The NESCC Secretary will ensure that this topic is on the agenda for the July 2011 NESCC meeting.

**Proposed TG on Emergency Planning Zone for Light Water
Small Modular Reactors (NESCC 11-006)**

Mr. Donald Spellman, Oak Ridge National Laboratory, offered the presentation contained in NESCC 11-006.

At the conclusion of the presentation, it was noted that the NRC is already evaluating the requirements for the size of Emergency Planning Zones and that the NESCC should wait to find out the results of this work. It was agreed that this topic will be included on the next NESCC agenda for further discussion.

ACTION: The NESCC Secretary will ensure that this topic is on the agenda for the July 2011 NESCC meeting.

**Proposal for a TG on National Standards Priority List of
Needed Standards Development and Revisions (NESCC 11-017,
NESCC 11-018)**

Mr. Donald Spellman, Oak Ridge National Laboratory, offered the presentation contained in NESCC 11-018.

There was much support for this proposal from members. It was agreed that this could be the beginning of a roadmap for standards architecture. Most SDOs in attendance agreed to participate.

To be as useful as possible, all international nuclear standards development work should also be included. One of the problems is that not much work is going on in ISO TC 85, despite the MOU between that group and IAEA which states that guides developed by IAEA will be sent to TC 85 for development into standards. The NESCC Chair informed attendees that NIST will be holding a standard in trade workshop in 2012 that will focus

on nuclear standards in the America's. This could be a place to have the discussion on international harmonization begin.

It was agreed that this Task Group should be formed.

ACTION: A call for members to the Task Group on National Standards Priority List of Needed Standard Development and Revisions be issued. The Task Group will be requested to provide a report to the next NESCC meeting.

**Agenda Item 9 Other Business
Meeting Reports
Other Updates**

No other business was discussed.

Agenda Item 10 Next Steps

The next meeting of the NESCC will be held on July 28, 2011 at NIST in Gaithersburg, Maryland. Instead of teleconference, the meeting will also be offered via webinar for those who cannot attend in person.

Agenda Item 11 Adjournment

The meeting was adjourned at 4:45pm.