## March 7, 2014

MEMORANDUM TO:	Glenn M. Tracy, Director Office of New Reactors	
FROM:	Michael C. Cheok, Director	/RA/
	and Operational Programs	

SUBJECT: STATUS OF ACTION PLANS IN RESPONSE TO THE POST-COMBINED LICENSE PART 52 IMPLEMENTATION LESSONS LEARNED REPORT

Office of New Reactors

Enclosed are the current status and milestones for the action plans in response to the Part 52 Implementation Working Group Report, dated July 22, 2013. The Division of Construction Inspection and Operational Programs (DCIP) and the Division of Advanced Reactors and Rulemaking (DARR) have coordinated the formulation of these action plans with the other Office of New Reactors (NRO) divisions (Division of Safety Systems and Risk Assessment (DSRA), Division of Site Safety and Environmental Analysis (DSEA), Division of New Reactor Licensing (DNRL), Division of Engineering (DE), and Performance and Resource Management Staff (PRMS)), the Office of the General Counsel (OGC), and Region II. The Region II Deputy Regional Administrator for Construction and the NRO Division Directors have concurred with the plans. DCIP staff will continue to coordinate the completion of these action plans with the other NRO divisions and Region II.

CONTACT: Phil O'Bryan, NRO/DCIP 910-399-5393 March 7, 2014

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**Introduction**: This enclosure details the action plans and the current status for the Part 52 Implementation Lessons Learned Working Group Report. The action plans were formulated by the Division of Construction Inspection and Operational Programs (DCIP) and the Division of Advanced Reactors and Rulemaking (DARR) staff, in coordination with the Division of Safety Systems and Risk Assessment (DSRA), the Division of Site Safety and Environmental Analysis (DSEA), the Division of New Reactor Licensing (DNRL), the Division of Engineering (DE), the Performance and Resource Management Staff (PRMS), the Office of the General Counsel (OGC), and Region II. DCIP staff will coordinate completion of these action plans.

**Summary**: On July 22, 2013, the Post-Combined License Part 52 Implementation Lessons Learned Report was issued (Adams Accession No. ML13196A403). The report details lessons learned in five areas of the NRC's Part 52 construction oversight. Action plans to address each of the report lessons were formulated. The current status and milestones in these action plans are discussed in this enclosure.

**Lessons Learned/Findings:** The Part 52 Implementation Lessons Learned Working Group identified the five lessons learned listed below. Additional discussion of each lesson is included in each lesson's associated action plan.

- 1. Clarity of design control document (DCD) Tier 2\* information (i.e. information for which prior Nuclear Regulatory Commission (NRC) review and approval is needed before changes can be implemented) could be enhanced.
- 2. Clear and timely regulatory decision making in the construction environment can be enhanced through better communications.
- 3. NRC staff acceptance of submitted Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) closure notifications (ICN) will require continued, effective interface with licensees.
- 4. The vendor oversight program would benefit from further clarification of its objectives and its relationship to the Reactor Oversight Program (ROP) and the Construction Reactor Oversight Program (cROP); and enhanced communications of vendors' performance issues with operating reactor and construction licensees.
- 5. NRC staff and the licensees should monitor the ongoing implementation of the current licensing basis change processes to identify where additional process enhancements may be warranted.

# Action Plan for Lesson 1: Clarity of design control document (DCD) Tier 2\* information

## Summary:

Lesson 1 of the Lessons Learned Report discusses instances where lack of clarity has led to different interpretations of DCD Tier 2\* information. Resolution of these differences is necessary to ensure Part 52 facilities are constructed in accordance with their licenses.

The lessons learned report recommendation for this lesson is as follows:

The AP1000 DCD Tier 2\* information should be reviewed to determine if ambiguity is problematic in areas of the AP1000 DCD other than those noted by the Working Group (WG). If so, then the DCD Tier 2\* information for future design certification reviews and combined licenses should also be reviewed and the guidance for designation and documentation of DCD Tier 2\* information should be enhanced. In addition, for the AP1000 design, specific effort should be undertaken to ensure common understanding between the NRC staff and the AP1000 licensees relative to Tier 2\* information. The WG noted that the NRC staff has begun that effort for the remaining critical sections discussed in Section 3H5 of the AP1000 DCD.

#### Enhancements/Actions:

A Tier 2\* Designation (T2\*D) Working Group consisting of staff from DARR, DCIP, DE, DNRL, DSEA, DSRA, RII and OGC was established. Three problem identification and resolution areas have been identified to facilitate discussion in the WG. The WG will further refine the subgroups detailed below during their initial meetings; in addition, the WG will determine what actions and resolutions were obtained in the remaining critical sections discussed in Section 3H5 of the AP1000 DCD.

A) Problem identification – Ambiguity within current new reactors' licenses

1) Identify Tier 2\* information contained within the AP1000 DCD, the Vogtle plantspecific DCD, and the V. C. Summer plant-specific DCD

2) Compare identified Tier 2\* information to the current definition of Tier 2\* contained within NUREG-0800 Chapter 14.3 Appendix A and the Part 52 DCD appendixes

3) Conduct public meetings with the AP1000 designer (Westinghouse) and AP1000 licensees (Vogtle and Summer) to ensure a common understanding between the NRC staff and the licensees relative to Tier 2\* information

4) Revise as necessary the definition of Tier 2\* information to clarify staff expectations for Tier 2\* information

5) Review current AP1000, Vogtle and Summer DCD Tier 2\* information against a revised definition of Tier 2\* information, if applicable

B) Problem identification - Clear, consistent, and objective criteria

1) Update staff guidance contained in SRP 14.3 and possibly propose revisions to the regulations to improve clarity, consistency and objectivity in the definition of DCD Tier 2\* information

#### C) Problem identification – Communication

1) Conduct public meetings with design certification applicants to obtain their feedback and to ensure common understanding of Tier 2\* information and any revised Tier 2\* definition

2) Develop and provide training to the technical staff on any updated Tier 2\* guidance

As the Part 52 Implementation Working Group noted, NRO staff have engaged the Part 52 licensees and Westinghouse in discussions about Section 3H5 of the AP1000 DCD in order confirm a common understanding of design details. The first meeting was a category 2 public meeting held on January 22, 2014. Additional meetings are being planned. Specifically, the discussions have primarily focused on the shield building design.

#### Effectiveness Review Plan:

The T2\*D WG shall evaluate the technical staff expectations for Tier 2\* information in the ongoing DCD reviews, (i.e. Large Light Water Reactors and Small Modular Reactors) for consistency within the Tier 2\* information determinations; first internally to the specific DCD, then secondly, between two or more DCDs. Enhancement/Action Table: Lesson 1 – Clarity of DCD Tier 2\* Information

Enhancement/Action	Office/Division Assigned	Completion Status/Implement ation Schedule
Define Work Scope		
Establish Tier 2* Designation Working Group	DARR	Complete November 2013
Identify specific areas and actions to be reviewed by the Working Group	DARR, DE, DSRA, DSEA,DCIP, DNRL, RII, OGC	Complete December 2013
AP1000 Shield Building Design		
Conduct public meetings with the current Part 52 licensees and Westinghouse to verify a common understanding of the shield building design. Identify and conduct additional meetings as necessary for other DCD topics.	DCIP, DE, RII	First meeting held on January 22, 2014. Second meeting to be held mid-2014.
Problem identification - ambiguity		Scheduled: 5/31/14
Identify Tier 2* information contained within the AP1000 DCD, the Vogtle plant-specific DCD, and the Summer plant-specific DCD	DARR, DE, DSRA, DSEA, DCIP, DNRL, RII	
Compare identified Tier 2* information to the current definition of Tier 2* contained within NUREG-0800 Chapter 14.3 Appendix A and Part 52 DCD appendixes	DARR, DE, DSRA, DSEA, DCIP, DNRL, RII	
Conduct public meetings with AP1000 designer (Westinghouse) and AP1000 licensees (Vogtle and Summer) to ensure a common understanding between the NRC staff and the licensees relative to Tier 2* information	DARR, DE, DSRA, DSEA, DCIP, DNRL, RII, OGC	
Revise as necessary the definition of Tier 2* information to clarify staff expectations for Tier 2* information	DARR, DE, DSRA, DSEA, DCIP, DNRL, RII, OGC	
Review current AP1000, Vogtle and Summer DCD Tier 2* information against any revised definition of Tier 2* information	DARR, DE, DSRA, DSEA, DCIP, DNRL, RII	
Problem identification - rational, consistent, and objective criteria		Scheduled: 9/30/14
Update staff guidance contained in SRP 14.3 to improve clarity, consistency and objectivity in the definition of DCD Tier 2* information	DARR, DE, DSRA, DSEA, DCIP, DNRL, RII, OGC	
Problem identification – communication		Scheduled: 9/30/14

Enhancement/Action	Office/Division Assigned	Completion Status/Implement ation Schedule
Develop and provide training to the technical staff on any updated Tier 2* guidance	DARR, DE, DSRA, DSEA, DCIP, DNRL, RII	
Conduct public meetings with design certification applicants to obtain their feedback and to ensure common understanding of Tier 2* information and any revised Tier 2* definition	DARR, DE, DSRA, DSEA, DCIP, DNRL, RII, OGC	
Effectiveness Review		Recurring through 2017
Evaluate on-going DCD reviews, (i.e. LLPWRs, and SMRs) for consistency within the Tier 2* information determinations		

Contacts: Earl Libby and Joseph Colaccino, NRO/DARR/APOB

# Action Plan for Lesson 2: Regulatory Decision Making during Construction

## Summary:

The lessons learned report states that "Clear and timely regulatory decision making in the construction environment can be enhanced through better communications." This lesson primarily discusses the inspection and enforcement activities associated with a V. C. Summer nuclear island basemat rebar finding (Inspection Report 05200027/2013008, ADAMS Accession No. ML13085A058). The working group's report points out that 5 months elapsed from finding identification until the issue was characterized as an apparent violation in an exit meeting with the licensee. The issue was earlier identified as an unresolved item (URI 0520027/2012004002). However, the report states that "a significant amount of the time was spent after the licensee requested additional time to prepare various submittals of additional information for NRC staff consideration," and the licensee felt that "the NRC staff's ongoing willingness to accept additional information was an indication that there was still an opportunity to convince the NRC of the acceptability of their positions."

The lessons learned report recommendation for this lesson is as follows:

The NRC staff should consider a process for escalating engagement with licensee management to resolve significant unresolved construction inspection findings. Internally, to ensure clear and timely regulatory decisions, prompt enforcement action should be taken when the evidence available to inspectors indicates that a violation has occurred.

## Enhancements/Actions:

Actions and enhancements to implement the recommendations are listed in the table on the next page. Region II has already implemented actions to enhance communications with Part 52 licensees about pending enforcement actions during quarterly meetings between Region II management and the Part 52 licensees' management. No similar delays in resolving URIs have been encountered.

Initiation and resolution of URIs is discussed in Inspection Manual Chapter (IMC) 0613. Region II and DCIP staff reviewed this IMC and agree that the guidance for opening a URI is sufficiently clear. Also, the guidance for follow-up and closure of URIs states that "Unresolved items shall be closed as soon as practical." However, IMC 0613 section 12.02 "Follow-up and Closure of URIs" should be enhanced by including a discussion of NRC management involvement for issues that are encountering significant delays in resolution. A change request with the proposed wording was submitted in July 2013. Regional and NRO staff have made aware of these changes and are currently implementing them.

## Effectiveness Review Plan:

The effectiveness of this action plan will be measured by monitoring the length of time required to close URIs. If there are future URIs that require more than six months to close, or that cause significant delays in construction, the circumstances will be analyzed to determine if further enhancements will be beneficial.

Enhancement/Action Table: Lesson 2 – Regulatory Decision Making During Construction

Enhancement/Action	Office/Division Assigned	Completion Status/Implementation Schedule
<ol> <li>Revise IMC 0613. Section 12.02 "Follow-up and Closure of URI's" to include a discussion of NRC management engagement with the licensee management to resolve outstanding inspection questions.</li> </ol>	NRO DCIP	Change request submitted in July, 2013 (reference number 2013-024). IMC 0613 revision in progress as part of the routine change process and is expected to be complete by 6/1/14.
<ol> <li>Discuss lessons learned from the V. C. Summer nuclear island basemat finding and the proposed IMC 0613 revision with RII DCP/DCI, emphasizing the escalation of NRC and licensee management engagement when resolution of issues is delayed and the appropriate timing of the initiation of the enforcement process.</li> </ol>	RII	Complete. May 2013
<ol> <li>Review current inspection URI's and potential findings and ensure that similar delays are not occurring.</li> </ol>	RII	Complete/Ongoing

Contacts: Phil O'Bryan and Jim Beardsley, NRO/DCIP/CIPB; Steve Smith, RII/DCI/CIB2

# <u>Action Plan for Lesson 3:</u> Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Closure

## Summary:

This lesson discusses difficulties encountered during the ITAAC closure process. The lessons learned report states that "NRC staff acceptance of submitted Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) closure notifications (ICNs) will require continued, effective interface with licensees." This lesson primarily discusses the first ICN submittal to the NRC (ADAMS Accession No. ML12328A160). This ICN was not accepted by the NRC due to a lack of sufficient detail. The report also noted that the lack of standardization of ITAAC for the different new reactor designs limits the applicability of the AP1000 ITAAC lesson.

The lessons learned report recommendation is as follows:

NRC staff should continue to conduct workshops or other stakeholder interactions to identify and resolve differences on the expected level of detail in ICNs, and to enhance ICN guidance as the result of ongoing lessons learned. Additionally, for future design reviews such as those anticipated for Small Modular Reactors, the NRC staff should consider the use of standard terms or formats across designs to make ITAAC closure lessons more generally applicable.

## Enhancements/Actions:

The NRO staff is implementing several actions to address the ITAAC lessons learned for AP1000 licensees and plans to apply them to small modular reactors (SMR). In addition, the staff will continue to update key ITAAC guidance documents. Since the inception of the Office of New Reactors, the NRC staff has routinely involved industry and the public in developing programs and policies that effectively implement Part 52 regulations regarding ITAAC. The staff began a series of ITAAC public workshops in 2007 to develop the program by which licensees develop, and the staff reviews, ICNs. Based on the initial public workshops, industry developed a guideline for the ITAAC closure process. The staff has endorsed the industry guideline and subsequent updates through issuance of a regulatory guide. Both the industry guideline and the NRC's regulatory guidance are considered to be dynamic documents that are updated to address emerging topics and capture lessons learned.

The staff endorsed the third revision of the industry guideline Nuclear Energy Institute (NEI) 08-01, "Industry Guidance for the ITAAC Closure Process under 10 CFR Part 52," with the May 2012 issuance of Regulatory Guide 1.215, "Guidance for ITAAC Closure Under 10 CFR Part 52." In addition to endorsing the industry's approach, this regulatory guide also clarified several topics related to the ITAAC closure process. The latest revision to the industry guideline, Revision 5 of NEI 08-01, includes additional examples of the scope of information required for ICN submittals. Discussions on ICN content between staff, industry, and other stakeholders in the public workshops have largely been collaborative. In general, ICN submittals have included sufficient information regarding a licensee's ITAAC activities and the specific results of a licensee's completed inspections, tests, and analyses. The staff will continue to engage licensees on the content of ICNs to ensure that submittals contain sufficient information to complete ICN verification reviews and support the NRC's 52.103(g) finding to authorize fuel load. As NEI 08-01 is considered a dynamic document, its update includes more ICN examples that effectively cover most of the Westinghouse AP1000 design. Other reactor designs are represented, but the staff will continue to engage industry and other stakeholders on expanding the ICN examples to include designs referenced by future combined operating licenses (COLs), including those for Economic Simplified Boiling Water Reactor (ESBWR) and SMR designs. These ICN examples are the result of extensive work between staff, industry, and other stakeholders during the workshop series and are considered to be the standard from which industry will submit ITAAC notifications to the NRC.

To promote the development of high-quality ITAAC for all SMR designs, the staff created a forum similar to the ITAAC workshop series that started in 2007. In September 2013, staff from DCIP and DARR met with representatives from NEI, Bechtel, Westinghouse, and NuScale to outline a series of public meetings that would focus on improvements to ITAAC preparation, execution, and closure for SMRs. The first of these meetings was held on February 11, 2014. The areas of focus include:

- Improving ITAAC development and efficiency of staff review by:
  - Updating SRP 14.3 sections related to ITAAC
  - Creating standard ITAAC
  - Refining the scope of ITAAC
  - Addressing items in the NRC's post-COL self-assessment working group report
- Enhancing ITAAC closure and NRC inspection by:
  - Addressing closure of ITAAC completed at a manufacturing facility
  - Defining the scope of ITAAC maintenance
  - o Identifying potential changes to the ITAAC inspection program

The goal of these SMR ITAAC workshops is to improve efficiency and effectiveness of ITAAC preparation and reviews, improve quality and inspectability of the ITAAC and Tier 1 information, and address ITAAC closure and ITAAC maintenance issues. The staff expects that this effort will result in higher quality SMR design submittals and more efficient ITAAC completion and inspection during the Part 52 construction process.

The staff is also updating key documents to further enhance the development and review of ITAAC. SRP section 14.3 provides review guidance for ITAAC contained in design certification (DC), early site permit (ESP), and COL applications. Design Specific Review Standards (DSRSs) provide additional review guidance for SRP sections related to unique design characteristics of SMRs. Forthcoming revisions to SRP 14.3 and DSRSs are expected to be complete by March 2014 and will incorporate lessons learned in the ITAAC process and provide guidance on format and content. The staff will use SRP 14.3 and DSRSs as guidance to determine whether: (1) appropriate ITAAC have been included in a licensing application, and (2) the applicable inspections, tests, and analyses can be completed to determine that the acceptance criteria have been met.

## Effectiveness Review Plan:

The staff expects that industry will routinely revise its ITAAC closure process guideline to address emerging topics and issues encountered during Part 52 construction activities. When appropriate, the staff will provide clarifying information in future revisions of RG 1.215 to endorse NEI 08-01. The staff plans to continue conducting ITAAC public workshops with industry, NEI, and other stakeholders. In addition, the staff has begun a separate series of public workshops to improve the development and review of SMR ITAAC.

The staff can measure the effectiveness of these public workshops in two ways. One measure will be the number of "insufficient information letters" and "potential problem letters" that the NRC staff issues in response to submitted ICNs, which will indicate the quality of the ICN submittals. The second assessment will be a direct comparison of NEI 08-01 examples to submitted ICNs to assess the effectiveness of licensees using the examples in NEI 08-01 to develop ICNs. Regarding SMRs, the staff can measure the number of ITAAC-related requests for additional information (RAIs) that are issued in each phase of the DC and COL safety reviews. By comparing the number of RAIs with previous DC and COL application reviews, the staff can assess the effectiveness of public workshops focused on improving the development of SMR ITAAC.

Enhancement/Action	Office/Division	Completion Status/Implementation
	Assigned	Schedule
Continue regularly scheduled	DCIP	Completed Nov 2013 and Feb 2014
Category 3 public ITAAC workshops		meetings. Upcoming schedule: May
with industry and other stakeholders		2014, Aug 2014
Provide staff comments to NEI 08-	DCIP	Completed: February 2014
01, Revision 5, "Industry Guideline		
for the ITAAC Closure Process		
Under 10 CFR Part 52"		
Revise Regulatory Guide 1.215,	DCIP	Expected issuance date: Mar 2015
"Guidance for ITAAC Closure Under		
10 CFR Part 52"		
Conduct an SMR ITAAC workshop	Lead: DCIP	Completed Nov 2013 and February
series	Support:	2014 meetings. Future meetings are
	DARR	planned in March, April, and May 2014
Complete SRP 14.3 and DSRS	DCIP	March 2014
Updates		

Enhancement/Action Table: Lesson 3 - ITAAC Closure

Contacts: Jim Gaslevic and Brian Anderson, NRO/DCIP/IGCB

# Action Plan for Lesson 4: Vendor Oversight

# Summary:

This lesson discusses potential challenges to the Vendor Inspection Program (VIP) due to the large number of vendors and finite NRC resources. The report states that "The vendor oversight program would benefit from further clarification of its objectives and its relationship to the Reactor Oversight Program (ROP) and the cROP; and enhanced communications of vendors' performance issues with operating reactor and construction licensees." The report discusses several avenues for increased efficiency and effectiveness of vendor oversight.

Specifically, the lessons learned report recommended that:

- 1) The staff should continue to communicate and clarify the Vendor Inspection Program objectives and the program's relationship to the cROP, and document its relationship to the ROP.
- 2) The NRC staff should also consider formulating a process to enhance communications with licensees about their vendors. This would provide the NRC staff with additional information about trends in vendor performance, and facilitate the NRC providing specific licensees notice when there are indications of vendor quality issues affecting their facilities.
- 3) Additional information exchange as part of the Multinational Design Evaluation Program should be considered to help prioritize vendor inspections.

## Enhancements/Actions

For coordination of vendor oversight of cROP activities, the vendor inspection staff recently implemented weekly conference calls with the Region II staff to discuss pending inspections and areas for further vendor oversight. Additionally, specific to the AP1000 projects, the vendor staff is including vendor related ITAAC inspections and issues in the AP1000 Performance Project Meetings (PPMs). To enhance interactions with the Office of Nuclear Reactor Regulation (NRR) ROP inspection staff, the vendor inspection staff proposed new language to be added to NRC Inspection Procedure 71152, "Problem Identification and Resolution," to request that inspectors notify the vendor inspection. Such issues can be identified during implementation of the routine screening and semiannual trend review portions of this inspection procedure (Inspection Requirements 02.01 and 02.02).

Also with regard to the first recommendation, and in light of the San Onofre Nuclear Generating Station (SONGS) replacement steam generator (RSG) issues, other enhancements to the VIP may also be warranted. At the time of the SONGS steam generator modifications, the NRC staff was implementing a process outlined in a memorandum (ML032750012) from October 17, 2003 that concluded that expansion of NRC nuclear component supplier oversight for currently operating reactors was not necessary. The memo stated that the NRC intended to continue to rely on the licensees' Appendix B programs and NUPIC audits to ensure adequate quality of vendor-supplied components. The policy also intended that the NRC would observe NUPIC audit activities at least twice a year. In unusual cases (e.g., Rx vessel head), decisions on vendor oversight would be handled on a case-by-case basis. The SONGS replacement steam generators (RSGs) were designed in the 2004-2005 timeframe by Mitsubishi Heavy Industries (MHI) with significant customer input and oversight. Fabrication was completed during 2006-

2009 and the SONGS RSGs for Unit 2 and 3 were installed in 2010 and 2011 respectively. The SONGS RSGs experienced tube degradation in January 2012. There were no specific vendor inspections of the SONGS/MHI design scoping or fabrication in this time-frame.

In response to the SONGS RSG issues, the staff will establish a working group to provide recommendations in the area of vendor oversight. Areas to be considered may include: roles and responsibilities for the various NRC organizations; potential guidance/criteria for inspecting major plant modifications; responsibility for approving and initiating plant design/modification inspections; inspection prioritization; inspection scope; and inspection timing.

With respect to the second recommendation, the NRC staff will continue to communicate with licensees about their responsibilities in the vendor oversight area. Among the methods of communication currently being employed in this area are: participation in Nuclear Procurement Issues Committee (NUPIC) meetings and other industry forums; direct observation of selected NUPIC vendor audits; drafting of NRC Information Notices (when warranted) regarding NRC identified vendor issues; and posting of vendor inspection reports to the NRC website.

Additionally, regarding communications from the NRC staff to licensees about vendor performance, the staff has already implemented numerous methods to ensure effective communication. For NRC licensees of facilities currently under construction, the NRC staff has utilized the Inspections, Tests, Analyses and Acceptance Criteria (ITAAC) process to communicate with licensees about vendor issues deemed sufficient to question the validity of an ITAAC acceptance criteria. In such examples, the NRC staff documents the concern in the vendor inspection report and follows up with a specific letter to the licensee indicating that an issue was identified that could impact ITAAC closure. For operating plant licensees, if an NRC vendor inspection identifies an issue that questions the operability of a supplied component, the existing protocol is to work through NRR Project Managers to inform the effected licensees. The staff will provide guidance in the Vendor Inspection Program Plan (VIPP) to formally describe and refine these existing processes.

Regarding the NRC staff's participation in the Multinational Design Evaluation Program (MDEP) Vendor Inspection Cooperation Working Group (VICWG), the NRC has recently requested that information regarding vendors of common interest be discussed and shared as a matter of routine business. The VICWG standing meeting agenda has a topic called "VICWG Country Regulatory Update". At the meeting in April 2013, the members agreed to come to future meetings prepared to discuss inspections, observations, or events that could have international interest. During the November 2013 meeting, there were presentations by the United Arab Emirates regulator, the Federal Authority for Nuclear Regulation (FANR), the Finnish regulator, the Radiation and Nuclear Safety Authority (STUK), the South Korean regulator, the Korea Institute of Nuclear Safety (KINS), the Chinese regulator, the National Nuclear Safety Authority (and the NRC. As a result of these presentations the NRC identified a supplier of safety related piping that that may warrant further NRC inspection. International insights are one of the factors contained in the VIPP vendor selection process that the NRC uses to identify which vendors should be inspected. No further enhancements are proposed at this time regarding this issue.

## Effectiveness Review Plan:

NRR is expected to incorporate the change to Inspection Procedure (IP) 71152 in 2014 and the VIPP modifications will be completed by June 1, 2014. Therefore, an effectiveness review will

be performed by December 2015 to ensure that the suggested changes were made to IP 71152 and that the changes were effective. Specifically, the purpose of the review will be to assess whether the changes to the IP were sufficient to communicate vendor issues back to the vendor inspection group in NRO. An effectiveness review will be formulated for the SONGS RSG issue after an action plan is recommended by the working group.

Enhancement/Action Table: Lesson 4 – Vendor Oversight

Part 52 Lessons Learned Enhancement/Action – Lesson 4	Office/Division Assigned	Completion Status/Implementation Schedule
Propose new language for NRC Inspection Procedure 71152, "Problem Identification and Resolution," to notify the vendor inspection group about issues concerning vendor performance that result from NRC inspectors routine screening and semiannual trend reviews of licensee corrective action programs	NRO/DCIP	Complete. (ROP Feedback Form 71152- 1946)
Add guidance to the Vendor Inspection Program Plan to formally describe the existing processes concerning how the NRC communicates with licensees about specific vendor performance issues	NRO/DCIP	Modify VIPP by 6/1/2014.
Enhance information exchanges as part of the Multinational Design Evaluation Program	NRO/DCIP	Complete/Ongoing
Establish a DCIP working group to coordinate with NRR and Regions to evaluate improvements in Vendor Oversight	Lead: NRO/DCIP	The working group will be established by 3/30/14.
	Support: NRR/DIRS RIV/DRS RII/DRS	
Provide recommendations to the Director of DCIP on vendor oversight enhancements, taking into account the SONGS replacement Steam Generator issues and other large component fabrication activities		Recommendations are due by 6/30/2014.

Contacts: Ed Roach and Rich Rasmussen, NRO/DCIP

# Action Plan for Lesson 5: Changes to the Licensing Basis during Construction

#### Summary:

This lesson discusses the evolution of the processes for making changes to the licensing basis while a Part 52 facility is being constructed.

The lessons learned report recommendation is as follows:

The NRC staff should continue to assess the implementation of the processes for making licensing basis changes as additional experience is gained during construction. The NRC staff should continue to engage industry on additional process enhancements.

To increase the efficiency of the licensee evaluations, the NRC Changes during Construction Working Group should finalize its recommendation regarding industry use of the screening process used in the operating fleet for evaluating plant changes against 50.59 as an acceptable method of evaluating changes during construction.

#### Enhancements/Actions:

COL-ISG-025 "Interim Staff Guidance on Changes during Construction Under 10 CFR Part 52":

The staff issued the second draft of COL-ISG-025 in the *Federal Register* on August 15, 2013 (78 FR 49782) for use and comment. The comment period ran for 75 days until October 29, 2013. NEI submitted one comment, suggesting combining the preliminary amendment request (PAR) no objection letter with the license amendment request (LAR) acceptance letter. Staff evaluated and considered this suggestion and decided not to combine these two letters because the two letters are separated in time during the review process. The completion of COL-ISG-025 was a predecessor to the staff endorsing NEI 96-07, Appendix C, discussed below, as the ISG is referenced in the NEI guidance document.

NEI 96-07 Appendix C "Guideline for Implementation of Change Processes for New Nuclear Plants Licensed Under 10 CFR 52" Revision 0D:

The staff finalized its comments on the NEI 96-07 Appendix C Revision 0D dated January 8, 2013 (ADAMS ML13010A304) and provided the staff comments to NEI on December 5, 2013 (ADAMS ML13268A511). The Changes during Construction Working Group (CdC WG) received a revision to NEI 96-07 App. C from NEI on January 29, 2014. The CdC WG expects to endorse the NEI guidance document prior to the end of the 2014 calendar year if the revised guidance accurately reflects staff comments.

The CdC WG anticipates developing a new Draft Guide and Regulatory Guide for the endorsement of NEI 96-07 Appendix C in November, 2014.

## Other Actions:

The Division of New Reactor Licensing (DNRL) and Division of Advance Reactors and Rulemaking (DARR) are actively tracking potential developments in the Part 52 change processes during the construction phases of Vogtle 3 & 4 and Summer 2 & 3. The DNRL Project Managers (PMs) assigned to these units under construction are periodically monitoring licensees' plant change screening (50.59) or departure simplified evaluations (Section VIII) to identify regulatory process enhancements. In addition, staff is monitoring the evaluations of licensee submittals of license amendment requests (LARs) and preliminary license amendment requests (PARs) for further efficiencies in staff processing and turnaround times controllable within the staffs' purview.

## Effectiveness Review Plan:

The CdC WG continues to periodically monitor licensees' implementation of the Part 52 change processes during the construction phase through license amendment requests submittals, for adherence to the regulations, focusing on identifying incremental efficiencies to the change/departure processes of the design certification rules. Region II construction inspectors periodically inspect licensee implementation of the licensees' procedures pertaining to processing of plant changes during the construction phase via Inspection Procedure 35007. Best practices or anomalies that are identified within the licensees' change control programs by the construction inspection program personnel are conveyed to DCIP operating engineers and DNRL program managers for evaluation and consideration for inclusion in staff guidance, inspection procedures and enforcement documents.

Enhancement/Action	Office/Division Assigned	Completion Status/Implementation Schedule
COL-ISG-025, publish for use and comment	DARR	Complete: 08/15/2013
COL-ISG-025, Review public comments received	DARR	Complete: 10/31/2013
Close out COL-ISG-025 into DG/RG endorsing NEI 96-07 Appendix C	DARR	11/20/2014
NEI 96-07 Appendix C, staff comments to NEI	DARR	Complete: 12/05/2013
NEI 96-07 Appendix C, review for endorsement	DARR, DNRL, DCIP, DSRA, DE, RII, OGC	Complete: 1/29/2014
NEI 96-07 Appendix C, endorsement Letter as "acceptable for use" during development of DG then RG	DARR	03/15/2014
Monitoring, CdC for Part 52 licensees	DNRL Region II	Periodically through completion of construction phases, transition through 52.103(g)

Enhancement/Action Table: Lesson 5 - Changes to the Licensing Basis during Construction

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