

July 24, 2015

MEMORANDUM TO: Scott Morris, Director
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

FROM: Scott Sloan, Chief */RA/*
Operator Licensing and Training Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JUNE 16, 2015, MEETING WITH OPERATOR
LICENSING INDUSTRY FOCUS GROUP

On June 16, 2015, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with the Nuclear Energy Institute's (NEI) Operating Licensing Focus Group (OLFG) to discuss with the nuclear industry a number of operator licensing issues.

This meeting was the latest in a series of meetings intended to promote efficiency, effectiveness, and open communications with regard to the licensing of individuals to operate commercial nuclear power plants. The purpose of this particular meeting was to present and discuss changes the NRC is considering to the operator licensing process, as a result of a lessons learned task force review, which could include changes to: (1) the current grading criteria used for evaluating individuals on the simulator scenario portion of NRC operator licensing examinations, (2) the process used for re-grading an individual who contests a NRC operating test failure, and (3) the NRC re-examination process. Other items discussed included licensed operator eligibility and an industry update on a project to revise the knowledge and abilities catalogs for nuclear power plant operators for currently operating reactors.

Representatives of the NRC and the 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
4. Proposed Changes to
the NRC Operator Licensing Program

CONTACT: David Muller, NRR/DIRS
(301) 415-1412

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DATE	7/13 /2015	7/24/2015

OFFICIAL RECORD COPY

List of Attendees Nuclear Regulatory Commission (NRC) / Nuclear Energy Institute Operator Licensing Focus Group (NEI OLFG) Meeting June 16, 2015	
Name	Organization
Allen Howe	NRC
Scott Sloan	NRC
Donald Jackson	NRC
Gerald McCoy	NRC
Hironori (Pete) Peterson	NRC
Vince Gaddy	NRC
Tim Kolb	NRC
Rick Pelton	NRC
David Muller	NRC
Larry Vick	NRC
Jeffrey Cruz	NRC
Caylee Johanson	NRC
David Silk	NRC
Chris Earls	NEI
Gregg Ludlam	NEI OLFG
Chuck Sizemore	NEI OLFG
Tom Giebelhausen	Institute for Nuclear Power Operations
Melinda Bogart	General Electric
Michael Petersen	Xcel Energy
Gary Ohmstede	Southern Nuclear
Roger Jones	Entergy
Russell Joplin	Tennessee Valley Authority
Mark Otten	Ameren
Charles Sawyer	Duke Energy
William Freebairn	Platts McGraw Hill

List of Individuals via Webinar/Telephone Nuclear Regulatory Commission (NRC) / Nuclear Energy Institute Operator Licensing Focus Group (NEI OLFG) Meeting June 16, 2015	
Chris Lally	NRC
Amanda Toth	NRC
Carole Revelle	NRC
Brendan Ryan	Professional Reactor Operators Society
Ken Heffner	Certrec Corporation

AGENDA FOR THE CATEGORY 2 PUBLIC MEETING WITH THE NEI OPERATOR
LICENSING FOCUS GROUP

Tuesday, June 16, 2015
9:00 a.m. to 12:00 p.m. Eastern Standard Time
NRC Three White Flint North Room 1C05
11601 Landsdown Street
Rockville, MD

<u>TOPIC</u>	<u>LEAD</u>
Introductions and Opening Remarks	NRC/NEI
Overview of Recommendations from the Operator Licensing Lessons Learned Task Force	NRC
General Topics for Discussion	NRC/NEI
Eligibility Requirements and Guidance Documents	NRC
Knowledge and Abilities Catalog Update	NRC/NEI
Public Comments	Public
Summary/Conclusions/Action Items	NRC/NEI

DISCUSSION SUMMARY

Introductions and Opening Remarks

The NRC staff stated the importance of the operator licensing process to reactor safety, in that only properly screened and trained individuals, who have demonstrated the necessary knowledge, skills, abilities, and competence to safely operate a nuclear power plant, are to be licensed as operators by the NRC. The staff further stated a goal of consistency in the examination process. However, the staff noted that the results of a March 2014 decision by the Atomic Safety and Licensing Board (ASLB) has presented a challenge to the current operator licensing process, including a challenge to the consistency of the process.

In response to the ASLB decision, the staff presented an overview of actions taken to date by the NRC, including:

- An NRC lessons learned task force was formed and their report with recommendations was issued in November of 2014 (at ADAMS accession number ML15124A615)
- An implementation team was subsequently formed to analyze the recommendations of the task force and develop action items
- Specific issue teams were then formed to address the action items

The staff stated that the primary focus of this meeting was to discuss these action items regarding changes the NRC is considering to operator licensing examinations and changes to the operator licensing process. These changes are being considered by the NRC to enhance the operator licensing process and to promote consistent implementation of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." The staff further stated that informal feedback was welcome at this meeting, and that formal comments will be solicited when Draft Revision 11 to NUREG-1021 is issued for public comments (to occur approximately January 2016).

The OLFG stated that they were very interested in what changes the NRC is considering, and that the OLFG would provide feedback at the meeting as the changes were presented. The OLFG also stated a degree of disappointment, in that in the view of the OLFG, it appeared that the NRC was considering numerous and significant changes to operator licensing examinations and a currently sound operator licensing process, based largely upon a single ASLB decision.

Overview of Recommendations from the Operator Licensing Lessons Learned Task Force: Proposed Changes to the NRC Operator Licensing Program

Using a slide show presentation, the NRC staff proceeded to present proposed changes to the NRC operator licensing program (see Enclosure 4) to the meeting attendees. Additional information not included in the slide show was also presented and discussed.

Simulator Scenario Grading Changes

The staff stated the following with regard to proposed changes to how applicants will be graded on the dynamic simulator scenario portion of NRC examinations:

- Discontinue the practice of restoring a point back if an individual makes two non-critical errors yet correctly performs another activity in the same rating factor.
- Revise the rating factor grading scale from 1 to 3 to 0 to 3. The passing competency score will remain at 1.8.
- A critical task error will result in a score of 0 in a rating factor (or rating factors), except in the Communications competency area. Incorrect performance of a critical task does not result in an automatic examination failure, which is the same as current practice.
- A rating factor will be added in the Technical Specification competency area for senior reactor operators.
- Rating factor weighting factors will also be changed, in light of the new grading criteria.

The staff stated that these changes should add consistency to the grading when compared to the current grading process.

The OLFG stated several concerns regarding the NRC's proposed changes to simulator scenario grading:

- The proposed changes can still lead to inconsistencies in the grading, and could actually increase subjectivity
- The proposed changes don't recognize an individual's correct performance of activities
- An examiner could still demonstrate bias, by improperly skewing rating factor scores to zero and/or by assigning an error to more than two rating factors
- The proposed changes will result in fewer individuals passing their NRC examination and becoming licensed operators in control rooms

Overall, the OLFG stated that they were satisfied with the current methodology for simulator scenario grading and were, for the most part, opposed to the NRC's proposed simulator scenario grading changes.

The NRC staff responded to the concerns of the OLFG by stating:

- A benchmarking analysis was performed of the grading of 740 individuals who have taken an NRC examination in 2013 and 2014. Applying the proposed simulator scenario grading changes to these 740 individuals resulted in approximately a 4% increase in failure rate.
- The historical pass rate on the NRC operating test has been 98%.
- In some cases an individual has multiple opportunities to perform another activity in the same rating factor correctly, in other cases, an individual does not. This can be a source of inconsistency when adding a point back.
- The proposed simulator scenario grading changes are simpler for an examiner to implement, which will add consistency.

- NEI has previously identified issues with simulator scenario grading, as documented in a 2011 NEI Independent Review Team (IRT) Report¹.

Simulator Scenario Critical Tasks

The staff stated that they proposed to enhance and clarify the definition of a scenario critical task (CT), and enhance and clarify the guidance for identifying CTs during examination development and when new CTs are determined after examination administration.

The OLFG acknowledged the information presented, and questioned whether unplanned reactor trips should be considered a CT in every instance. In some cases, even though unplanned, a reactor trip maybe a prudent action for applicants to take.

Delay Licensing Decisions for Marginal Performers on NRC Operating Tests

The staff stated that similar to the current practice of delaying licensing decisions for marginal performers on NRC written examinations pending an appeal, the staff was considering applying this to operating tests. If no operating test appeal was received, individuals who were marginal performers, yet passed their operating tests, would receive their licenses, assuming all other requirements were met, such as passing their written examination and completed eligibility requirements.

The OLFG acknowledged the information presented, and their only concern was that if an appeal was received, would the licensing delay for the marginal performers extend through the time required to complete a hearing.

Waiver Requests and Examination Excusals

The NRC staff stated that their current position regarding waiver and examination excusal requests is that any request must be received formally by letter. In addition, the OLFG was informed that the staff will provide an official decision on a waiver or excusal request once an NRC Form 398 (license application) is received. The staff understands that this is not optimal, and is working towards improvement, such that waiver/excusal decisions can be completed earlier in the operator licensing process.

With regard to examination excusals, the staff stated that it is considering an option that any previously passed examination can be excused if appropriate justification is provided. This option would apply even to individuals who performed marginally on the passed portion of their previous examination.

The OLFG acknowledged the information presented, and like the NRC staff, the OLFG was concerned about the timeliness in submitting waiver and excusal requests, and the timeliness in

¹ With regard to simulator grading, the IRT report (at ADAMS accession number ML12299A234) stated on pages 19 and 20: "The acceptance criteria may not identify marginal candidates. For example, the numerical grading system allows averaging of performance over several events and a range of evaluation factors, such that failure to perform critical steps may be offset by successful completion of several non-critical actions. Overall, the IRT considers the evaluation of candidate knowledge and abilities on the simulator and JPMs [job performance measures] is important and should be enhanced."

receiving the NRC's decision.

NRC Appeal Process Changes

The NRC staff presented proposed changes to the appeal process, should an individual contest an NRC operating test failure. These proposed changes would appear in Operator Licensing Manual Chapter 500 and in NUREG-1021, Section ES-501, and could include:

- Appeal reviews will be limited to contested test items only
- An appeal review can identify new scenario CTs and new applicant errors if they are associated with contested items
- Other applicants' operating test grading will be reviewed based upon appeal results
- The affected NRC Region can submit their views of the applicant contentions, and their views of the NRC appeal results, only by a formal letter approved by Regional NRC Management
- Any claim of bias or prejudice will be addressed concurrently by an existing NRC process, with the possibility of a prompt NRC re-examination of the applicant

The OLFG acknowledged the information presented, and although they largely agreed with the proposed changes, the OLFG was somewhat concerned with the amount of involvement by the affected NRC Region. In addition, the OLFG stated that it seemed problematic to allow an appeal review panel to identify new CTs, as the panel members did not observe the examination.

Changes to NRC Re-Examinations

The staff presented to the OLFG the following proposed changes to the NRC re-examination process:

- An NRC management representative will observe NRC re-examinations
- No NRC examiners involved in the previously failed examination will participate in an applicant's re-examination
- The re-examination results for an applicant will be reviewed by a different NRC manager

The OLFG acknowledged the information presented.

Other Proposed Operator Licensing Changes

The staff presented to the OLFG the following additional proposed internal operator licensing process changes:

- Establish a process for managing NRC Regional differences
- Enhance NRC internal audits and peer reviews
- Update NRC examiner training based upon recent case studies and lessons learned
- Incorporate applicable frequently asked questions (FAQs) into Revision 11 of NUREG-1021, and "sunset" the current operator licensing FAQ web pages

The OLFG acknowledged the information presented and provided two comments:

- The NRC should consider using independent and outside groups to conduct audits
- The operator licensing FAQ web pages are very useful, so caution should be exercised if the NRC is considering discontinuing them

Timeline for Proposed Changes to the Operator Licensing Process

The NRC staff presented to the OLFG that Revision 11 to NUREG-1021 is currently being worked on by the staff, and that Draft Revision 11 to NUREG-1021 should be available for public comments in January 2016. After the public comments are received and dispositioned, the staff estimated that the final version of Revision 11 to NUREG-1021 should be published in August 2016.

General Topics and Licensed Operator Eligibility

During this portion of the meeting, the NRC staff and the OLFG continued to discuss waivers and eligibility, and discussed scheduling future meetings and a national examiner's workshop. With regard to licensed operator eligibility and waivers, the following items were discussed:

- The OLFG's goal of improving ACAD 10-001, "Guidelines for Initial Training and Qualification of Licensed Operators," to make this document the definitive source for determining whether or not an individual is eligible to take the NRC examination and eligible for licensing (i.e., "eligibility"), or whether a waiver will be necessary
- An additional OLFG goal of fewer eligibility waiver requests and eligibility questions from facility licensees to the NRC
- Proposed changes to ACAD 10-001 regarding eligibility for senior reactor operator instructors
- Improving the definition of "related science degree" as to what types of degrees or coursework are to be credited towards eligibility
- Changes to the definition of "power plant staff" and clarifying what is meant by "involved in day to day plant activities"
- A concern stated by the NRC staff regarding the overall regulatory framework for licensed operator eligibility, in that eligibility is not a clear-cut requirement in NRC regulations, but eligibility does appear on the license application (NRC Form 398), and that ACAD 10-001, a document not controlled by the NRC, is being used to determine eligibility

Knowledge and Abilities Catalog Update

A member of the OLFG stated that revisions to NUREGs-1122 and 1123, "Knowledge and Abilities Catalog for Nuclear Power Plant Operators: Pressurized [Boiling] Water Reactors," will be made available for NRC review in approximately one month. The NRC staff stated that due to the staff's significant involvement over the course of this project that issuing these NUREGs should be fairly uncomplicated.

Public Comments

Comments from the public included:

- A question on the availability of ACAD documents
- Operator licensing has a sound process in-place, and it has worked well over the years
- Some subjectivity in the grading of operating tests is likely unavoidable
- The results of a single NRC examination may not always identify an operator who exhibits marginal performance
- A concern in the number and type of concurrent NRC changes that could impact facilities, applicants, and licensed operators, including revised knowledge and abilities catalogs, post-Fukushima actions, larger licensing classes and an increase in operator retirements, and now a proposed revision to NUREG-1021
- Implementing a 0-3 grading scale for rating factors while also eliminating the current point back grading practice seems excessive, and could result in a substantial increase in operating test failures

The NRC and OLFG acknowledged the comments received.

Summary/Conclusions/Action Items

The NRC and OLFG agreed that this meeting was very useful, and that past meetings have been useful as well. Action items, as discussed during the meeting, concerned anticipated dates for completing draft revisions to NUREG-1021 and NUREGs-1122 and 1123.

Proposed Changes to the NRC Operator Licensing Program

Timothy Kolb
Operator Licensing & Training Branch
Office of Nuclear Reactor Regulation

June 16, 2015

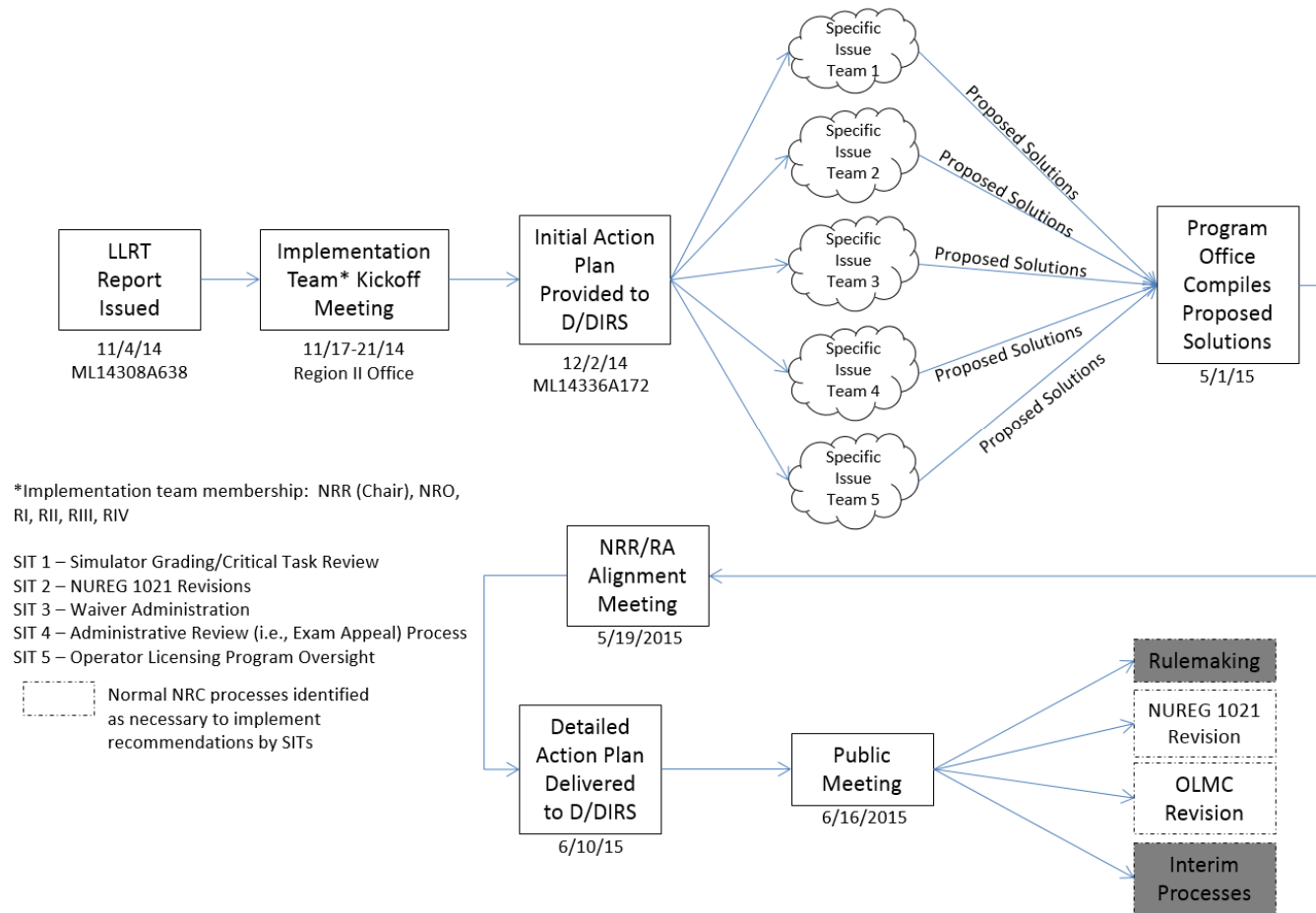
Today's Meeting

We are here to share with you some proposed changes we intend to pursue to improve the Operator Licensing Program administration. We are not soliciting formal comments at this time, however, the public will have an opportunity to provide formal comments on the NUREG 1021 changes later in the process. We are interested in discussing your ideas and receiving feedback on ways to improve the Operator Licensing Program administration.

Background

- Lessons Learned Review Team (LLRT) consisted of cross-regional senior examiners independent of individuals involved in the hearing process
- Operator Licensing Implementation Team (OLIT) consisted of members from all 4 regions and the program office
- Both teams had full support of NRC senior management

LLRT REPORT RESPONSE PROCESS



Purpose

Enhance the Operator Licensing examination process to provide a more consistent means of making licensing decisions, evaluating excusals and waivers of examination requirements, and strengthening the guidance related to the appeal process.

Proposed NUREG 1021 Changes

- Discontinue the practice of restoring a point back when two non-critical errors are offset by correctly performing another activity in the same rating factor
- Revise simulator performance scoring to be revised from a range of 1 to 3 to a range of 0 to 3

Proposed NUREG 1021 Changes (cont'd)

- Critical Tasks (CTs)-Enhance guidance for pre-identifying CTs, now have “EOP-based CTs” and “Total number of CTs” as a “target” rather than a “limit”
- Add criteria to ES-501, “Initial Post-Examination Activities,” to hold licenses in abeyance if there are operating test failures

Proposed NUREG 1021 Changes (cont'd)

- Utilize formal correspondence only for waiver requests and decisions
- Add excusal justification criteria for passed portion of exam to the NUREG
- Limit appeal reviews to contested items only

Proposed NUREG 1021 Changes (cont'd)

- Branch Chief or other management official to observe any re-examination following allegations of conflicts of interest or bias
- Add examiner restrictions for operating retake exams:
 - Any examiner who observed the applicant's initial exam is prohibited from participating in retake
 - A different manager shall make the final licensing decision
- Incorporate applicable FAQs into Rev.11

BREAK!

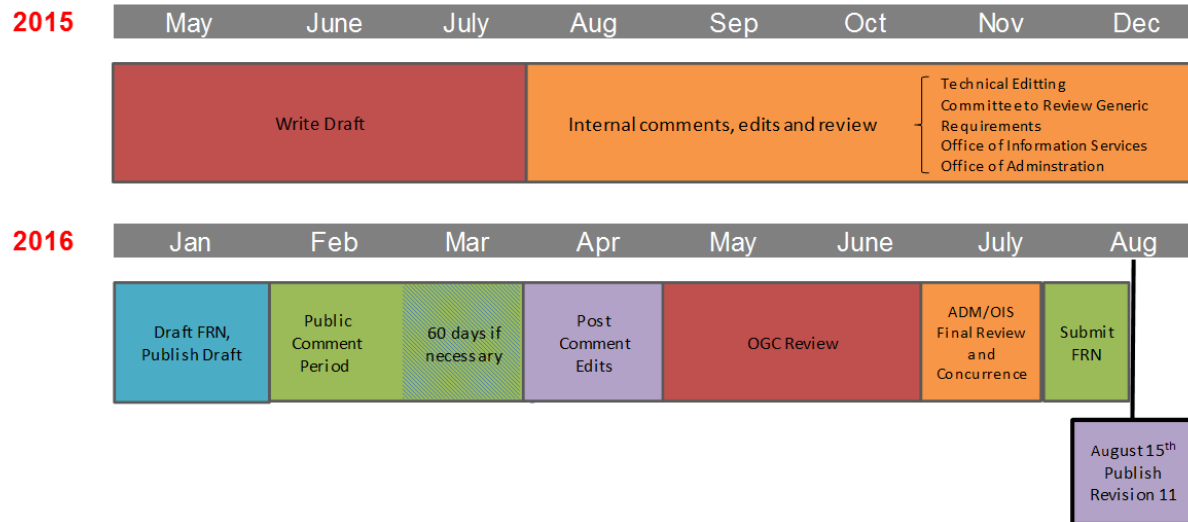
Proposed Operator Licensing Internal Process Changes

- Appeal review process being revised to clearly identify scope and conduct of the appeal panel
- Examination Waiver and Excusal guidance is being clarified
- Bias/Prejudice claims to be handled in accordance with our internal process regarding “Licensee complaints against NRC employees”

Proposed Operator Licensing Internal Process Changes

- Establish process for managing regional differences
- Enhance Audit/Peer review process
 - Cross-regional participation on exams
 - Measures to improve program oversight and interactions across regions
- Examiner training updated with case studies and results from audits and appeal resolutions

Action Plan Timeline



NUREG 1021
 545 pages
 23 sections, 6 appendices

List of Acronyms

ADM//OIS	Office of Administration/Office of Information Services
CT	Critical Task
D/DIRS	Director/Division of Inspection and Regional Support
EOP	Emergency Operating Procedures
ES	Examination Standards
FAQ	Frequently Asked Questions
FRN	Federal Register Notice
LLRT	Lessons Learned Review Team
NRR/RA	Nuclear Reactor Regulation/Regional Administrator
OGC	Office of General Counsel
OLIT	Operator Licensing Implementation Team
OLMC	Operator Licensing Manual Chapter
SIT	Specific Issue Team

Questions