



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

June 4, 2019

MEMORANDUM TO: Christian B. Cowdrey, Chief
Operator Licensing Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

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

SUBJECT: SUMMARY OF MAY 16, 2019, PUBLIC MEETING WITH INDUSTRY
OPERATOR LICENSING REPRESENTATIVES

On May 16, 2019, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with representatives of the Nuclear Energy Institute's Licensed Operator Focus Group and other industry operator licensing representatives.

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: the Generic Fundamentals Examination and Written Examination, Operating Test Performance Deficiency definition, and revision of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors."

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
(301) 415-2026

SUBJECT: SUMMARY OF FEBRUARY 13, 2019, PUBLIC MEETING WITH INDUSTRY
OPERATOR LICENSING REPRESENTATIVES JUNE 4, 2019

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OFFICE	NRR/DIRS/IOLB *	NRR/DIRS/IOLB	NRR/DIRS/IOLB *	NRR/DIRS/IOLB:C
NAME	BTindell	TBuchanan	MScheetz	CCowdrey
DATE	5/29/19	6/3/19	5/31/19	6/4/19

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List of Attendees – Public Meeting with Industry Operator Licensing Representatives
February 13, 2019

Name	Organization
Christian Cowdrey	NRC
Theresa Buchanan	NRC
Donald Jackson	NRC
Bernie Litkett	NRC
Brian Tindell	NRC
Greg Werner	NRC (via telephone)
Eric Cushing	NRC (via telephone)
Gerald McCoy	NRC (via telephone)
Ikeda Betts	NRC (via telephone)
Maurin Scheetz	NRC (via telephone)
Jesse Seymour	NRC (via telephone)
Matt Emrich	NRC (via telephone)
Timothy Riti	Nuclear Energy Institute
Andrew Mauer	Nuclear Energy Institute
Kostas Dovas	Exelon
Chuck Millard	Exelon
Gregg Ludlam	Entergy
Richard Baird	NextEra
Russ Joplin	Tennessee Valley Authority
Tom Dean	Exelon
Zach Goldwasser	Arizona Public Service
Steve Dennis	Public Service Enterprise Group
Fred Bruns	Exelon
Jana Bergman	Curtis-Wright
Ozzie Vidal	Certrec (via telephone)
Adrian Culver	South Texas Project Electric Generating Station (via telephone)

List of Attendees – Public Meeting with Industry Operator Licensing Representatives
February 13, 2019

Name	Organization
Ivan Kingsley	Sonalysts (via telephone)
Mark Chitty	NuScale (via telephone)
Patrick Leary	NuScale (via telephone)
Tim Tovar	NuScale (via telephone)
Cyrus Afshar	NuScale (via telephone)
Mike Melton	NuScale (via telephone)
Justin Rogers	Pacific Gas and Electric (via telephone)
Bob Meyer	Professional Reactor Operator Society (via telephone)
Mark Walter	NextEra (via telephone)
Travis Ouret	NextEra (via telephone)
Erik Reightner	NextEra (via telephone)
Sean Wylie	NextEra (via telephone)

AGENDA FOR THE U.S. NUCLEAR REGULATORY COMMISSION CATEGORY 2
PUBLIC MEETING WITH INDUSTRY OPERATOR LICENSING REPRESENTATIVES

Wednesday, May 16, 2019
9:00 a.m. to 12:00 p.m. Eastern Standard Time

NRC One White Flint North, Room 16D03
11555 Rockville Pike
Rockville, MD 20852

<u>TOPIC</u>	<u>PRESENTER</u>
Introductions and Opening Remarks	NRC/Industry
Written Examination and GFE	NRC/Industry
Operating Test Performance Deficiency Definition	NRC/Industry
NUREG-1021 Revision	NRC/Industry
Closing Remarks	NRC/Industry
Public Comment	Public

DISCUSSION SUMMARY

Written Examination and GFE

The staff discussed the background of the Generic Fundamentals Examination (GFE) and the basis for forming a working group to evaluate GFE options. From the working group's options, NRC management decided to pilot two GFE reintegration options. The staff asked industry representatives to support the pilot to obtain useful data for GFE reintegration while minimizing impact on applicants. The GFE pilot would not be used as part of the initial operating licensing examination process. The staff asked industry representatives whether GFE reintegration could lead to additional, smaller class sizes, which would impact staff resources. The industry representatives replied that this should not occur, and, by reintegrating the GFE, the industry could start training programs as desired. This should result in larger class sizes, as the facility would be able to wait for selected candidates to arrive at the facility prior to starting the training class.

Industry representatives reiterated their support for the initiative and stated that two boiling water reactor facilities and two pressurized water reactor facilities would support a pilot effort, likely by the end of the year. The industry representatives expressed some concerns related to the pilot effort, as the applicants in the current training programs have not had the benefit of a revised training program that would reflect the changes in the examination process. The staff acknowledged these concerns and stated that the results of the pilot would be reviewed to determine what additional actions were needed prior to implementation, including the possibility of a second pilot. Industry representatives additionally asked for the staff to provide examples of satisfactory and operationally valid theory questions. The staff will consider providing these examples, and examples of such questions are likely already publicly available. The industry representatives also had a concern related to oversampling of component topics. The staff stated that the current examination process requires the examination author and chief examiner to ensure balance of coverage for topics, which should correct any oversampling.

Operating Test Performance Deficiency Definition

The staff provided an update on an effort to define the term Performance Deficiency in NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 11. This would improve consistency and clarity during grading of the operating test (simulator portion). The staff is seeking a simple definition to minimize subjectivity in the grading process. The staff presented a draft definition and guidance that refers to language in the Code of Federal Regulations regarding applicant understanding and ability to take action in the plant. The staff proposed that a performance deficiency would be based on standards for operator performance (such as procedures, training, learning objectives and regulatory requirements). Examiners would evaluate observed action or inaction as well as applicant statements of understanding or intent that are inconsistent with one or more of these standards. A draft definition and guidance is currently with the NRC regions for review and comment. The staff expects to share this with industry representatives at a public meeting or in a communication in the next few months. The staff does not anticipate any change in pass/fail rate for applicants due to the draft definition.

NUREG-1021 Revision

The staff discussed the NUREG-1021 Revision 12, "Streamline Project," which would consolidate information, improve usability, and make the document easier to maintain and

revise. The staff does not intend this revision to be a major change to how the NRC conducts examinations. The staff shared the following examples of draft changes:

1. Simplify the approach to eligibility. The National Academy for Nuclear Training (NANT) guidelines should be used by facility licensees with an accredited systems approach to training program.
2. Consolidate sections so that information is easier to find and located in single topic areas.
3. Create placeholders, to include the operator licensing program for Advance Reactors, such as Small Modular Reactors.
4. Add the Performance Deficiency definition and guidance.
5. Adjust written examination instructions in support of the GFE re-integration project.
6. Remove vague language, use plain language, and improve known problem areas to improve examination consistency (one example is the optional use of the SRO-Only question guidance).
7. Consider moving guidance out of NUREG-1021 that is better suited for operator license manual chapters or for the NRC public website (for example, the reference section and historical information about operator licensing).
8. Add recommendations from the Cold Licensing Charter (ADAMS Accession Nos. ML18039A945 and ML18236A864).
9. Expand the glossary to include terms for ease-of-reference such as “comparable unit” and “verifiable action.”

The staff currently plans to publish a draft NUREG for public comment in the first quarter of calendar year 2020.

A member from industry asked if the NRC will be removing Examiner Standard 600 series information from the revision. The staff responded that moving the NRC administered requalification examination information out of the NUREG is under evaluation.

A member of industry talked about the proposed removal of NRC waivers for eligibility and asked if the NRC has discussed this change with NANT so that they could incorporate a waiver process into the NANT guidelines before this process is removed from NUREG-1021. The NRC staff replied that deferrals will still be possible and that the staff will review any changes to NANT guidelines. However, the NRC cannot legally waive industry standards that are part of a licensee’s training program. As required by 10 CFR 55.31, an operator license applicant must meet the licensee’s requirements to be licensed. The NRC would need to discuss with NANT if they intend to create a waiver process within the guidelines or if facility licensees will be directed to create an evaluation process. Industry representatives stated that they support a process to evaluate equivalencies and to remove the administrative burden of going back and forth with the NRC staff about eligibility.

Industry and Public Comments

The staff and industry representatives commented that the meeting was appreciated and that more meetings should be planned.

An industry representative asked about plans and schedule for issuing Revision 3 of NUREG-1122, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Pressurized Water Reactors," and NUREG-1123, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Boiling Water Reactors." The staff answered that the agency plans to evaluate the re-submittal by NEI, resolve internal comments, and publish the catalogs. The staff plans to begin the effort this summer and complete publication this year. There will be a transition period to the new revision for written examinations, which the staff will publicly discuss before publication.