



National Institute of Standards and Technology U.S. Department of Commerce

ANSI-NIST Nuclear Energy Standards Coordination Collaborative

Meeting Report

Thursday, July 28, 2011

NIST Headquarters 100 Bureau Drive, Stop 1070 Building 101 Lecture Room A 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 webinar. 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 2NRC Activities in Response to the Fukushima Accident
(NESCC 11-033)

Mr. Robert Taylor, NRC, offered the presentation contained in NESCC 11-033. Mr. Taylor was member of the NRC Emergency Response Team on-site at Fukushima following the accident.

After Mr. Taylor's presentation, the floor was opened for questions. The first question inquired as to whether the recommendations from the NRC Task Force will require existing standards to be updated. It was noted that the recommendations have not been finalized, but once each recommendation can be evaluated individually, there will most certainly be a need for either the development of new standards or the revision of existing standards. Mr. Taylor stressed that the NRC Task Force is still in evaluation mode. The recommendations that are made will need to be evaluated and prioritized so that progress can be made. To date, no timeline has been established for these activities.

Mr. Taylor informed attendees that the NRC is viewing this accident as a LWR (light water reactor) event, and the NRC Task Force will address LWR design. In some cases, LWRs are more robust and capable to withstand such an event. The standards may not

require any updates. Mr. Taylor did note, however, that SMR (small modular reactor) standards may need to be updated based on the findings of the NRC Task Force.

An enquiry on who will provide the enhanced training that was mentioned in the presentation was made. Mr. Taylor explained that if enhanced training is deemed necessary and regulatory requirements are created, licensees will provide the training with oversight by the NRC.

Mr. Taylor explained that while there has not been a change to the definition of sever accident, the NRC Task Force has recommended that there needs to be a way to regulate extended design basis accidents as a strong regulatory policy does not currently exist.

Agenda Item 3US Nuclear Industry Strategy for Responding to Fukushima
Lessons Learned (NESCC 11-035)

Mr. Jim Riley, NEI, offered the presentation contained in document NESCC 11-035.

Mr. Riley explained that standards are a long term activity. The NEI is interested in examining all standards that require modification based on the lessons learned from Fukushima, but stressed that the immediate needs of the industry need to be determined and addressed first. Any other revisions can be dealt with at a later time.

The NRC inquired as to whether NEI had an example where the NEI has identified a problem and worked directly with an SDO to create a standard to address that problem in a timely manner? Mr. Riley explained that the situation does not often arise, and that in fact, NEI can create guidance documents faster than an SDO can develop a standard. It was noted that the NRC would like to get SDOs involved in addressing identified problems sooner.

It was suggested that the response to Fukushima needs to be an international response, and that perhaps groups like NEI and the NRC should work directly with SDOs as soon as possible. SDOs, however, need to find a way to decrease the amount of time it takes to get standard completed. It was noted that many SDOs have an emergency amendment process that allows for a quick response to an emergency situation. Perhaps this is a way for currently identified needs to be addressed.

SDOs also need to be informed of government priorities sooner so that they can begin the standards development process sooner. It was suggested that the NESCC should meet more frequently as to allow government agencies and SDOs to have a forum where industry and government needs can be communicated as early as possible and appropriate responses discussed. In the future, the NESCC will meet three times a year and always have webinar capabilities for those who are unable to attend in person.

Agenda Item 4Nuclear Fabrication Consortium (NESCC 11-037)

Mr. Nate Ames, NFC, offered the presentation contained in NESCC 11-037.

Following the presentation, Mr. Ames explained that EWI is very involved in the ASME activities. EWI participates at the subcommittee level and provides data but encourages its members to populate the higher level committees to provide input on standards.

Based on EWI research, ASME is currently exploring a way to appropriately modify their documents.

Agenda Item 5ANT Project Update (NESCC 11-037)

Mr. Ken Barry, EPRI, offered the presentation contained in NESCC 11-037.

Mr. Barry explained that the projects undertaken by EPRI create guidelines, not standards or regulations as the organization is not set up for that. There is also no established process to move EPRI guidelines into code and standards to date.

A question was asked regarding the safety of current plants. Mr. Barry explained that existing plants are safe. The projects being undertaken by the ANT are aimed at figuring out how things can be done in a more cost effective manner and processes be more effective overall.

Discussion ensued on the quality of products created outside the US and used in nuclear power plants. It was noted that US regulations require NextEra to use domestic sources. The ANT has a project on supplier quality issues that will aim to create a training class for plant owners and operators that teaches them to better communicate their needs to suppliers.

Agenda Item 6NESCC Update (NESCC 11-040)

Dr. Ambler Thompson, NIST, offered the presentation contained in NESCC 11-040.

After the presentation, it was noted that EPRI is working to find funding for its project on high strength rebar which was identified as a need in the NESCC Concrete Task Group Report.

Agenda Item 7Task Group Proposals and Reports
Proposal for a TG on Electrical Cables (NESCC 11-025,
NESCC 11-041)

Dr. Stephanie Watson, NIST, offered the presentation contained in NESCC 11-041.

NEI noted that it has guidelines for cable aging management that should also be included in this work. Dr. Watson explained that the proposed task group would also evaluate the threshold for existing cables and termination and splicing issues.

It was agreed by attendees that the task group should be established with Dr. Stephanie Watson as convener.

ACTION: The NESCC Secretary will issue a call for members to the Task Group of Electric Cables with Dr. Stephanie Watson, NIST as its convener. This task group is instructed to include an evaluation of connectors and terminations as well as information on polymer degradation.

Report from the National Standards Priority List Task Group (NESCC 11-036)

Mr. Jim August, CORE Inc., offered the presentation contained in NESCC 11-036 on behalf of the Convener, Mr. Donald Spellman, ANS, who could not attend.

There was some confusion among the attendees at the conclusion of the presentation as the establishment of a new task group with a very similar charter to this task group was proposed. The presentation suggested that the proposed task group should focus on standards related to Fukushima.

The current scope of the National Standards Priority List Task Group was read. The agreed scope for this tsak gropu, as stated in NESCC 11-017, is as follows: "Develop and publish a priority list of all national standards needs that covers standards in need of revision and new standards that will be needed in the near future. A priority list will be individually collected from each nuclear industry SDO (participants to be decided by the Task Group). A set of standards classes to fit the industry will then be developed to attempt to categorize the "sets" of standards that are to be covered. The SDO lists will then be separated into these classes and then prioritized based upon industry need. Considerable liaison will be required with the industry SDOs but few face-to-face meetings should be required. Therefore, only minimal funding support from NESCC will be required."

After the scope of the current task group was read, many attendees voiced concern about creating a new task group with such a similar scope. It was also noted that the current task group scope requires the evaluation of more than just ANS standards.

Discussion also ensued about the funding request in the presentation. Dr. Thompson noted that while some funding may exist, all funding given for NESCC projects is expected to be matched by the organization requesting the funds.

Proposal for a TG on Concrete Repair (NESCC 11-028, NESCC 11-031)

Dr. Clarissa Ferraris, NIST, offered the presentation contained in NESCC 11-031.

At the conclusion of the presentation, a question was raised as to the need for an evaluation of the SCI work? Dr. Ferraris noted that the NRC will need to approve concrete repairs, and this work will identify what NRC needs to approve said repairs.

It was agreed that the scope would be modified to include pre-stressing tendons and related system repair.

It was agreed by attendees that this Task Group should be established with Dr. Ferraris as Convener.

ACTION: The NESCC Secretary will issue a call for members to the Task Group of Concrete Repair with Dr. Clarissa Ferraris, NIST as its convener. This Task Group is instructed to revise its scope to include pre-stressing tendons and related system repair.

Report from the HDPE Piping Task Group (NESCC 11-038)

Dr. Aaron Forster, NIST, offered the presentation as contained in NESCC 11-038. No questions were asked at the conclusion of the presentation.

Report from the Standards Database Task Group (NESCC 11-036)

Ms. Carol Moyer, NRC, offered the presentation contained in NESCC 11-036 on behalf of the convener, Tom Boyce, NRC, who was unable to attend.

Ms. Moyer informed attendees that the task group has not met since in a few meetings as funding issues with NIST had to be addressed. The group will meet more frequently and will require more input from outside users. Any NESCC member who would like to participate on this task group is encouraged to contact the NESCC Secretary (sseitz@ansi.org).

It was noted that ASTM has also developed a database that allows its members to upload their lists of standards, which may be a very similar product. The ASTM representative to the meeting will send Mr. Boyce more information on the ASTM effort.

Agenda Item 8 Other Business

The next meeting of the NESCC is anticipated to take place in coordination with the fall ANS meeting. We are looking to hold our meeting on November 1 or 2 in Washington, DC. If a room to accommodate the committee cannot be found in Washington, DC, the meeting will be held in early 2012.

Agenda Item 9 Adjourn

The meeting was adjourned at 3:15 pm.

NESCC 11-042 September 7, 2011

NESCC July 28, 2011 Attendees

FULL NAME

COMPANY

In-Person Attendees

Daniel Kaufman American Institute of Steel Construction American Nuclear Society N. Prasad Kadambi Fran Schrotter ANSI ANSI Sally Seitz Joe Koury **ASTM** International Mr. Steve Byrne **ASTM** International Katy Makegig ATL, International Javeed Munshi Bechtel Constellation Energy Nuclear Group **Bob** Price CORE, Inc. JK August CTLGroup Mr. Peter Kolf Department of Energy Alison Krager Jason Tokey Department of Energy Kenneth Wade DOE Tammy Way DOE Timothy Beville DOE Ken Barry EPRI Thomas Pessa Exelon PowerLabs David Stokes FMC Ernest Lever Gas Technology Institute Denis Clark Idaho National Laboratory Mr. Thomas Spencer Moffatt & Nichol Megan Housewright National Fire Protection Association James Riley NEI William Hinton NextEra Energy - Seabrook Nathan Ames NFC Ambler Thompson NIST Chiara Ferraris NIST Chuck Ehrlich NIST Joanie Chin NIST NIST Jonathan Martin Lipiin Suug NIST Michael Case NIST NIST Tom Myers Aaron Forster NIST Dr. Stephanie Watson NIST - US Department of Commerce Nancy McNabb NIST Engineering Lab

Bob Carpenter NRC Jake Philip NRC Robert Taylor NRC Mahab Khatib Palo Verde Nuclear Generating Station PSEG Nuclear LLC Peter Buzzard S&ME, Inc John Love, III Sperko Engineering Services W J Sperko Nathan Sauer, P.E. Structural Group Paul Tourney Tourney Consulting Group MADHUMITA SIRCAR, P.E. U.S. NRC University of Kansas Dr. David Darwin **Richard Black** US Department of Energy US Nuclear Regulatory Commission Carol Moyer USNRC Sheila Ray Carl Larosche Wiss, Janney, Elstner

Webinar Attendees

Douglas Sordyl Brian Grimes Joseph Crunkleton Chuck Zalesiak Ricahrd Evans Maria Guimaraes Cory Peters Bill Maher Cheryl O'Brien, P.E. David Thompson Robert Dameron, P.E. Paul May Robert Gehm Aamer Syed PARTHA GHOSAL American Concrete Institute Brian Grimes Inc Constellation Energy Dominion Dominion EPRI ExelonPowerLabs fpl Idaho National Laboratory Manufacturers Standardization Society Moffatt & Nichol NFPA RSCC Wire & Cable LLC Sika Corporation SOUTHERN COMPANY