

May 20, 2008

MEMORANDUM TO: Richard Rasmussen, Chief
Construction Inspection & Allegation Branch
Division of Construction Inspection
& Operational Programs
Office of New Reactors

FROM: Ian Spivack **/RA/**
Construction Inspection & Allegation Branch
Division of Construction Inspection
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Office of New Reactors

PARTICIPANTS: Public, Industry, and NRC Staff

SUBJECT: SUMMARY OF PUBLIC MEETING HELD ON MAY 6 AND 13, 2008, TO
DISCUSS ITAAC CLOSURE AND ASSESSMENT AND ENFORCEMENT
FOR NEW REACTORS

The Construction Inspection and Allegations Branch of the Division of Construction Inspection and Operational Programs (DCIP) in the Office of New Reactors (NRO) conducted a category 2 meeting on Tuesday, May 6th, 2008 with the Nuclear Energy Institute (NEI), industry, and members of the public at the NEI office at 11426 Rockville Pike Suite 230, Rockville, MD 20852 from 8:00 am until 11:30 am. The topic focused on the NRC staff's review of the NEI 08-01 draft "Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52" (ADAMS ML080950402). NEI submitted this document for staff review on April 4, 2008. This meeting was considered an interim meeting before the Category 3 public meeting workshop on ITAAC Closure on May 13th, 2008. The May 13th workshop included a similar presentation of the May 6th meeting topic, and included continued conversations of items that were discussed during the last meeting.

Items discussed during the May 6th meeting included corrections to definitions in the draft guide and removal of citations of NRC expected actions. Also discussed were clarifications to text on topics such as "enhanced" programs to maintain an Inspection, Testing, Analysis, Acceptance Criteria's (ITAAC's) acceptance criteria validation, proper references usage, and intended Quality Assurance Program plans.

Items that were deferred to the May 13th meeting included definitions, DAC references, and other technical topics. Please see the discussion of the May 13th meeting, below, for details.

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The Construction Inspection and Allegations Branch and Region II Construction Inspection Programs conducted a Category 3 meeting on April 13th, 2008, in Rockville, Maryland. The meeting was led by DCIP and discussed cross cutting issues / safety culture considerations for new reactor construction, an overview of a sample 10 CFR Part 52 license, a discussion on the NEI 08-01 document, an industry presentation on modular construction, an overview of security program considerations for construction inspection programs, a discussion on Design Acceptance Criteria (DAC) for digital instrumentation and control (I&C), and industry insight on DAC. The meeting was the eighth in a series of meetings discussing these topics, and was attended by members of the NRC headquarters staff, NRC Region II, the industry, and the general public.

The NRC staff provided opening remarks related to continuing good working relationships with industry and the public, promoting common understanding, and leveraging existing working group knowledge and resources for the benefit of ITAAC scheduling. Industry provided opening comments on the "roadmap to success" and emphasized the importance of pre-planning and appreciated the exchange of ideas between the NRC and the industry.

At the completion of the opening remarks, the NRC presented "New Reactor Construction Safety Focus" (ADAMS ML081290572). The presentation discussed program nomenclature, proposed inspection mechanics, milestones for evaluation development, and safety culture initiatives within the NRC and stakeholder input. The proposed terminology for this topic is construction safety focus components (CSFC). The construction safety culture components are still being developed and may be different than operational safety culture components. A schedule was presented to show the timeline of major events. IMC 2505 will be issued without the CSFC, but will provide the necessary CSFC framework.

Industry stated that there is no immediate health threat for construction related safety issues. Industry also stated that safety culture during construction will need to be different than safety culture during operations. There was a discussion regarding the schedule of producing the safety culture components and that the components will be ready before on-site construction begins. Industry questioned how the NRC will determine how many contributors will be necessary in order to determine a valid trend. Industry suggested that a pilot program would be a good way to determine the number of contributors. Industry asked for examples of components and areas of CSFC. Currently, the NRC task group developing the position for construction inspection program is not considering the use of cross-cutting areas for construction as they exist in the ROP (PI&R, SCWE and Human Performance), but will focus on the individual "components" under development.

The NRC presented "Overview of a Generic Combined License" (ADAMS ML081290576). The presentation discussed background of the generic license process, the license sections, ITAAC, fuel loading and testing. SECY-00-0092, "Combined License Review Process" proposed a generic combined license, which was endorsed by the Commission in a Staff Requirements Memorandum. Requirements sections D, G and K were discussed in detail. Industry questioned the need for a 5% power hold point and the requirements it will take to get approval to go beyond the 5% power hold point. Industry will provide written comments to the NRC regarding the 5% power hold point.

The NRC presented "Review of NEI 08-01 Draft 'Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52'" (ADAMS ML081290553). The presentation discussed issues from the May 6th, 2008 meeting. Generally, the staff found that the draft guide was well written,

each major topic was covered, and many previous issues from the public meetings were incorporated. A global comment was that NRC actions or expectations should be avoided throughout the document. The industry taskforce will work on the definition of "as-built", as well as other definitions in the document. The staff's position is that the final licensee's ITAAC signoff requires the final onsite placement of a component or system. The definition for "ITAAC related construction finding" needs to delete the term "acceptance criteria" because this could limit the importance of the intended integrity of the entire "ITAAC" terminology. Also, NRC stated that the definition of "reasonable person" should be removed from the document. If this definition needs to be in the document, it should be a direct copy of the information from the statements of consideration for the part 52 Rulemaking. Industry stated that the definition from the statements of consideration is not helpful. Industry stated that this definition might be moved to the closure letter. The definition of construction activities should not have a reference to 10 CFR 50.10. Industry suggested that the NRC 52.99 and 52.103(g) flowchart developed by NRC staff through the workshops held in January and March 2008 might be beneficial to include in the NEI document.

Industry stated that there is a technical challenge with labeling proprietary information stored in Primavera. Based on the comments received, NRC scheduled another Category 2 Public meeting to allow continued dialog in advance of the next Category 3 workshop scheduled for July 10, 2008. The next meeting is preliminarily schedule for June 17th and will be noticed on the NRC website.

Four ITAAC closure letters and 225-day notifications, submitted to the NRC by NEI, were then discussed. NRC discussed the changes made to the 225 Day Notification ITAAC-ABWR 2.2.3 (ADAMS ML081370268), 225 day Notification ITAAC-ABWR 2.1.1.3 (ADAMS ML081370290), 225 Day Notification ITAAC-ABWR 2.14.4.4a (ADAMS ML081370312), and ITAAC Closure Letter 2.3.3 Item 3a (ADAMS ML081370350).

Industry presented "Modular Construction" (ADAMS ML081370142). The presentation discussed modular construction related to non-nuclear activities and how they might relate to nuclear related activities. The presentation discussed construction related activities at Hanford nuclear power plant, American Society of Mechanical Engineers accreditations, and quality assurance program. Examples of oil and gas modular construction were presented. Transportation of modules can be done via rail, road, and water. Images from modules constructed in Japan were shown for the advanced boiling water reactor.

The NRC presented "Oversight of Security-Related Construction Activities" (ADAMS ML081290565). The presentation discussed security construction oversight for new reactors. Security will not be different than any other area inspected during construction. There are currently 16 security ITAACs being reviewed by the staff and industry. IMC 2507 is the vendor inspection chapter and is being evaluated by the staff for the possible conduct of very limited-scope inspections at vendor facilities for selected pre-fabricated security systems. Security equipment is not safety related, but needs to be fabricated, installed, and operated so that the Physical Protection System can provide high assurance to protect against the design basis threat. The staff is evaluating the inspections that will need to be in place during the various stages of new construction (such as when fuel is received or prior to initial criticality).

The NRC presented "Design Acceptance Criteria for Digital Instrumentation and Controls" (ADAMS ML081370204). The purpose of this presentation is to gain input on effective and efficient digital I&C DAC and related ITAAC closure, quality and schedule, and establishing best practices. Software life cycle was developed to function when required and allows for future

design enhancements. A detailed schedule is essential in order to effectively and efficiently close out ITAAC and DAC. The license will be issued at some point during the life cycle process. This topic will be discussed during future public meetings.

Industry presented "Industry insight on Design Acceptance Criteria" (ADAMS ML081370147). The presentation discussed modular construction and ITAAC for the AP1000. Modular preparation can begin before traditional construction and site preparation. Modular fabrication can be performed in parallel with other construction activities and can reduce onsite work. Sub-modules will establish wall thickness and reinforcement. The size and number of modules depend on transportation access. Various inspections can be performed at the module construction facility.

The next Category 3 workshops will be July 10th, 2008 and August 28th, 2008 at a location to be determined.

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The next Category 3 workshops will be July 10th, 2008 and August 28th, 2008 at a location to be determined.

Enclosure: Attendees List

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I. Spivack

ADAMS ACCESSION: Package: ML081370368, Public Meeting Notification – May 6, 2008: ADAMS ML081020014, Public Meeting Notification – May 13, 2008: ADAMS ML081140244, Summary of May 6 and 13 public meeting: ADAMS ML081370136, 05/13/2008-Meeting Slides, New Reactor, Construction Safety Focus: ADAMS ML081290572, 05/13/2008-Meeting Slides, Overview of a Generic Combined License: ADAMS ML081290576, 05/13/2008-Meeting Slides, Review of NEI 08-01 Draft, "Industry Guideline for the ITAAC Closure Process Under 10 CFR Part 52.": ADAMS ML081290553, 225 day ITAAC2_2_2-3 final: ADAMS ML081370268 ABWR 2 1 1 3_225 day RPV System Hydro_05_05_08 Final: ADAMS ML081370290, ABWR 2 14 4 4a_225 day SGTS Pressure Test_05_05_08 Final: ADAMS ML081370312 AAC Closure Letter 2 3 3 Item 3a bFinal 051508: ADAMS ML081370350, NRC-NEIREV1: ADAMS ML081370142, 05/13/2008-Meeting Slides, Oversight of Security-Related Construction Activities: ADAMS ML081290565, rev1 5_13 DAC: ADAMS ML081370204, Module: ADAMS ML081370147

| OFFICE | NRO/DCIP/CCIB | NRO/DCIP/CCIB |
|--------|---------------|---------------|
| NAME | ISpivack | RRasmussen |
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Attendance List**

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