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*Nuclear Energy Standards  
Coordination Collaborative (NESCC)*

**Meeting Report**  
**Tuesday, July 23, 2013**

**ANSI**  
1899 L Street NW  
11<sup>th</sup> Floor  
Washington, DC 20036

**Agenda Item 1            Opening of the Meeting**

Ms Casandra Robinson, National Institute of Standards and Technology (NIST), welcomed participants to the meeting. All participants present, both in person and via WebEx, introduced themselves. A full list of participants is available as attachment 1 of this report.

**Agenda Item 2            NESCC Business**

**Agenda Item 2.1        New Co-Chair Introductions**

Mr Kevin Riley, Duke Energy, was introduced as the new private-sector co-chair and described his background in the nuclear industry. Members welcomed Mr Kevin Riley to the NESCC.

**Agenda Item 2.2        Accomplishment and Actions from the March Meeting – NESCC 13-069**

Ms Robinson reviewed the action item list contained in NESCC 13-069.

She noted that while an international component to the Steering Committee has not been added, the Nuclear Energy Institute (NEI) and the Electric Power Research Institute (EPRI) are advisory members to the Steering Committee and bring some international perspective to the group.

Mr Charlie Carter, American Institute of Steel Construction (AISC), who has been requested to provide NESCC Members with an update on the work of the AISC group on modular composite walls, reported that the draft had been released for public comment. This draft was circulated to NESCC members on July 25, 2013 as NESCC 13-078 for commenting. All comments received from NESCC members will be addressed by the AISC as public comments (**Action Item 2**).

**Agenda Item 2.3 Member Survey Results – NESCC 13-068**

Ms Robinson reviewed the survey results as contained in NESCC 13-068. She noted that this document is strictly an overview of the results received.

The Steering Committee will review the results of the survey and use the information to aid in the preparation of future meeting agendas (**Action Item 15**).

**Agenda Item 2.4 Framework – NESCC 13-051**

Ms Robinson began the discussion by informing NESCC members that the Framework is very different than the previous NESCC Charter. The Framework document has been prepared with information from various sources, including charter documents from other American National Standards Institute (ANSI) Standards Panels. Ms Robinson reviewed the document and opened the floor for discussion.

Mr Prasad Kadambi, American Nuclear Society (ANS), suggested that the vision of the group be modified to stress the importance of standards to the nuclear industry. He expressed the opinion that the reason advanced nuclear technology is so expensive is because standardization has not kept up with the most recent nuclear technology. He suggested that the NESCC could benefit from a presentation of a representative of the aerospace industry who could describe how standardization has assisted that industry expand and embrace new technologies (**Action Item 3**).

Dr Clarissa Ferraris, NIST, noted that the NESCC cannot force coordination of standards development on its members, but that the NESCC could certainly foster and encourage such coordination. The success of the High Density Polyethylene (HDPE) Piping Task Group and its coordination with the American Society of Mechanical Engineers (ASME) on the same topic is one such example of how the NESCC has successfully fostered coordination among its members.

Ms Debra Decker, Stimson Center, suggested that the mission described in the Framework document might be too broad, and should include issues regarding plant security. Mr Kevin Riley noted plant security varies from location to location, and each plant's security practices are guarded and not open for discussion. Mr Kadambi noted that the key question is not security itself but the trade-off between safety and security. It was suggested that if plant's security was of interest to Ms Decker, she could propose a new NESCC Task Group to the Steering Committee for their consideration.

Mr Jim Riley, NEI, also suggested that the mission of the NESCC may need to be modified. When the group was established in 2009, the focus was on new nuclear plant development. Since that time, due to both economic and other issues, new plant construction has slowed. Mr Jim Riley suggested that the

focus of the group should be on the development and revision of standards for the maintenance of existing power plants.

Mr Kadambi inquired about the membership of the Steering Committee and whether or not ANSI represented the standards development organization (SDO) members of the NESCC on the Steering Committee. It was explained that ANSI would not represent the SDOs because the SDOs are individual members of the NESCC. If an SDO has a political issue to raise to the Steering Committee, they can request that ANSI bring that topic to the attention of the Steering Committee. If the issue is technical, SDOs are encouraged to approach any member of the Steering Committee to have the topic addressed.

It was also agreed that each SDO member of the NESCC should identify an individual to serve on the NESCC as their official representative (**Action Item 5**).

Because NESCC members did not review the Framework in advance of the meeting, it was agreed that the Framework, as contained in NESCC 13-051, would be distributed to membership for a one week commenting period. Following that commenting period, the Steering Committee will address all comments received, modify the Framework as necessary, and circulate the document to NESCC members. It is intended that this Framework will be approved by the NESCC members at the November 7, 2013 meeting (**Action Item 4**).

### **Agenda Item 3            Task Group News**

#### **Agenda Item 3.1        Repair of Concrete Task Group**

Dr Ferraris informed attendees that the Task Group has completed its final report. Any comments received during the call for comments have been addressed. It was noted that the U.S. Nuclear Regulatory Commission (NRC) had submitted "informal" comments. The report has been sent out to key users and stakeholders in the nuclear industry for input. Once that input has been received, the report will be published. The NESCC will ask its SDO members how the report will be used (**Action Item 6**).

Mr Kevin Ennis, ASME, suggested that a "champion" be identified to move the recommendations in the report forward. He noted that having a champion is how the HDPE group and ASME began working together. It was suggested that outreach be done to the American Concrete Institute (ACI), AISC and ASTM International to encourage them to move forward with the recommendations in the report (**Action Item 7**).

#### **Agenda Item 3.2        Electrical Cable Task Group – NESCC 13-065**

Dr Stephanie Watson, NIST, reviewed the presentation contained in NESCC 13-065. She informed membership that Mr Corey McDaniel, Rockbestos-Suprenant Cable Corporation (R-SCC), is the new co-convener of the group.

Mr Kadambi inquired as to the best way to identify a champion on the Electrical Cable Task Group who could ensure that the recommendations from the report are acted upon. Dr Watson said she would rely on both the new co-convener of the Task Group and the NESCC Steering Committee for assistance.

It was noted that the current draft of the report has been presented to the EPRI group on cables. Mr Brian Thomas, NRC, also suggested contacting the International Atomic Energy Agency (IAEA) as there is some interest internationally to harmonize with the US.

**Agenda Item 3.3 HDPE Piping Task Group – NESCC 13-076**

Mr John Grimes, ASME, presented the slides contained in NESCC 13-076 on behalf of Dr Aaron Forster, NIST, the convener of the Task Group. Mr Grimes offered apologies on behalf of Dr Forster.

It was agreed that ANSI staff will work with Mr Grimes and Dr Forster to develop articles detailing the success of the HDPE Piping Task Group and ASME in regards to the development of the HDPE Piping Road Map and to distribute them broadly (**Action Item 8**).

**Agenda Item 3.4 Standards Database Task Group – NESCC 13-067**

Mr Tom Boyce, NRC, and Ms Harriet Karagiannis, NRC, offered the presentation contained in NESCC 13-067. Mr Boyce introduced Mr Herald Zhang, ANSI Intern, and thanked ANSI for hiring Mr Zhang.

Mr Zhang presented the database. He noted that the database is currently populated with the most recent version of the NRC regulatory guides. It is the intent of the NRC, based on funding availability, to backfill the database with older regulatory guides and standards. For now, the focus has been on entering the most recent information.

The most current version of the database and associated documentation will be made available to NESCC members via the NESCC website no later than August 23, 2013 (**Action Item 9**).

**Agenda Item 4 ASME Section XI Progress Report – NESCC 13-075**

Mr Ennis offered the presentation contained in NESCC 13-075.

Following his presentation, Mr Ennis informed attendees that a top ten issues list will be developed for the ASME Code for Operation and Maintenance of Nuclear Power Plants. Many plants currently in operation are not using this code, but when plants are updated, this code is utilized. Mr Ennis believes that this work will garner quite a bit of attention once it starts.

**Agenda Item 5 NRC Priority List for ASME Issues – NESCC 13-071**

Ms Carol Moyer, NRC, offered the presentation contained in NESCC 13-071.

Following the presentation, attendees inquired about whether the NRC will be able to keep pace with the ASME code development. The NRC is aware that it will not be able to keep up with the most recent code developments, but is working to endorse the 2013 developments.

The NRC is tracking ASME development in buried pipe design, pump qualification, glossary terms, performance based volumetric testing, ultra sonic evaluation, rules for disposition of leakage outside section 11, support for SMRs, Appendix N, welding, environmentally assisted fatigue, ASME code convergence, Appendix F, and valve position issue. This NRC priority list is different than the ASME priority list, which includes HDPE piping. The NRC priority list was developed in response to the levels of interest expressed by various NRC communities.

Mr Bill Corwin, U.S. Department of Energy (DOE), informed attendees that the DOE is beginning to create its own priority list and inquired as to how the NRC began its process. Ms Moyer explained that an NRC employee was heavily engaged in the work of the ASME committee working on ASME Boiler Pressure Valve Code Section 11. ASME has been using priority lists for some time, and the employee brought the process to the NRC.

#### **Agenda Item 6          Standards News**

Ms Mary Donaldson, NIST, reported on the incorporation by reference (IBR) issue. The Administrative Conference of the US (ACUS), which is made up of the general counsels of all U.S. government departments, undertook a study of IBR issues in the Fall of 2011. ACUS suggested that federal agencies consider the costs to all interested parties when deciding whether or not to incorporate a standard by reference. The group behind the website Public.Resource.Org suggested that once a standard is incorporated into law, the standard loses its copyright and the document becomes public property. As such, the organization posted copies of standards of various SDOs on its website for free download. The Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) sent a cease and desist letter to Public.Resource.Org who responded by filing a complaint against SMACNA. The lawsuit was settled out of court and the decision closed.

Ms Donaldson completed her presentation by noting that ACUS has filed with the Office of the Federal Register to suggest that only standards that are freely available should be incorporated to law by reference.

#### **Agenda Item 7          View-Only Access to Standards**

Mr Greg Cade, National Fire Protection Association (NFPA), reported on NFPA's availability of standards. He informed attendees that all NFPA standards are freely available for viewing on the NFPA's website ([www.nfpa.org](http://www.nfpa.org)), but are digitally protected in such a way that prevents the user from downloading or printing the document. He also noted that ASTM has developed what it calls a "reading room" on its website where you can view and read ASTM safety standards incorporated in U.S. regulations. Both NFPA and ASTM require that a reader register as users (at no charge) on their websites.

Ms Fran Schrotter, ANSI, noted that ANSI is working on an IBR Portal which will make available for view only incorporated by reference standards from small to mid-size SDOs.

**Agenda Item 8      NRC Self-Assessment Report – NESCC 13-072**

Mr David Matthews, NRC, and Mr Larry Burkhart, NRC, presented the slides contained in NESCC 13-072 (**Action Item 14**).

**Agenda Item 9      Vogtle and Summer Plants – New Nuclear Plant Lessons Learned  
(Technical Perspective) – NESCC 13-073**

Dr Mohamed Shams, NRC, offered the presentation contained in NESCC 13-073.

**Agenda Item 10      Construction Speed and Quality Improvement Technologies Task  
Group and Relationship with EPRI's Advanced Nuclear Technology  
Program – NESCC 13-063**

Mr Ken Barry, EPRI, offered the presentation contained in NESCC 13-063.

Mr Barry reported that the priority list mentioned in the presentation was developed by attendees to the Task Group meetings. He suggested that the Steering Committee investigate the possibility of establishing a Task Group on reduced heat hydration for mass concrete as the topic is frequently mentioned but will involve quite a bit of effort.

Mr Carlos Cantarero-Leal, Westinghouse, inquired on the status of the NRC endorsement of the steel plate composite structure standard. It was noted Westinghouse has provide Ms Tammy Way, DOE, a list of standards referenced in the design of the Westinghouse AP1000 reactors. Ms Way is working with Westinghouse to determine how best to provide the information to NRC without making proprietary information public (**Action Item 10**).

**Agenda Item 11      Industry Perspective on U.S. Standards and International Supply  
Chair – Korean Electric Cable Case Study – NESCC 13-0749**

Mr Corey McDaniel, R-SCC, offered the presentation contained in NESCC 13-079.

It was noted that China is also having a similar issue with cables used on AP1000 reactors. China is using locally sourced cables which are not qualified for use in the U.S..

**Agenda Item 12      U.S. Strategy with Respect to International Organization for  
Standardization (ISO) Nuclear Energy Standards – NESCC 13-074**

Dr George Flanagan, ISO/Technical Committee (TC) 85/Subcommittee 6 Chairman, offered the presentation contained in NESCC 13-074.

Following the presentation, many attendees had questions on the ISO standards development process and how the U.S. engages in that process. It was noted that ASTM is the Technical Advisory Group (TAG) Administrator for ISO/TC 85 and its subcommittees. ANSI staff agreed to contact ASTM staff and conduct an informational webinar on the ISO process and U.S. involvement in ISO/TC 85 (**Action Item 11**).

**Agenda Item 13      Wrap-Up**

The next meeting of the NESCC was tentatively scheduled for October 22, 2013 at the ANSI offices in Washington, DC. The date was subsequently changed to November 7, 2013 to avoid a conflict with the ACI Fall 2013 Convention.

**Agenda Item 14      Adjournment**

The meeting was adjourned at 4:00 pm.

**Attachment 1: Attendees to the July 23, 2013 NESCC Meeting**

**Participating In-Person:**

<b>Name</b>	<b>Organization</b>	<b>SDO Affiliation</b>
1. Tammy Way	DOE/INL	ANS
2. Tom Miller	DOE	None
3. Kevin Ennis	ASME	N/A (Org is an SDO)
4. Jim Riley	NEI	ANS, ASME
5. Carol Moyer	NRC	ASME, NRC Standards Program
6. Tom Boyce	NRC	
7. Brian Thomas	NRC	None
8. Harriet Karagiannis	NRC	None
9. Greg Orloff	CSA Group	N/A (Org is an SDO)
10. Steve Lefler	Duke Energy	ASME
11. Clarissa Ferraris	NIST	ACI, ASTM
12. Prasad Kadambi	Kadambi Engineering Consultants	ANS
13. Ken Barry	EPRI	None
14. Carlos Canterero-Leal	Westinghouse	ACI
15. Greg Cade	NFPA	N/A (Org is an SDO)
16. Robert Fleming	Marmon I&T/R-SCC	
17. Stephanie Watson	NIST	IEEE
18. Bill Corwin	DOE	
19. Charlie Carter	AISC	N/A (Org is an SDO)
20. Debra Decker	Stimson Center	
21. George Flanagan	ORNL	ISO
22. Corey McDaniel	R-SCC	
23. Larry Burkhart	NRC	
24. Mohamed Sharms	NRC	
25. John Grimes	ASME	N/A (Org is an SDO)
26. Herald Zhang	ANSI	
27. Dave Matthews	NRC	
28. Kevin Riley	Duke Energy	ANS
29. Fran Schrotter	ANSI	N/A
30. Cassy Robinson	NIST	ASTM
31. Sally Seitz	ANSI	N/A

**Participating via Webinar:**

<b>Name</b>	<b>Organization</b>	<b>SDO Affiliation</b>
32. Brian Grimes	Brian Grimes Consulting	ANS, ISO U.S. Nuclear Technical Advisory Group
33. David Thompson	MSS	N/A (Org is an SDO)
34. Bill Maher	FPL	None
35. Jim August	Core Inc.	ANS
36. Steve Byrne	Consultant	ASTM
37. Camilo Rodriguez		
38. Pat Schroeder	ANS	
39. Mark Ferres		
40. Ravindra Joshi	NRC	

**NESCC Action List**  
**July 23, 2013**

Action Item	Responsible person	Target Date	Resolution
1. From previous list: Consider ways to better publicize NESCC efforts and to obtain utility and vendor participation and input.	Steering Committee (Cassy – lead)	August 20, 2013	
2. AISC draft on the modular composite walls will be provided to Sally Seitz for circulation to NESCC members for commenting. All comments received will be addressed by the AISC as public comments.	Charlie Carter, AISC	August 1, 2013	Complete
3. Investigate the success story of the aerospace industry with respect to standards and its technology and report at next NESCC meeting.	Fran Schrotter, ANSI	On going	A representative is unable to attend the November 7, 2013 meeting, but will be contacted again once the March 2013 meeting date has been set.
4. NESCC Framework: <ul style="list-style-type: none"> <li>• Submit current framework to the NESCC membership for 1-week review and comment period.</li> <li>• Incorporate the comments received into a new version for review by Steering Committee.</li> <li>• Submit revised document to the NESCC membership for a 30-day review and comment period.</li> <li>• Incorporate the comments received into a new version for review by Steering Committee.</li> <li>• Publish completed document.</li> </ul>	Sally Seitz, ANSI  Cassy Robinson, NIST  Sally Seitz, ANSI  Cassy Robinson, NIST  Sally Seitz, ANSI	Complete.  August 8, 2013  August 12, 2013  September 15, 2013  October 1, 2013	
5. Request each SDO participating in the NESCC to designate a decision-maker who can take action on NESCC recommendations and requests (upper level nuclear person if possible; president otherwise).	Cassy Robinson, NIST	August 8, 2013 August 14, 2013	

Action Item	Responsible person	Target Date	Resolution
<ul style="list-style-type: none"> <li>• Develop list of SDOs and contacts</li> <li>• Make requests of all</li> </ul>			
<p>6. Task group reports:</p> <ul style="list-style-type: none"> <li>• Develop a process for determining how SDOs participating in the NESCC are using task group reports.</li> <li>• Submit an annual enquiry to NESCC membership to see if and how the recommendations of the final reports of the NESCC task groups are being used. <ul style="list-style-type: none"> <li>○ HDPE follow-up</li> </ul> </li> </ul>	<p>Cassy Robinson, NIST</p> <p>Cassy Robinson, NIST Sally Seitz, ANSI (ongoing each year)</p>	<p>August 8, 2013</p> <p>Yearly</p> <p>May 2014</p>	
<p>7. Investigate how to identify industry champions in the NESCC Task Groups to promote the recommendations of final task group reports in SDOs and industry.</p>	<p>Kevin Riley, Duke Energy Cassy Robinson, NIST</p>	<p>On-going</p>	
<p>8. HDPE piping:</p> <ul style="list-style-type: none"> <li>• Work with Aaron Forster and John Grimes, co-chairs of the HDPE Task Group, to develop an article that describes the success of the collaboration between the NESCC HDPE group and ASME; publish in multiple outlets.</li> <li>• Investigate other publications that will publish the HDPE success story and other NESCC news. Ask Aaron for recommendations.</li> </ul>	<p>Fran Schrotter and Sally Seitz, ANSI</p> <p>Fran Schrotter and Sally Seitz, ANSI Kevin Riley, Duke Energy Cassy Robinson, NIST</p>	<p>September 30, 2013</p> <p>September 30, 2013</p>	
<p>9. The current version of the Standards Database will be made available via the NESCC website for use by NESCC members, noting that the version available is not the final version. Version provided will include all regulatory guides and associated standards and may include inspection reports.</p>	<p>Tom Boyce and Harriet Karagiannis, NRC</p>	<p>August 23, 2013</p>	
<p>10. Contact Carlos Cantarero-Leal (Westinghouse) to discuss the possibility of sharing the list that Westinghouse provided of all standards used in the manufacturing of AP1000 reactors with the NRC.</p>	<p>Tammy Way, DOE</p>	<p>August 8, 2013</p>	

Action Item	Responsible person	Target Date	Resolution
11. Contact ASTM to hold a webinar for interested NESCC members on the ISO Process and how US input is developed.	Fran Schrotter and Sally Seitz, ANSI	August 24, 2013	
12. Identify NESCC members who can serve as champions at SDO meetings, who will bring forward the recommendations and suggestions of the NESCC Task Groups	Kevin Riley, Duke Energy Cassy Robinson, NIST	October 22, 2013	
13. Report on the top 5 standards priorities as identified by NESCC SDO members.	Tom Boyce, NRC		
14. NRC self-assessment results <ul style="list-style-type: none"> <li>• Review results and initiate request for presentation.</li> <li>• Follow-up on invitation to present with Larry Burkhardt.</li> </ul>	Tom Boyce, NRC Tammy Way, DOE	September 6, 2013 September 16, 2013	
15. Analyze survey results further and compare with industry interests	Kevin Riley, Duke Energy (Cassy will assist)	November 7, 2013	
16. Consider conformity assessment topic mentioned by P. Kadambi – would 3 <sup>rd</sup> party conformity assessment of the implementation of a designer’s work have caught the T-head issue described by M. Shams.	Steering Committee	August 8, 2013	Implementation would likely require rule-making by NRC; this is not justifiable on a cost-benefit basis.