December 29, 2009

MEMORANDUM TO: Timothy Frye, Branch Chief
Construction Inspection & Allegations Branch
Division of Construction Inspection
& Operational Programs
Office of New Reactors

FROM: Jose Jimenez, Reactor Operations Engineer **/RA Nilda Rivera for/**
Construction Inspection & Allegations Branch
Division of Construction Inspection
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Office of New Reactors

PARTICIPANTS: Public, Industry, and NRC Staff

SUBJECT: SUMMARY OF DECEMBER 8, 2009, CATEGORY 2 MEETING WITH THE NUCLEAR ENERGY INSTITUTE (NEI), INDUSTRY, AND THE GENERAL PUBLIC, TO DISCUSS NRC'S COMMENTS OF NEI 08-02 "CORRECTIVE ACTION PROCESSES FOR NEW NUCLEAR POWER PLANTS DURING CONSTRUCTION," REVISION 3

On December 8, 2009, a public meeting was held between the U.S. Nuclear Regulatory Commission's (NRC), Construction Inspection and Allegations Branch (CCIB) of the Division of Construction Inspection and Operational Programs (DCIP) in the Office of New Reactors (NRO), Nuclear Energy Institute (NEI), industry, and the general public. The meeting was located at Executive Boulevard Building, 6003 Executive Boulevard, Rockville, Maryland. The purpose of the meeting was to discuss the comments provided by NRC to NEI 08-02, "Corrective Action Processes for New Nuclear Power Plants During Construction," Revision 3 (ML093440182).

The NRC staff started the meeting by discussing the status of NRC review of NEI 08-02 including discussions of the goals that were accomplished and what are the current expectations as work is performed to determine the adequacy of NEI 08-02. NEI provided revision 3 to the document based on NRC staff's comments on October 28 public meeting (ML093240360). NRC staff began discussing the issues that are still unresolved in the document by providing draft comments summarizing the staff's preliminary position (ML093410493). The discussion was centered on the key messages that NRC has presented to NEI through all of the public meetings (ML091680080). NRC recognized that based on its comments a number of words in the document were changed, sections were restructured but overall the document does not provide a clear description how issues will be handled through the work process. In previous meetings, it was understood that the work processes would have a corrective action measure in place to adequately capture, assess and resolve conditions adverse to quality that have been identified. The current revision does not provide clearly how identified conditions would be treated in the work process and how these conditions would go into the corrective action process if it was determined the condition was a significant condition adverse to quality.

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The examples provided by NEI relied on each single individual, being part of a given work process, to make the determination of how the issue should be dispositioned and it was expected that if not sure how to proceed to turn the issue over to the corrective action process or their supervisor.

This brought up the question of how a work in progress will be classified in such an environment. NRC and NEI engaged in contrasting scenarios that revealed NEI 08-02 does not provide enough guidance on how to proceed under such circumstances. It was agreed that this was going to receive further review at our next meeting. The examples provided on how the work process is expected to work highlighted NRC's concern of adequate accountability, licensee supervision and correct management of conditions adverse to quality. This is due to the fact that conditions adverse to quality (which will comprise most of the issues during construction) could be handled outside any perceived process and it would be left up to the employee's discretion. This was one of the weaknesses identified in the previous construction cycle and is one of the reasons why NRC still considers that NEI 08-02 does not provide enough guidance. NEI maintained that the work processes are quality related activities and thus remained confident that conditions adverse to quality would be adequately handled. NRC shared that it is not captured by the guidance and that as it stands, it could be implemented in a way that could create a weakened construction program.

In summary, NRC stated that NEI 08-02 does not provide enough clarification on how the work process can address the requirements in 10 CFR Part 50, Appendix B, Criterion XVI. As written, there is no reassurance that if implemented, it will consistently identify deficiencies and consistently screen their significance to determine whether a condition adverse to quality exits or not. The delegation of identification and correction of conditions adverse to quality to numerous work processes is still regarded as very difficult to implement with success as written and a likely place where each group can set very different thresholds and standards from each other; thus not providing enough reassurance of adequate implementation of Criterion XVI.

NRC staff expressed that they are willing to conduct a public meeting to go through the document line by line and address possible solutions to the comments provided at this public meeting. The next meeting will be schedule in mid-January and discussions will be centered on final comments to revision 3 provided to NEI which are found in Enclosure 3.

Members of the public were in attendance but Public Meeting Feedback forms were not received. Please direct any inquiries to me at (301) 415-5303, or jose.jimenez@nrc.gov.

Enclosures: 1) Meeting Attendees List
2) Agenda (ADAMS Accession Number: ML093221008)
3) Final NRC Comments on NEI revision 3

cc w/encl: See next page

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ADAMS Accession Number: ML093580216 NRC-001

OFFICE	NRO/DCIP/CCIB	NRO/DCIP/CCIB:BC
NAME	JJimenez	T. Frye
DATE	12/29/09	12/29/09

Meeting Attendees List

NEI 08-02 "Corrective Action Processes for New Nuclear Plants under Construction" Workshop **December 8, 2009** **Location: Executive Boulevard Building, Rockville, MD** **Meeting Attendees**	
Jose Jimenez	NRC/NRO
Patrick Boyle	NRC/NRO
Andrea Keim	NRC/NRO
Roger Lanksburry	NRC/RGII
Tom Bilik	NRC/RGIII
Richard Rassmussen	NRC/NRO
Juan Peralta	NRC/NRO
Junichi Uchiyama	Mitsubishi
Paul Bessethe	Morgan Lewis
Russ Bell	NEI
Jim Fisicaro	NEI
Lawrence Walsh	Shaw Group
Mark Harvey	Unistar Nuclear
Ken Lowrey	STP
George Saks	

NRC Staff Comments

NEI 08-02 "Corrective Action Processes for New Nuclear Power Plants During Construction," Revision 3

- **The changes made to revision 3 do not provide enough clarification on how the work processes include part of the corrective action process in place at a site. The document does not provide guidance on how licensees will interact with suppliers and vice versa in terms of the work processes' corrective actions. The guidance in place will not provide enough reassurance that the screening process will be conducted uniformly for individuals responsible for the work process and the CAP.**

    - NRC requested that if the intent of the definition of Construction Corrective Action Process was to define it as the umbrella concept for both the CAP and the corrective action process in the work processes it should have been explicitly stated in order to set the proper tone for the rest of the document.

    - Per our discussion it was understood that the work process corrective action measures will occur with-in it, to handle CAQ and/or non-conformances. The way it is currently defined does not make it clear (as with the definition of CAP) that the work process will have management process/tools to correct CAQ/non-conformances in compliance with the requirements stated in the definition. Not mentioning that the work process has a corrective action process in place to handle issues, creates the impression of the work process being something completely different from the expected corrective action programs.

    - The document lacks a section were it provides guidance on the corrective action elements that the work process should have and how it should handle the screening, evaluation, and documentation of all items that would currently fall in Column one of Attachment 2 table. Section 5 should be were the corrective action elements pertaining to the work processes are discussed and explain how to best achieve those goals during implementation.

    - Based on previous construction experience and issues identified during inspection of construction projects like MOX/LES corrective actions programs delegated to suppliers have not been implemented as intended. The document should try to provide more guidance/expectation on how the corrective action process in the work process will work in conjunction or communicate with the licensee. Section 3.4 seems like the right place to expand on these expectations. The sentence of … **suppliers been responsible for developing** … is not correct. Licensee should develop or validate corrective action processes in the suppliers' work processes. Language should reflect this concept, similar to words in your previous revision.

- Section 4 has good information on what the corrective action process should establish for an effective program. None the less it does not provide additional information to help clarify the concept of how conditions identified on site will be handled in either the CAP or the corrective action process with-in the work processes established for the different work activities. Some of this information could be inferred by the flow diagram but the document should be more explicit on how it is expected issues will be handled by these multiple corrective processes and how will the licensee be able to effectively keep oversight of them.

- Section 4.2.1 should specify that the licensee should develop a screening process that shall be uniformly used on site. This will ensure that licensee personal evaluating issues entered into the CAP/work process and contracted personnel evaluating issues entered in the corrective action process of the different work processes will adequately evaluate these issues. As it is now it is not clear on whether it applies to the licensee's CAP, the work process corrective action elements, or the CCAP.

- Section 4.2.1 does not specify who is responsible/cognizant of the screening process. Whether an individual or screening organization; if it is an individual then it must be stated in the document and what would qualify an individual to make that determination. Criteria listed for screening is not common knowledge for individual at the work process level and this knowledge gap should be addressed in the document.

- Section 4.2.2 should explicitly link or explain that when the document refers to how each organization will implement the corrective action processes it means each organizations implementation of the work processes, CAP and the path these issues can take from identification/handling in the work processes' corrective action process into the CAP. The current information is correct but it should put both concepts (CAP and Work Process) in the forefront of the document.

- Section 4.2.2 should limit the use of the words low significance and just use defined terms as CAQ/SCAQ. The same comment on what is meant by otherwise significant.

- Section 5 still uses the words **some degree of corrective action**. Per our discussion, the work process will have with-in it part of the corrective action process that should have been discussed earlier in the document (previous comments). This choice of words is confusing as to what is intended. This section should mention (as it is our understanding) that the corrective action process with-in the work process will be (in addition to in procedures) in a management process/tool; to clearly indicate it is a stable program under the oversight of responsible management. This also seems a good section to add a few sentences on how work processes established by suppliers will comply with the requirements established by the licensee and how the licensee should conduct oversight to ensure compliance.

- In Section 5, the sentence **NQA-1-1994 Basic… discuss the resolution of non conformance…** should be put in context to explicitly state that all of those issues will be handled in the corrective action process with-in the work processes.

- In Section 5, the paragraph beginning with **In addition to the corrective action requirements of Criterion XVI…** the writing remains confusing as to what is the intended purpose. It would be preferable that the document would elaborate on an example of what a work process would look like and how the corrective action process will accomplish the intended requirements. Then the document could mention the NQA-1 requirements as further examples to use by licensees to develop procedure requirements for the corrective action process in their respective work process.

- The last sentence of Section 5 should also state that it needs to be in compliance with Criterion XV of Appendix B, 10 CFR Part 50.

- Section 7 should address what actions need to be taken, if a transition to the operating CAP is going to occur in a subsystem well before fuel load. In terms of **ITAAC maintenance,** the operational CAP is designed to handle Tech Spec issues while the construction corrective action processes is designed to handle ITAACs. This needs to be addressed.

- Attachment 1 inside the CAP if an issue is determined to not be a SCAQ/ITAAC the third logic block says Implement Correction. This block should read similar to the block in Work Process: **Implement Correction, Document and trend.**

- Based on our discussion we recommend that a better approach for the columns in Attachment 2 would be to designate them as (from left to right): “conditions within the scope of the work process”; “conditions adverse to quality”; and “significant conditions adverse to quality”. There is a need to have a better understanding on which issues will be handled through the process and be properly considered conditions adverse to quality. The concept of activities “in-process” needs to be addressed to fully understand some of the examples provided in the document.

- Additional guidance needs to be provided in either Section 4 or 5 that would explain which conditions will fall in column one. The document could have words to this effect: “In general, conditions that are still within control of the work process, where the work has not been declared complete, are not conditions adverse to quality and are not required to be entered in the corrective action program. Examples would be: design errors identified before all approvals are complete for a calculation; installation errors identified before the item is released and where correction is within the scope of the work process; certain non-conforming material where the work process contains guidelines for repairing the material; software errors identified during verification testing; etc”.

- If agreement can be reached on what constitutes a condition adverse to quality or when an issue is “in-process” based on our discussions it seems the best approach would be to have a site wide process to handle conditions adverse to quality.

- Specific comments:

  - Throughout document, change “action to preclude recurrence” to “action to preclude **repetition**.”
  - Provide consistent use of term “supplier” throughout document.
  - Provide consistent use of the term “item” throughout document. The term “equipment” is used in the document in lieu of “item.” The term “item” has also been used in lieu of “conditions.” Suggest refrain the use of “item” in an informal sense
  - Executive Summary, First sentence: Revise to “…guidance on how the **holder licensee** of a combined license (COL) **or Limited Work Authorization (LWA)** issued under….”
  - Section 1, Paragraph 3: Last sentence: Suggest streamlining to: “New nuclear plant construction projects use similar corrective action elements, but the methods for documenting corrective actions may differ.”
  - Section 1, Paragraph 4: Third sentence: Revise to: “… is conducted after the **combined** license **(COL)** or limited work authorization (LWA) is issued….”
  - Section 1, Paragraph 5: Second sentence: Revise to: “….method of satisfying NRC **regulatory** corrective action requirements.”
  - Section 1, Paragraph 5: Third sentence: Change “generated as” to “**documented** as.”
  - Section 1, Paragraph 5: Last sentence: Revise to: “When an onsite safety-related **contractor supplier** demobilizes and leaves the site, the licensee/supplier will review all open **items CAQs related to that specific supplier** for correct disposition and **that** ensure….”
  - Section 1.1: Nonconforming Item definition, second sentence: Revise to: “….of the nonconforming items **(e.g., repair, use-as-is)** shall be….”
  - Section 1.1: Suggest providing definition for “Reject.”
  - Section 3.4: Add statement regarding the situation where a supplier is working to the licensee’s QA program in lieu of its own QA program.
  - Section 4, Paragraph 4: Revise to: “…To make consistent and timely **significance** determinations, cause….”
  - Section 4.2.2, Paragraph 1: First sentence: Revise to: “… are classified as SCAQ and therefore require **cause analysis and** actions to **preclude repetition prevent recurrence**.”
  - Section 4.5, Paragraph 1: Suggest new title: “**Verification,** Closure, and Follow-up.” Also, change Section 4, (e).
  - Section 4.5, Paragraph 1: Clarification - “Follow-up” is not discussed is this section, although the term is in the title. Is it the “effectiveness review”? It would be expected that CAQs would also be “closed,” not just SCAQs, as the first sentence implies. Also, “closure” of SCAQ (and CAQ) is never discussed in the section, although the title states this action. Attachment 1 address the closure action, but not “follow-up.” Because closure is not discussed in Section 4.5, it is also unclear at what point the effectiveness review is complete (before or after closure). The reader must review Attachment 1 to determine when the effectiveness review is complete. Guidance is not provided for what could constitute an “effectiveness review.” Attachment 1 shows that SCAQ is closed AFTER the determination of effectiveness. It would seem that an SCAQ could be

closed prior to a determination of effectiveness, and after some period of time after closure an effectiveness review could then be performed, instead of keeping an SCAQ open (that is, not closed) until an effectiveness review is completed. Attachment 1 is very specific regarding closure, THEN effectiveness review. Perhaps provide an option to conduct the effectiveness review either before or after closure, or provide specific guidance regarding when an effectiveness review is completed.

- Section 5, Paragraph 7: Delete entire paragraph or clarify.-This sentence states that Requirement 15 of NQA-1 must be applied. Section 1, Paragraph 2, states "or other NRC endorsed QA standard." A licensee may base its QA program on a QA standard other than NQA-1.
- Attachment 1: Revise two action blocks entitled "Document justification of significance" to "Document **justification determination** of significance."