

April 28, 2009

PARTICIPANTS: EPR DESIGN CENTER WORKING GROUP, NRC STAFF, MEMBERS OF THE PUBLIC

SUBJECT: SUMMARY OF THE MARCH 17, 2009, EPR DESIGN CENTER WORKING GROUP PUBLIC MEETING

On March 17, 2009, the U.S. Nuclear Regulatory Commission (NRC) held a public meeting at the Rockville Civic Center Park, Glenview Mansion Area B, 604 Edmonston Road, Rockville, MD 20851, with representatives of the U.S. EPR Design Center Working Group (DCWG). The purpose of the meeting was to discuss several cross-cutting issues relating to the U.S. EPR design, including inspections, tests, analyses, and acceptance criteria (ITAAC) for inspectability, finality of operational programs, technical specifications, and review schedules. The meeting agenda is provided as Enclosure 1 and attendees are identified in Enclosure 2.

This meeting summary is available through the Agencywide Documents Access and Management System (ADAMS) as a document with Accession Number ML090930259. The presentation materials distributed at the meeting are contained in ADAMS document ML090780807. Documents in ADAMS are available electronically at the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/adams.html>. If you do not have access to ADAMS or have problems accessing the documents located in ADAMS, contact the NRC Public Document Room (PDR) staff at 1-800-397-4209, 301-415-4737, or pdr@nrc.gov.

The March 17, 2009, meeting was a category 2 public meeting during which members of the public were invited to provide comment at specific times identified in the agenda. The meeting was open to the public for the entire duration. Two members of the public attended the meeting in person. One member of the public was present for the entirety of the meeting. In addition, a representative from Ontario Power Generation was present on the conference line that was made available to the public. Several topics were covered as noticed in the meeting agenda. A summary of each topic is provided in the following sections.

Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) for Inspectability

The morning session was devoted to ITAAC for inspectability. The session began with an NRC presentation on ITAAC for inspectability, which raised many cross-cutting format and content issues contained in Tier 1 of the AREVA design certification application, Revision 0. Several key issues relating to ITAAC for inspectability were raised by NRC staff, and the discussion on each item is summarized below. Examples for each topic labeled A through I are given in the presentation material provided in ML090780807.

A. ITAAC identification and numbering.

1. The inconsistent alphanumeric labeling of ITAAC items was highlighted using examples taken from Tier 1 of the design certification application.
2. In Revision 0, there were several cases where the numbering scheme was inconsistent and changed from numbers to letters, to numbers (for example,

Tier 1, Table 2.2.1-5 Item 3.4b), which contains sub-lettering in the inspections, test, or analyses column as well as the acceptance criteria column.

3. NRC staff stressed the importance of alignment and consistency in wording that defines ITAAC.
4. Members of the DCWG expressed appreciation of the input received from NRC staff during this presentation.
5. NRC staff stressed that all of the issues presented were cross-cutting and not specific examples, but should be viewed as a sampling of issues spanning all of the ITAAC items.
6. A question arose on the documentation of reports for ASME codes. NRC staff responded:
 - i. For items with analysis, a report is required.
 - ii. For items that are not analysis, it is questionable whether or not a report is required.
7. AREVA staff mentioned that the response to RAI 182 was postponed until after this round of discussions to ensure that their final product met the concerns raised in this meeting.
8. NRC staff present at the meeting suggested that the applicant and those present be mindful of the effect of any changes to ITAAC on NRC technical staff and resources.

B. ITAAC interpretation:

1. NRC staff presented example ITAAC items that were inconsistent in the number of items addressed. For example, Tier 1, Table 2.2.1-5 Item 3.3 contains three criteria, whereas Tier 1, Table 2.2.2-3 Item 3.3 contains only two criteria.
2. NRC staff presented items that did not contain bounding tests. For the EQ and seismic items, NRC staff suggested the use of constant terminology to satisfy the requirements throughout ITAAC.
3. A discussion was held with regard to the need for bounding tests in the ITAAC.
 - i. DCWG members commented that inspectors would not have the tools or experience to perform the bounding analysis.
 - ii. NRC staff commented that the bounding analysis should still be present for the inspector to collect the information and pass it on to contractors or other NRC staff that could perform the bounding calculations.
 - iii. This discussion should be revisited at a later time in a teleconference setting or at a future DCWG meeting.

C. Reference-only ITAAC

1. AREVA representatives indicated that this item had already been addressed.
2. COL applicants from the DCWG suggested hearing the basis of the issue for their information. NRC staff provided a short summary and examples of the issue.

D. Instrumentation and control life cycle

1. NRC staff presented examples from the AREVA FSAR Revision 0 that raised questions on which items contained in the ITAAC item applied to inspection and which applied to analyses.

2. An example was shown from Tier 1, Table 2.4.1-9, Item 4.14 in which several items are present in the acceptance criteria column, but it is unclear which items belong to the inspections portion and which items belong to the analysis portion of the ITA column.

E. Definition and terminology

1. NRC staff introduced ITAAC items from the AREVA FSAR Revision 0 that used different terminology, and introduced confusion between “as-built” and “as-installed” terms used in individual ITAAC items.
2. For example, Tier 1, Table 2.2.1-5 Items 2.1 and 3.3 contain the above phrases without a differentiation between the terms.
3. Other examples of terminology inconsistencies were given relating to IRWST and isolation of the electrical systems.
4. The DCWG expressed that they had received a request for additional information on this type of issue.
5. NRC staff stressed the importance of not having records referenced in the ITA column.

F. ASME requirements

1. NRC staff introduced examples of confusion between “components” and “equipment” contained in the ITAAC items.
2. A question on the position paper regarding the ASME reports was raised. Action was taken by projects to follow up on this item and check the status of the position paper.
3. NRC staff inquired as to why piping supports were not mentioned in ITAAC items pertaining to seismic load qualifications. The DCWG responded that they considered these items redundant.

G. ITAAC Specificity and Detail

1. NRC staff presented several examples of ITAAC items that were either not specific or lacked a sufficient level of detail. NRC staff stressed that an inspector cannot infer adequacy using their personal judgment, and that clear acceptance criteria must be fully defined. For example, in Tier 1, Table 2.7.6, statements exist that “controls exist” but these controls are not specifically described.
2. Several additional examples were presented to emphasize the need for clearly defined ITAAC items to allow verification during inspections. Specific examples were provided on ITAAC items involving interlocks.

H. EQ bounding analysis

1. A discussion was held between the NRC staff and members of the DCWG on the as-built engineering design reports.
2. NRC staff stressed the need for consistency and clarity to eliminate confusion on the part of the NRC and builders of the plant.

I. Incomplete ITAAC

1. A specific example of incomplete ITAAC, Tier 1, Table 2.6.1-3 Item 6.1 was provided concerning ITAAC that is missing key components, particularly the leakage detection system.

After the NRC presentation, the DCWG presented slides on ITAAC inspectability. The presentation brought examples of responses to request for additional information (RAI) 148, Question 14.3.3-23 and RAI 132. The NRC presentation focused on the concerns documented in RAI 182. The DCWG expressed that the response to RAI 182 was scheduled to be delivered to NRC staff on May 29, 2009.

An open discussion was held in which other NRC reviewers brought forward concerns about security ITAAC and the effects of ITAAC modification on staff resources.

NRC staff from NRO's Division of Engineering (DE) stressed that they were not focusing on consistency of ITAAC language/terminology at this time. Rather, technical reviewers in DE are identifying the need for additional ITAAC for completeness. DCWG members suggested holding an EPR-specific meeting on ITAAC completeness and consistency at a later date, preferably in the short term.

Representatives from the office of nuclear security and incident response (NSIR) provided an overall discussion of ITAAC from a security viewpoint. This discussion concluded the morning session.

Finality of Operational Programs

After lunch, the NRC staff gave a presentation on finality of operational programs. This discussion resulted from a question raised during the January 16, 2009, EPR DCWG meeting on the extent to which operational programs may be addressed in design certifications. NRC staff noted the similarities between design acceptance criteria (DAC) in design certifications and operational programs in COL applications. The staff discussed policy and regulatory requirements for addressing operational programs. Discussions were held on how operational programs may be addressed in both DC and COL applications.

NRC staff emphasized that policy and legal requirements for finality of operational programs were still being discussed internally between NRC staff and OGC. NRC took action to continue informing applicants of progress on the development of policy regarding finality of operational programs through future teleconferences and public meetings. One topic of concern was the required level of detail to obtain finality, which will be discussed over the course of the next few months.

Changes to EPR COL applications regarding Technical Specifications

The DCWG gave a presentation entitled "Technical Specifications," in which the DCWG presented that the reference combined license application (RCOLA) elected not to incorporate by reference the U.S. EPR FSAR Technical Specifications. The combined license (COL) applications took departures in current revisions. The departure discussed during the meeting was a departure created for the Setpoint Control Program. The DCWG stated that the Technical Specification departures would be eliminated in Revision 4 of the RCOLA and Revision 1 of the SCOLAs.

NRC staff asked questions regarding the ability of the COL applicants to provide plant specific LSSS values required by Technical Specifications since unbracketed Limiting Trip Setpoint values were specified in the Final Safety Analysis Report (FSAR). Also, the staff queried how the COL applicant would provide plant specific values for any and all bracketed values contained in the EPR FSAR Technical Specifications. The DCWG responded that the Technical Specifications would be developed by AREVA and referenced by COL applicants. NRC staff indicated that a specific request for additional information had been sent to AREVA regarding the Limiting Trip Setpoints specified in the FSAR, and that an additional RAI on the RCOLA proposal for the Setpoint Control Program Specification had been submitted to Unistar with no response to date.

NRC staff mentioned the issuance of interim staff guidance (ISG) on December 9, 2008, regarding this issue. The document number was stated as DC/COL-ISG-08. NRC and DCWG staff concluded that future meetings may be held discuss this document at a later date after DCWG members have reviewed the information contained in the ISG. In the interim, NRC staff suggested a review of the RAIs issued on this subject, with particular regard to set-point values. DCWG members stated that the COL application could incorporate by reference the values in the FSAR. NRC staff stated that the FSAR may be unable to define plant specific values. It was agreed that a follow-up discussion would be necessary to resolve this issue.

Security Review/ Part 73 requirements/ NEI templates

NRC staff gave a quick overview of the new rule 10 CFR 73.55, which is due to go into the Federal Register on the week of March 23, 2009. The April 1, 2009, deadline for COL applications to be submitted was discussed. NRC staff stated that they would prefer to receive a complete document after the April 1, 2009, date than review a document that was incomplete and submitted on time. All submittals should, however, be received by approximately May 1, 2009. DCWG asked if the new regulation would be applied in parts and include ITAAC. NRC staff stated that the new rule would be addressed in whole, and that aircraft impact considerations are not in the new rule.

For review template NEI 03-12, NRC staff indicated that discussions between NEI representatives, industry, and NRC staff had been held and that an endorsement letter would follow once comments from the meetings are addressed. The comments will not require a new revision.

The DCWG gave a presentation entitled "Security – US EPR," which reviewed the current plans for submittals concerning security. Near term submittals included modifications of FSAR 13.6, modified ITAACs, and a revised physical security plan based on NEI 03-12, Revision 6. These items will be submitted by April 2, 2009.

A discussion of security assessments in the DC and COL applications was held, including technical report ANP-10296 on design features that enhance security. The COL application incorporates by reference the DC security assessment, Technical Report ANP-10295. DCWG members stated that the RCOL security assessment would be submitted to the NRC by April 2, 2009.

The DCWG presentation covered longer term submittals, including a plan to resolve RCOLA review RAIs to minimize revisions to the SCOL applications. In addition, the longer term submittals will include a report on large area fires and a cyber security plan. The DCWG also

expressed interest in utilizing future meetings for clarification and discussion in order to minimize RAIs related to safeguards information.

DC and COL schedules / DC RAI status / Standard Language RAIs

Items 11 and 12 were switched in the schedule to allow support from NRC staff on this topic. NRC staff explained that the recalibration of the DC schedule was driven by response time to requests for additional information from AREVA. The recalibration pushed the overall Phase 2 schedule for the DC back by two months to January 19, 2010.

NRC staff explained that Advisory Committee for Reactor Safeguards (ACRS) meetings would be held on a chapter basis. NRC staff explained the meaning of Level 1 change as a public milestone change, which occurred as part of the recalibration process. AREVA representatives deferred a discussion of AV-42 to a future meeting. NRC staff stated that the Phase I baseline was met, and that managed reserve was now available in the re-baselined Phase 2 schedule for the design certification. NRC staff stressed that the DCWG would be kept informed of any subsequent schedule changes.

NRC staff led a generic discussion on the status of RAIs issued towards the design certification application, indicating that approximately 2500 draft RAI questions were issued to AREVA. Approximately 2000 responses have been received to date, leaving approximately 500 questions deferred by the DC applicant.

DCWG members inquired as to when they would receive a detailed list of responses and current status. NRC staff replied that a pilot program on Bellafonte was currently underway, and if this program was successful then the approach would be adopted by the EPR projects branch at NRC. NRC staff took action to accelerate the process of generating these reports and making them available to the public.

NRC staff gave a short presentation on standard language RAIs and suggested references available in the public domain for the DCWG applicants to review. The topic of standard language RAIs will be revisited in later meetings once the DCWG members have reviewed the information provided.

New guidance on bracketed information

The DCWG presented slides concerning alignment of the COLA applications, specifically addressing bracketed information. The general procedure was presented. In site-specific documents, all brackets will be removed. In the FSAR and ITAAC items, bracketed information will be located and expanded to encompass the broadest selection of site-specific information. Strings of bracketed information will be combined to simplify paragraphs where necessary. The emergency plans were re-aligned for the COL applications. The revisions containing the changes to bracketed information for each COL application were listed, and can be found in the reference slides.

Discussion and solicitation of future meeting topics

The last topic was a discussion of future DCWG meeting topics. The topics suggested by the attendees are listed below with primary responsibility in parentheses.

1. Further discussion on Technical Specifications issues (DCWG)
2. Dialogue between NSIR and SCOL applicants (NRC / DCWG)
3. Presentation on complete RAI status report (NRC)
4. Integrated audit schedule for COL applications (NRC / DCWG)
5. Update on finality of operational programs (NRC)
6. Further discussion of ITAAC progress and issues (NRC / DCWG)
7. Status report on standard language RAIs (DCWG)

Members of the public were in attendance. No public feedback forms were received. Please direct any inquires concerning this meeting to Jason Carneal at 301-415-3813 or Jason.Carneal@nrc.gov.

Sincerely,

/RA/

Jason Carneal, Project Manager
EPR Projects Branch
Division of New Reactor Licensing
Office of New Reactors

Docket No. 52-020

Enclosures:
Meeting Agenda and Attendee List

cc: EPR DCWG Mailing List

1. Further discussion on Technical Specifications issues (DCWG)
2. Dialogue between NSIR and SCOL applicants (NRC / DCWG)
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7. Status report on standard language RAIs (DCWG)

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Sincerely,

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Docket No. 52-020

Enclosures:
 Meeting Agenda and Attendee List

cc: EPR DCWG Mailing List

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NRO-002

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*See prior concurrence page

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**REVISED AGENDA
EPR DESIGN CENTER WORKING GROUP PUBLIC MEETING**

**Tuesday March 17, 2009
8:30 AM – 4:30 PM**

- | | | | |
|-----|--|--------------|----------|
| 1. | Introduction and Opening Remarks | (NRC/DCWG**) | 8:30 AM |
| 2. | Review of ITAAC for Inspectability | (NRC) | 8:45 AM |
| 3. | Break* | | 10:45 AM |
| 4. | Presentation on ITAAC Progress | (DCWG**) | 11:00 AM |
| 5. | Open Discussion on ITAAC for Inspectability | | |
| | | (NRC/DCWG**) | 11:30 AM |
| 6. | Lunch* | | 12:00 PM |
| 7. | Finality of Operational Programs | (NRC/DCWG**) | 1:00 PM |
| 8. | Changes to EPR COL applications regarding Technical Specifications | | |
| | | (DCWG**) | 1:30 PM |
| 9. | Security Review/ Part 73 requirements/ NEI templates | | |
| | | (NRC/DCWG**) | 2:00 PM |
| 10. | Break* | | 2:30 PM |
| 11. | New guidance on bracketed information | (DCWG**) | 2:45 PM |
| 12. | DC and COL schedules / DC RAI status / Standard Language RAIs | | |
| | | (NRC) | 3:15 PM |
| 13. | Discussion and solicitation of future meeting topics | | |
| | | (ALL) | 4:00 PM |
| 14. | Adjourn* | | 4:30 PM |

All times listed are approximate and for planning purposes only. Adjustments may be made during the meeting as necessary.

**The public will be given the opportunity to comment prior to these points in the meeting.*

*** DCWG – Design Center Working Group (AReVA, UniStar, AMEREN/UE and PPL affiliates)*

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EPR Design Center Working Group Public Meeting
March 17, 2009
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(Revised 04/01/2009)

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