

March 4, 2009

MEMORANDUM TO: Michael Junge, Chief  
Operator Licensing and Human Performance Branch  
Division of Construction and Operational Programs  
Office of New Reactors

FROM: Richard Pelton **/RA/**  
Operator Licensing and Human Performance Branch  
Division of Construction and Operational Programs  
Office of New Reactors

SUBJECT: SUMMARY OF FEBRUARY 4, 2009, MEETING WITH THE INDUSTRY  
FOCUS GROUP ON NEW REACTOR OPERATOR LICENSING

On February 4, 2009, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with the Industry Focus Group on new reactor operator licensing to discuss the project plan for the revision of the knowledge and abilities catalogs (K&A catalogs). Enclosure 1 lists the attendees at the meeting. Enclosure 2 is the agenda for the meeting.

This meeting was the latest in a series intended to promote efficient, effective, and consistent preparation and administration of new reactor operator licensing examinations. The industry provided the status of the plan to update the existing K&A catalogs. Four design-centered working groups will be working on the K&A catalogs. The K&A working groups are: ABWR, composed of representatives from South Texas Project Nuclear Operating Company (STPNOC), Toshiba, and GE Hitachi; ESBWR, composed of representatives from GE Hitachi; AP1000, composed of representatives from Southern Nuclear Operating Company, South Carolina Electric & Gas, Duke Energy, Progress Energy, and Westinghouse; and EPR/APWR, composed of representatives from Luminant Generation Company LLC, Unistar Nuclear Energy, Ameren UE, PPL Bell Bend, LLC, and Mitsubishi.

The NRC agreed to attend design centered K&A catalog meetings to provide feedback, to review K&A sections as work progresses, and to participate in surveys as subject matter experts (SME). The NRC will also attempt to provide consistent NRC examiners/SMEs to each of the design center working groups.

It was decided that the use international SMEs and experiences for Section Three, "Plant Systems," and Section 4, "Emergency and Abnormal Plant Evolutions," of the new and revised K&A catalogs would be acceptable. Use of international SMEs on the remaining sections might not be possible due to differences in operating philosophies.

The NRC estimated that approval of each K&A catalog would occur about six months after presentation of the catalog to the Advisory Committee on Reactor Safeguards (ACRS). The time between submittal and approval includes time for the ACRS to review, and then meet to discuss the catalog, the public comment period, incorporation of public comments, additional ACRS meetings, and concurrent Committee to Review Generic Requirements (CRGR). Catalogs delivered to ACRS for review should highlight changes (additions, deletions,

modifications) with an explanation of the reason for the change and provide a description of the process used to identify the changes.

Individual design centers provided the following information:

AP1000: AP1000 will use Vision software for development of the catalog. The group plans to meet in March to begin evaluation of the CVCS system. To improve the efficiency of the review process, the group plans to evaluate and deliver systems in blocks 20 systems. A new K&A catalog is planned.

ABWR: STPNOC and Toshiba have been working to develop a catalog since December 2008. The project plan identifies that STPNOC will evaluate all systems and review the changes with Toshiba and representatives from Japanese utilities using ABWR technology. To date, the list of plant systems has been reviewed with deletions made and K&A statements added. The group provided examples of two ABWR systems (ML090500697). GE Hitachi stated that they plan is to work with STPNOC and Toshiba to create one ABWR K&A catalog. The ABWR catalog will no longer be an addendum to NUREG-1123, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Boiling Water Reactors" as originally planned, but a separate catalog. A meeting has been requested in the early summer timeframe.

ESBWR: GE Hitachi reported that work involving training has been placed on hold until certification of the ESBWR design. K&A catalog efforts are on hold.

EPR/APWR: The group reported that the addendums to current K&A catalogs will be worked between June 2009 and June 2010, delivery of draft addendums is expected between June 2010 and November 2010, with NRC approval by November 2012 rather than January 2012 as stated in the original K&A catalog plan. During the course of the project, 6 – 8 meetings involving SMEs are planned. The SMEs will be previously licensed, operations trainers, engineers, or designers. It is still expected that EPR/APWR K&A statements will be separate addendums to NUREG-1122, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Pressurized Water Reactors."

The NRC stated that use of draft K&A catalogs for exam development is still being researched. The industry would like to use the draft catalogs in the development of several examinations.

In closing, it was decided that the next meeting related to the licensing and examination of reactor operators should be held in June, 2009 and the group would like to meet with the NRC three times per year. No final positions were taken during the meeting.

Enclosures: As stated

CONTACT: Rick Pelton, NRO/DCIP  
(301) 415-1028

Individual design centers provided the following information:

AP1000: AP1000 will use Vision software for development of the catalog. The group plans to meet next month to begin evaluation of the CVCS system. To improve the efficiency of the review process, the group plans to evaluate and deliver 20 systems at a time for review. A new K&A catalog is planned.

ABWR: STPNOC and Toshiba have been working on the catalog since December 2008. The project plan is for STPNOC to evaluate all systems and review the changes with Toshiba and representatives for Japanese utilities using ABWR technology. To date, the list of plant systems has been reviewed with deletions made and K&A statements have been added. The group provided examples of two ABWR systems (ML090500697). GE Hitachi stated that the plan is to work with STPNOC and Toshiba to create one ABWR K&A catalog. The ABWR catalog will no longer be an addendum to NUREG-1123, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Boiling Water Reactors" but a separate catalog. A meeting has been requested in the early summer timeframe.

ESBWR: GE Hitachi reported that work involving training has been placed on hold until certification of the ESBWR design. K&A catalog efforts are on hold.

EPR/APWR: The group reported that the addendums will be worked between June 2009 and June 2010, delivery of draft addendums is expected between June 2010 and November 2010, with NRC approval by November 2012 rather than January 2012. During the course of the project, 6 – 8 meetings involving SMEs are planned. The SMEs will be previously licensed, operations trainers, engineers, or designers. It is still expected that EPR/APWR K&A statements will be separate addendums to NUREG-1122, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Pressurized Water Reactors."

The NRC stated that use of draft K&A catalogs for exam development is still being researched with the intent of using the draft catalogs to develop several examinations.

In closing, it was decided that the next meeting related to the licensing and examination of reactor operators should be held in June, 2009 and the group would like to meet with the NRC three times per year. No final positions were taken during the meeting.

Enclosures: As stated

CONTACT: Rick Pelton, NRO/DCIP  
(301) 415-1028

ADAMS Package Accession Number: ML090630290  
Meeting Notice Accession Number: ML090080601  
Meeting Handout Accession Number: ML090500697  
Meeting Summary Accession Number: ML090630034

OFFICE	DCIP/COLP	DCIP/COLP
NAME	R Pelton	M Junge
DATE	03/04/09	03/04/09

OFFICIAL RECORD COPY

Meeting with the Industry Focus Group on  
New Reactor Operator Licensing  
February 4, 2009

Meeting Attendees

<b>Name</b>	<b>Organization</b>
Mike Junge	NRC / HQ
Rick Pelton	NRC / HQ
John Munro	NRC / HQ
Nancy Salgado	NRC / HQ
Fred Guenther	NRC / HQ
Jim Kellum	NRC / HQ
Sarah Price	NRC / HQ
Mark Lintz	NRC / HQ
Sean Currie	NRC / HQ
Russell Smith	NEI
Satoshi Hanada	MNES
Walt Shura	Dominion
Tom Kuhar	Westinghouse
Charles Sawyer	Duke
Michael Marler	STPNOC
Al Koon	SCANA
Tim Clouser	Luminant Power
Julia Longfellow	General Electric
Mike Llewellyn	INPO
Phil Polefrone	UNISTAR
William Jump	STPNOC
Mike Wagner	STP
Greg Sparks	Entergy
Todd Newkirk	IBEW
Jeremy Quinn	Toshiba America Nuclear Energy
Yasuo Ohea	Toshiba America Nuclear Energy

AGENDA FOR THE CATEGORY 2 PUBLIC MEETING WITH THE  
INDUSTRY FOCUS GROUP ON NEW REACTOR OPERATOR LICENSING ISSUES

February 4, 2009; 1:00 p.m. - 4:00 p.m.  
Executive Boulevard Building  
6003 Executive Boulevard, Room EBB1B15  
Rockville, MD 20852

TOPIC

LEAD

Introductions and Opening Remarks

NRC/Focus Group

Public Input

Public

Knowledge and Abilities Catalog Revision Plan

Focus Group

Public Questions and Answers

Public

Summary / Conclusion / Action Item Review

NRC/ Focus Group

Memo to Michael Junge from Richard Pelton dated

SUBJECT: SUMMARY OF FEBRUARY 4, 2009, MEETING WITH THE INDUSTRY FOCUS GROUP ON NEW REACTOR OPERATOR LICENSING

DISTRIBUTION:

PUBLIC  
COLP Reading File  
RidsNroOd  
RidsNroDcip  
RidsNroDcipColp  
RidsEDOMailCenter  
RidsOgcMailCenter  
RidsAcrsAcnwMailCenter  
SCoffin  
GHolahan  
MJohnson  
PMadden  
DMatthews  
DWilliams  
GTracy  
JTappert

MJunge  
FBrown  
NSalgado  
SGuenther  
JMunro  
RRihm  
DRoberts, RI  
MDapas, RI  
ECobey, RI  
SHansell, RI  
HChristensen, RII  
RCroteau, RII  
LPlisco, RII  
MWidmann, RII  
VMcCree, RII  
AGody, RII

COgle, RII  
RBaldwin, RII  
CKontz, RII  
ABoland, RIII  
HPeterson, RIII  
SWest, RIII  
MSatorius, RIII  
CCasto, RIV  
RCaniano, RIV  
TPruett, RIV  
RLantz, RIV  
MMiller, HRTD  
SCochrum, TTC  
RDevercelly, TTC  
REgli, TTC  
SRutledge, TTC

RSmith (ras@nei.org)

MLlewellyn (LlewellynMD@inpo.org)

Mr. Anthony Pietrangelo, Senior Director  
Risk Regulation  
Nuclear Energy Institute  
1776 I Street, NW, Suite 400  
Washington, DC 20006-3708

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

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

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

Mr. Pedro Salas  
Regulatory Assurance Manager - Dresden  
Exelon Generation Company, LLC  
6500 N. Dresden Road  
Morris, IL 60450-9765  
Ms. Barbara Lewis  
Assistant Editor  
Platts, Principal Editorial Office  
1200 G St., N.W., Suite 1100  
Washington, DC 20005

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