



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 21, 2018

MEMORANDUM TO: Nancy L. Salgado, Chief  
Operator Licensing Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

FROM: Brian W. Tindell, Reactor Engineer (Examiner Qualified) /*RA Theresa Buchanan Acting for*  
Operator Licensing Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JANUARY 24, 2018, MEETING WITH INDUSTRY  
FOCUS GROUP ON LICENSED OPERATOR TOPICS

On January 24, 2018, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with the Nuclear Energy Institute's Licensed Operator Focus Group to discuss a number of topics related to operator licensing.

This meeting was the latest in a series of meetings intended to promote efficiency, effectiveness, and open communications. The discussions addressed a variety of operator licensing topics, including: (1) current status and planned activities for revising NUREG-1122, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Pressurized Water Reactors," Revision 2, Supplement 1, and NUREG-1123, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Boiling Water Reactors," Revision 2, Supplement 1; (2) Generic Fundamentals Examination topics of interest; (3) Operator Docket Digitization status; and (4) the agenda for the upcoming industry-sponsored Operator Licensing Workshop.

Representatives of the NRC and the nuclear industry agreed that this meeting was useful for the exchange of information and agreed to continue the periodic meetings.

Enclosures:

1. List of Attendees
2. Agenda
3. Discussion Summary

CONTACT: Brian Tindell, NRR/DIRS/IOLB  
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SUBJECT: SUMMARY OF JANUARY 24, 2018, MEETING WITH INDUSTRY FOCUS GROUP  
ON LICENSED OPERATOR TOPICS DATED FEBRUARY 21, 2018

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OFFICE	NRR/DIRS/IOLB	NRR/DIRS/IOLB:BC
NAME	BTindell	NSalgado (TBuchanan for)
DATE	2/ 16 /2018	2/ 21 /2018

**OFFICIAL RECORD COPY**

List of Attendees – Nuclear Regulatory Commission (NRC) / Nuclear Energy Institute (NEI) Licensed Operator Focus Group (LOFG) Meeting January 24, 2018	
Name	Organization
Nancy Salgado	NRC
Chris Cowdrey	NRC
Theresa Buchanan	NRC
Jim Kellum	NRC
Bernie Litkett	NRC
David Muller	NRC
Brian Tindell	NRC
Sean Peters	NRC
KG Golshan	NRC
Mackenzie Stevens	NRC
Chris Miller	NRC (via telephone)
Jake Dolecki	NRC (via telephone)
Gerald McCoy	NRC (via telephone)
Eugene Guthrie	NRC (via telephone)
Bruno Caballero	NRC (via telephone)
Robert Orlikowski	NRC (via telephone)
Cyndy Bixler	NRC (via telephone)
Colleen Schmidt	NRC (via telephone)
Stephanie Morrow	NRC (via telephone)
Gregg Ludlam	NEI LOFG
Greg Cameron	NEI
Charles Millard	Exelon
Russell Joplin	TVA
Mark Otten	Ameren
Steve Dennis	PSEG
Chris Hynes	Duke Energy

List of Attendees – Nuclear Regulatory Commission (NRC) / Nuclear Energy Institute (NEI) Licensed Operator Focus Group (LOFG) Meeting January 24, 2018	
Name	Organization
Athan L. Tsakonas	Southern Nuclear (via telephone)
Gary Ohmstede	Southern Nuclear (via telephone)
Val Miklausich	Turkey Point Nuclear (via telephone)
Randall Amundson	NextEra Energy (via telephone)
Eric Thompson	Southern Nuclear (via telephone)
Travis Ouret	NextEra Energy (via telephone)
Joshua Ashcroft	Duke Energy (via telephone)
Gary Sanford	E3 Services (via telephone)
Jeffrey Dills	Talen energy (via telephone)
Eric Bussick	Southern Nuclear (via telephone)
David Hurlburt	Exelon (via telephone)
Brent Bottles	Exelon (via telephone)
Rick Garner	Duke Energy (via telephone)
Aaron Forsha	TVA (via telephone)
Ryan Pritchard	Exelon (via telephone)
Rodney DeLap	First Energy (via telephone)
Dee Nelson	Exelon (via telephone)
Raylene Richardson	Exelon (via telephone)
Chip Perkins	Certrec (via telephone)
Eric Murray	NextEra Energy (via telephone)
Kenneth Jenkins	Southern Nuclear (via telephone)
Erik Feightner	Florida Power & Light (via telephone)
Michael Kelly	Exelon (via telephone)
Stanley Nebus	Southern Nuclear (via telephone)
Ian VanBrocklin	Exelon (via telephone)



AGENDA FOR THE U.S. NUCLEAR REGULATORY COMMISSION (NRC) CATEGORY 2  
PUBLIC MEETING WITH THE NUCLEAR ENERGY INSTITUTE (NEI)  
LICENSED OPERATOR FOCUS GROUP (LOFG)

Thursday, January 24, 2018  
12:30 p.m. to 3:30 p.m. Eastern Standard Time

NRC One White Flint North, Room O16D03  
11555 Rockville Pike  
Rockville, MD 20852

<u>TOPIC</u>	<u>PRESENTER</u>
Introductions and Opening Remarks	NRC/NEI
Path Forward for Revising K/A Catalogs	NRC/NEI
Generic Fundamentals Examination	NRC
- Demonstration of Electronic Registration	
- Potential for Computer Based Examination	
- Research Regarding Bank Question Use	
Operator Docket Digitization	NRC
Operator Licensing Workshop Agenda	NEI

## DISCUSSION SUMMARY

### **Current Status and Planned Activities for Revising K/A Catalogs**

The NRC staff began by providing a brief background of this topic. The NRC published draft versions of NUREG-1122, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Pressurized Water Reactors," Revision 3 and NUREG-1123, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Boiling Water Reactors," Revision 3, for public comment. After the comment period, the Licensed Operator Focus Group (LOFG) informed the NRC that the importance ratings had changed in the Generic Fundamentals Examination (GFE) section of the draft catalogs and that no technical justification for these changes could be located. These changes had originally been provided to the NRC staff by the LOFG as part of an industry effort to update these catalogs. The NRC staff agreed that no technical justification requiring these changes could be located.

The LOFG proposed that the NRC staff remove these inadvertent changes by reverting the GFE sections of the draft catalogs to Revision 2, Supplement 1. The NRC staff noted that the LOFG had sponsored an effort to revise the content of the Knowledge and Abilities (K/A) statements in the GFE section to improve consistency between the catalogs, and the NRC supports those changes. However, because there is no explanation for the inadvertent changes to these importance ratings, the NRC staff must verify the accuracy of all of the catalogs' importance ratings before publishing the catalogs for public comment again. The NRC staff requested that the LOFG provide all of the data from the importance rating surveys to ensure that no other parts of the catalogs were impacted. The LOFG stated that they would attempt to find the information, but the industry's position is that the NRC only needs to address importance ratings in the GFE section.

The LOFG stated that the Revision 3 GFE K/As had not been re-rated as part of the larger industry effort to re-rate other sections of the catalogs, and that the importance ratings for the GFE K/As were likely typos or a computer error. The LOFG suggested that the NRC use the Revision 3 K/A catalogs' basis documents for the importance ratings, since the basis documents contained the revised K/As and the Revision 2, Supplement 1 importance ratings. The LOFG questioned the NRC staff on planned actions if the data is not found. The NRC staff said that they would evaluate the information once the LOFG provided it, or any necessary changes to the current planned actions if the data cannot be located.

Assuming that the staff concerns are addressed, the NRC staff described the planned actions prior to republishing the draft versions of the two K/A catalogs. The NRC staff proposed that, for those GFE K/A statements that remained unchanged between Revision 2, Supplement 1 and Revision 3, the Revision 2, Supplement 1 importance ratings be retained. For the GFE K/A statements that changed between Revision 2, Supplement 1 and Revision 3, the NRC staff proposed to re-rate the importance ratings internally. The NRC will also review operating experience to determine if any additional K/As need to be re-rated. The NRC staff stated that only 20 to 30 K/As should need to be re-rated. The NRC staff also plans to evaluate Sections 3 and 4 of the catalogs to restore deleted K/As, if the K/A was testable in Revision 2, Supplement 1 and was deleted in Revision 3 based on a GFE K/A that would not now be testable based on the revised importance rating. The NRC staff said that when they complete the effort, the catalogs will be published for another 30 day public comment period.

## **Generic Fundamentals Examination**

### **- Demonstration of Electronic Registration**

The NRC staff broadcast this portion of the meeting with a webinar to demonstrate the voluntary electronic registration process for the GFE. Currently, licensee representatives send letters to the NRC to register for the examination and the NRC Operator Licensing Assistants manually enter the information. The new process will provide an electronic form that automates parts of the process, is more secure, and is more efficient.

The NRC staff then described and demonstrated the voluntary electronic registration process. Licensee representatives will need to request and install an NRC-provided certificate one-time in order to authenticate their identity each time they enter data. Licensee representatives also need to request access to the registration process for their facility once. More information can be found at the following website: <https://www.nrc.gov/reactors/operator-licensing/electronic-gfe-registration-info.html>.

The NRC staff then responded to public questions. An industry representative asked what the process would be if a data entry error was made. The NRC staff stated that the licensee can correct mistakes by calling and sending a letter to the NRC up to the test date. An industry representative asked if the electronic registration process replaced the letter that the NRC would send to the facility. The NRC staff confirmed this. Then, an industry representative questioned how they would notify the NRC of what address to use to send the examination and how they would notify the NRC of who would receive the examination. The NRC staff acknowledged the question and stated that the process will be evaluated and further guidance will be given.

The LOFG stated that the modernization effort is positive and that the industry should use the process.

### **- Research Regarding Bank Question Use**

The NRC staff then presented the results of research performed by the NRC staff on the feasibility of a bank-only GFE. Currently, each examination includes five new questions and five modified questions with the remainder of the examination using bank questions. The research question was, "Can an examination with all of the test items taken directly from the NRC's GFE question bank maintain test validity, reliability, and integrity? If so, how many items should the GFE question bank contain to ensure examination integrity?" In order to provide an answer, the NRC staff reviewed research, benchmarked examination processes from other industries, and reviewed GFE data. The NRC staff concluded that using only bank questions would challenge the validity and reliability of the current GFE process because the questions and answers can be memorized. For further details, the technical report is available at ADAMs Accession No. ML17355A455.

The LOFG stated that they would like to make a bank only examination work, and questioned the feasibility of a change to a model of a public bank and a private bank, as described in the technical report. The NRC staff and LOFG said that this was a possibility and committed to continue discussions.

- Potential for Computer Based Examination

The NRC staff presented some preliminary results of an effort to explore an electronic offering of the GFE test, which potentially provides test flexibility. The NRC staff is still exploring options and would like to present further progress on this topic at the next public meeting.

The LOFG stated that they desire the flexibility of an examination that can be administered on demand to help with scheduling initial operator licensing training to avoid peak periods of site-specific examination resource requests. The NRC staff stated that, at this time, a bank-only examination is not supported by the research, so an electronic GFE would still only be offered two times per year. The LOFG stated that if an on-demand examination is not possible, then having four GFE per year would aid scheduling. The NRC staff said that the industry can authorize additional examinations. The LOFG declined. The NRC staff stated that in order to consider additional GFE, the industry should provide a formal written request with justification.

**Operator Docket Digitization**

The NRC staff provided an update on the Operator Docket Digitization effort. The pilot effort with a single plant will continue through February. The NRC staff will expand the pilot to one licensee per region with an initial operator licensing examination in the March or April 2018 timeframe. The NRC currently plans for the process to become voluntarily available in September, 2018 for the entire industry. The NRC staff invited the industry to look at the last meeting summary for more information on the initiative.

The LOFG asked if the NRC had placed information about the initiative on the NRC website. The NRC staff responded that there are plans to provide training and information before the process becomes available for the whole industry.

**Operator Licensing Workshop Agenda**

The LOFG stated that the workshop agenda has not been finalized. The agenda has changed slightly, and the LOFG has been working through the changes. The LOFG would like to ensure that there is a presentation on the GFE effort and Operator Docket Digitization effort. The NRC staff agreed, and committed to presenting on the topics.

**Public Comments**

The LOFG stated that the meeting was productive. A member of the public stated that they would like four GFEs as soon as possible.

The staff stated that the NRC should issue a new draft revision of Regulatory Guide 1.8 soon for a 60-day public comment period.

The NRC staff would like a meeting with the industry in summer 2018. The NRC staff would like to discuss the national initial operator license examination schedule, and continue discussions about the K/A catalogs, GFE topics, operator docket digitization, and NUREG-1021 Revision 11 implementation. The industry agreed that the meeting should be useful.