

April 29, 2009

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

FROM: Robert Kellner, Health Physicist */RA/*  
Health Physics Branch  
Division of Construction Inspection  
& Operational Programs  
Office of New Reactors

SUBJECT: SUMMARY OF APRIL 8, 2009, CATEGORY 2 PUBLIC MEETING WITH  
THE NUCLEAR ENERGY INSTITUTE TO DISCUSS HEALTH PHYSICS  
ISSUES FOR NEW REACTORS

On April 8, 2009, the Nuclear Regulatory Commission (NRC) staff held a teleconference meeting with members of the Nuclear Energy Institute (NEI) to discuss new reactor health physics issues. Enclosure 1 lists the meeting attendees.

A public meeting notice was issued on March 23, 2009, and was posted on the NRC's external (public) web page (Agencywide Document Access Management System (ADAMS) Accession No. ML090820512). The notice included the meeting agenda, which was also available as a handout at the meeting. The discussions included:

- General COLA/DCD Application Status and Lessons Learned
- Status of Industry Radiation Protection Templates, including, NEI 07-08 (ALARA), NEI 07-09 (ODCM), NEI 07-10 (PCP), and NEI 07-03 (Radiation Protection Program)
- Discussion of Draft industry template NEI 08-08, "Generic FSAR Template Guidance for Life Cycle Minimization of Contamination", Draft Revision 1, 1A, and 1B.
- Update of Regulatory Initiatives
- Miscellaneous Topics of Interest

NRC and industry representatives discussed the status of four Radiation Protection Program templates developed by NEI to support COL applications. NRC stated that final published templates for NEI 07-09, "Generic FSAR Template Guidance for Offsite Dose Calculation Manual (ODCM) Program Description" and NEI 07-10, "Generic FSAR Template Guidance for Process Control Program (PCP) Description" had been received and will be available through the NRC website (ML091050234). NEI stated that the safety evaluation for NEI 07-03, Radiation Protection Program (ML090410709) had been received and that NEI plans to have the document ready for final publication in late April. NRC representatives stated that the safety evaluation for NEI 07-08, ALARA, is in the review process and should be sent to NEI for final publication by mid May.

NRC staff and NEI discussion of NEI 08-08 focused on draft revision 1B (ML090960573) of the industry template and the NEI responses to the RAIs identified during the March 25 meeting (ML090960583). Each new RAI discussed during the March 25 was reviewed, editorial corrections identified in draft revision 1B, and wording concerning how cost considerations should be used were discussed. At the end of the discussion NRC and NEI agreed that the RAIs had been resolved, pending review of NEI 08-08, Revision 1 to be submitted to the NRC. NEI stated that they planned to have the revised template submitted to the NRC by the end of April.

An industry representative attending the meeting requested clarification of what actions are required by Design Certification (DC) or Combined License (COL) applicants to incorporate NEI 08-08 into their application. The paraphrased question was 'Does there just need to be a reference committing to use NEI 08-08 for compliance with 10 CFR 20.1406, or is something additional required?' Referencing 10 CFR 20.1406, NRC and NEI clarified that the purpose of the NEI 08-08 template is to assist COL applicants in developing a COL application and the operational programs, processes, and requirements that will address compliance with 10 CFR 20.1406 (a). NRC and NEI provided the following summary of the differences between COL and DC applications:

- COL applicants must describe in the application how facility design and procedures for operation will meet the requirements of 10 CFR 20.1406 (a). Upon acceptance by NRC, COL applicants can use the NEI 08-08 template as the licensing reference describing the content of operating programs/processes that will be provided by the applicant prior to initial fuel load to demonstrate compliance with 10 CFR 20.1406 (a). It was noted that supplemental site specific information will be required to be provided by the applicant.
- DC applicants must describe in the application how facility design features will meet the requirements of 10 CFR 20.1406 (b). DC Applicants should include COL License Information Items for development of operating programs, processes, and procedures to demonstrate compliance with 10 CFR 20.1406 (a).

NRC provided status updates on several regulatory issues including NRC progress on initiating the process to update 10CFR20 and 10CFR50 Appendix I to be consistent with the current ICRP guidance (SECY-08-0197), planned revisions of chapter 11 and 12 of the Standard Review Plan (NUREG 0800), Interim Staff Guidance (ISG) Draft ISG-13 and ISG-06 to address acceptance criteria for 10 CFR 20.1406 (a) and (b), and compliance with the National Source Tracking System (NSTS) requirements.

NEI provided comments on Draft Revision 7 of ISG-06 "Interim Staff Guidance for Evaluation and Acceptance Criteria for 10 CFR 20.1406 to Support Design Certification and Combined License Applications" (ML090640183). The comments can be found in ADAMS at accession number ML090990781.

NEI proposed a working model for revision of the accepted NEI generic Radiation Protection Program templates to be discussed further at the next routine meeting.

NEI commented on possible impacts of the Decommissioning Planning rule (SECY-09-0042) on upcoming revisions of Regulatory Guide 1.21 (DG-1186, Measuring, Evaluating, and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste (ML080660617)) and Regulatory Guide 4.1 (DG-4013, Radiological Environmental Monitoring for Nuclear Power Plants (ML080660608)). NEI stated that since these revised Reg. Guides will not be issued at least six months prior to new reactor applications they will not be applicable to any of the current submitted COL applications.

Enclosure:  
List of Attendees

cc w/encl: See next page

T Frye

- 2 -

An industry representative attending the meeting requested clarification of what actions are required by Design Certification (DC) or Combined License (COL) applicants to incorporate NEI 08-08 into their application. The paraphrased question was 'Does there just need to be a reference committing to use NEI 08-08 for compliance with 10 CFR 20.1406, or is something additional required?' Referencing 10 CFR 20.1406, NRC and NEI clarified that the purpose of the NEI 08-08 template is to assist COL applicants in developing a COL application and the operational programs, processes, and requirements that will address compliance with 10 CFR 20.1406 (a). NRC and NEI provided the following summary of the differences between COL and DC applications:

- COL applicants must describe in the application how facility design and procedures for operation will meet the requirements of 10 CFR 20.1406 (a). Upon acceptance by NRC, COL applicants can use the NEI 08-08 template as the licensing reference describing the content of operating programs/processes that will be provided by the applicant prior to initial fuel load to demonstrate compliance with 10 CFR 20.1406 (a). It was noted that supplemental site specific information will be required to be provided by the applicant.
- DC applicants must describe in the application how facility design features will meet the requirements of 10 CFR 20.1406 (b). DC Applicants should include COL License Information Items for development of operating programs, processes, and procedures to demonstrate compliance with 10 CFR 20.1406 (a).

NRC provided status updates on several regulatory issues including NRC progress on initiating the process to update 10CFR20 and 10CFR50 Appendix I to be consistent with the current ICRP guidance (SECY-08-0197), planned revisions of chapter 11 and 12 of the Standard Review Plan (NUREG 0800), Interim Staff Guidance (ISG) Draft ISG-13 and ISG-06 to address acceptance criteria for 10 CFR 20.1406 (a) and (b), and compliance with the National Source Tracking System (NSTS) requirements.

NEI provided comments on Draft Revision 7 of ISG-06 "Interim Staff Guidance for Evaluation and Acceptance Criteria for 10 CFR 20.1406 to Support Design Certification and Combined License Applications" (ML090640183). The comments can be found in ADAMS at accession number ML090990781.

NEI proposed a working model for revision of the accepted NEI generic Radiation Protection Program templates to be discussed further at the next routine meeting.

NEI commented on possible impacts of the Decommissioning Planning rule (SECY-09-0042) on upcoming revisions of Regulatory Guide 1.21 (DG-1186, Measuring, Evaluating, and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste (ML080660617)) and Regulatory Guide 4.1 (DG-4013, Radiological Environmental Monitoring for Nuclear Power Plants (ML080660608)). NEI stated that since these revised Reg. Guides will not be issued at least six months prior to new reactor applications they will not be applicable to any of the current submitted COL applications.

Enclosure: List of Attendees

cc w/encl: See next page

DISTRIBUTION:

PUBLIC

S. Burrows

rla@nei.org

RidsNroDcipChpb

Al Tschaeche ([xat@alum.mit.edu](mailto:xat@alum.mit.edu))

RidsOgcMailCenter

RidsAcrsAcnwMailCenter

NRO\_DCIP\_CHPB

RidsOpaMail

David Matchick ([dmatch@prolog.net](mailto:dmatch@prolog.net))

A. Johnson

I. Berrios

RidsNroDcip

A. Cabbage

Meeting Summary Accession Number: ML091180608

|        |               |                    |
|--------|---------------|--------------------|
| OFFICE | NRO/DCIP/CHPB | NRO/DCIP/CHPB (BC) |
| NAME   | R. Kellner    | T. Frye            |
| DATE   | 4/29/2009     | 4/29/2009          |

**OFFICIAL RECORD**

**Public Meeting with the Nuclear Energy Institute (NEI)  
Discussion of New Reactor Health Physics Topics  
March 25, 2009  
Meeting Attendees**

| Name           | Organization  | Name | Organization |
|----------------|---------------|------|--------------|
| George Oliver  | NEI           |      |              |
| William Smith  | SNC           |      |              |
| Malcomb Knapp  | Talisman/MNES |      |              |
| Edward Roach   | NRC - HQ      |      |              |
| Robert Kellner | NRC - HQ      |      |              |
| Sara Bernal    | NRC - HQ      |      |              |
| Kathy Yhip     | SCE           |      |              |
| Aaron Wilmot*  | Westinghouse  |      |              |
| Hosung Ahn     | NRC - HQ      |      |              |
| Ellen Anderson | NEI           |      |              |
| Ralph Anderson | NEI           |      |              |
| Tim Frye       | NRC - HQ      |      |              |
| Richard Ely*   | Enercon       |      |              |
| Al Tschaeche*  | NUMARK        |      |              |
|                |               |      |              |

\* By Telephone Nuclear Energy Institute

cc:

Mr. Anthony Pietrangelo, Vice President  
Regulatory Affairs  
Nuclear Energy Institute  
1776 I Street, NW, Suite 400  
Washington, DC 20006-3708  
arp@nei.org

Mr. H. A. Sepp, Manager  
Regulatory and Licensing Engineering  
Westinghouse Electric Company  
P. O. Box 355  
Pittsburgh, PA 15230-0355

Mr. Jack Roe  
Nuclear Energy Institute  
1776 I Street, NW, Suite 400  
Washington, DC 20006-3708  
jrw@nei.org

Mr. Charles B. Brinkman  
Washington Operations  
ABB-Combustion Engineering, Inc.  
12300 Twinbrook Parkway, Suite 330  
Rockville, MD 20852

Mr. Gary L. Vine, Executive Director  
Federal and Industry Activities, Nuclear Sector  
EPRI  
2000 L Street, NW, Suite 805  
Washington, DC 20036  
Gvine@epri.com

Mr. Pedro Salas  
AREVA  
pedro.salas@areva.com

Ms. Barbara Lewis  
Assistant Editor  
Platts, Principal Editorial Office  
1200 G St., N.W., Suite 1100  
Washington, DC 20005  
barbara\_lewis@platts.com

Mr. Gary Welsh  
Institute of  
Nuclear Power Operations  
Suite 100  
700 Galleria Parkway, SE  
Atlanta, GA 30339-5957

Alexander Marion, Executive Director  
Nuclear Operations & Engineering

Nuclear Energy Institute  
1776 I Street, NW, Suite 400  
Washington, DC 20006-3708  
am@nei.org

Mr. James H. Riley, Director  
Engineering  
Nuclear Energy Institute  
Suite 400  
1776 I Street, NW  
Washington, DC 20006-3708

Ralph Anderson  
Nuclear Energy Institute  
1776 I Street, NW, Suite 400  
Washington, DC 20006-3708  
rla@nei.org

Ron Shippee  
Areva Unistar  
ronald.shippee@areva.com

Milton Rejcek  
STPNOC  
mfrejcek@stpegs.com

William Smith  
Southern Company  
x2wesmit@southernco.com

Richard Ely  
Enercon Services  
rely@enercon.com

Mark Strum  
Areva Unistar  
Mark.Strum@areva.com

George Oliver  
Nuclear Energy Institute  
1776 I Street, NW, Suite 400  
Washington, DC 20006-3708  
gxo@nei.org

Martin O'Neill  
Morgan Lewis  
martin.oneill@morganlewis.com