

January 3, 2008

MEMORANDUM TO: Frederick D. Brown, Director  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

FROM: Nancy L. Salgado, Chief **/RA/**  
Operator Licensing and Human Performance Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF DECEMBER 11, 2007, MEETING WITH INDUSTRY  
FOCUS GROUP ON OPERATOR LICENSING ISSUES

On December 11, 2007, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with the industry focus group on operator licensing to discuss a number of operator licensing issues. Enclosure 1 lists the attendees at the meeting; no members of the general public were present.

This meeting was the latest in a series of meetings intended to promote efficient, effective, and consistent preparation and administration of initial operator licensing examinations. The discussions addressed issues related to simulator fidelity and testing, new reactor licensing, implementation of the fatigue rule (Subpart I of 10 CFR Part 26), and other operator licensing issues. Enclosure 2 is the agenda for the meeting, and the discussion topics are summarized in Enclosure 3.

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: As stated

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

January 3, 2008

MEMORANDUM TO: Frederick D. Brown, Director  
 Division of Inspection and Regional Support  
 Office of Nuclear Reactor Regulation

FROM: Nancy L. Salgado, Chief **/RA/**  
 Operator Licensing and Human Performance Branch  
 Division of Inspection and Regional Support  
 Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF DECEMBER 11, 2007, MEETING WITH INDUSTRY  
 FOCUS GROUP ON OPERATOR LICENSING ISSUES

On December 11, 2007, the U.S. Nuclear Regulatory Commission (NRC) staff held a public meeting with the industry focus group on operator licensing to discuss a number of operator licensing issues. Enclosure 1 lists the attendees at the meeting; no members of the general public were present.

This meeting was the latest in a series of meetings intended to promote efficient, effective, and consistent preparation and administration of initial operator licensing examinations. The discussions addressed issues related to simulator fidelity and testing, new reactor licensing, implementation of the fatigue rule (Subpart I of 10 CFR Part 26), and other operator licensing issues. Enclosure 2 is the agenda for the meeting, and the discussion topics are summarized in Enclosure 3.

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: As stated

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

**DISTRIBUTION:** PUBLIC IOLB/NEI & Public Meetings Folders  
 BBoger FBrown SRichards NSalgado  
 TMensah JMunro RPelton MWidmann  
 DMuller LVick MSykes MJunge  
 HPeterson RLantz SHansell  
 JRoe ([jwr@nei.org](mailto:jwr@nei.org)) PMcCullough ([mcculloughpn@inpo.org](mailto:mcculloughpn@inpo.org))

ADAMS Accession No. ML073511714

OFFICE	IOLB	IOLB/BC
NAME	DMuller	NSalgado
DATE	12/20/07	01/03/08

OFFICIAL RECORD COPY

List of Attendees - NRC / Industry Focus Group Meeting on Operator Licensing  
December 11, 2007

Name	Organization
Stuart Richards	Nuclear Regulatory Commission (NRC) / HQ
Nancy Salgado	NRC / HQ
Lawrence Vick	NRC / HQ
George Usova	NRC / HQ
Richard Pelton	NRC / HQ
David Muller	NRC / HQ
John Munro	NRC / HQ
Mike Junge	NRC / HQ
Marvin Sykes	NRC / RI
Sam Hansell	NRC / RI
Peter Presby	NRC / RI
Mark Bates (via telephone)	NRC / RII
Craig Kontz (via telephone)	NRC / RII
Gerry Laska (via telephone)	NRC / RII
Hironori Peterson (via telephone)	NRC / RIII
Jack Roe	Nuclear Energy Institute (NEI)
Chris Earls	NEI
Chuck Sizemore	Florida Power and Light (FPL)
Gregg Ludlam	Exelon
John Steely	Duke Energy
Michael Petersen	XCEL
Timothy Dennis	ANS Standards Committee Chairman
Kerry Wright	FPL
Ed Momm	FPL
Tom Mayfield	Entergy
Russell Smith	NEI
Robert Meyer	Professional Reactor Operator Society
Keith Welchel	Duke Energy, ANS 3.5 Secretary
Chuck Hess	Pennsylvania Power and Light (PPL)

FINAL AGENDA FOR THE CATEGORY 2 PUBLIC MEETING WITH THE  
INDUSTRY FOCUS GROUP (FG) ON OPERATOR LICENSING ISSUES

December 11, 2007; 9:00 a.m. – 12:00 p.m.  
Nuclear Energy Institute  
1776 I Street, NW, Washington, DC

<u>TOPIC</u>	<u>LEAD</u>
Introductions and Opening Remarks	NRC/FG
Public Input	Public
Generic Issues	NRC/FG
<ul style="list-style-type: none"><li>- Simulator fidelity and testing</li><li>- New reactor licensing update</li><li>- 10 CFR Part 26 (Fatigue Rule update)</li><li>- IN-2007-31, FDA Announcement on Sleep Disorder Drugs</li></ul>	
Public Questions and Answers	Public
Initial Licensing Issues	NRC/FG
<ul style="list-style-type: none"><li>- RIS-2007-17 exam projections</li><li>- Contractor-prepared initial exams</li><li>- Other</li></ul>	
Public Questions and Answers	Public
Requalification Issues	NRC/FG
<ul style="list-style-type: none"><li>- RIS on license proficiency watches</li></ul>	
Focus Group Issues	FG
<ul style="list-style-type: none"><li>- Instant SRO eligibility requirements for engineers and NLOs</li></ul>	
Public Questions and Answers	Public
Summary / Conclusion / Action Item Review	NRC/FG

## DISCUSSION SUMMARY

### GENERIC ISSUES

#### Simulator Scenario Based Testing (SBT) Methodology

The NRC staff acknowledged the Nuclear Energy Institute's (NEI) letter of November 20, 2007, to the NRC on simulator Scenario-Based Testing (SBT) methodology and agreed in principle to the letter's four recommendations as listed below:

1. Accept and endorse the Robinson Nuclear Plant simulator SBT testing methodology demonstrated to the staff.
2. Accept and endorse the Robinson Nuclear Plant simulator SBT documentation methodology.
3. Limit the scope of simulator SBT scenarios that fall under the 1998 version of ANSI/ANS-3.5, "Nuclear Power Plant Simulators for Use in Operator Training and Examination," to:
  - a. NRC initial license examination scenarios,
  - b. NRC annual re-qualification examination scenarios, and
  - c. Facility licensee scenarios utilized for license candidate reactivity control manipulation credit.
4. Demonstrate that testing of the malfunctions listed in section 3.1.4 of ANSI/ANS-3.5-1998 has been performed at least once in the lifetime of the simulator and that the documentation will include the completed test results.

Each of the recommendations was discussed. The NEI operator licensing (OL) focus group (FG) agreed to avoid use of the terms "validation" and "simulator design data" in the context of these recommendations because of the potential for misunderstanding given that these terms have specific meanings in ANSI/ANS-3.5. The NRC reiterated that simulator core performance testing must be conducted independent of SBT. Industry representatives agreed that bounding the scenarios used for SBT was not intended to cover simulator core performance testing and that facility licensees would still be expected to perform steady-state, normal operations, and transient tests. Malfunction testing would be the only periodic testing affected by the recommendations, as stated in Recommendation #4.

The FG agreed to develop a more detailed standards implementation document regarding the aforementioned SBT recommendations. The implementation document will also clarify that facility licensees must, as a minimum, conduct the SBT methodology on all scenarios described in Recommendation #3. The FG also agreed to forward a draft implementation document to the Office of Nuclear Reactor Regulation (NRR) and the Office of New Reactor Operations (NRO) Operator Licensing Program Offices for NRC staff review.

The American Nuclear Society (ANS) Standards 21 Committee Chairman discussed the status of the "200X" revision of ANSI/ANS-3.5. He reported that the proposed revision to ANSI/ANS-3.5 is currently out for public comment and that the public comment period ends January 29, 2008. He further indicated that the ANS standards committee will provide written responses to all comment submitters and requested that comments should state the problem, provide justification and analysis, and suggest a solution. The Chairman finally noted that the Nuclear Facilities Standards Committee (NFSC) will conduct balloting on January 15, 2008, to determine whether or not to publish a revised standard.

The NRC stated that staff representatives will attend the industry's Utility Simulator Users Group (USUG) conference in February 2008 and participate in a forum to discuss the simulator SBT recommendations with industry representatives.

### New Reactor Licensing

NRC staff from the NRO provided an update on new plant licensing submittal processing. The staff indicated that they had met with NEI and industry representatives in September 2007 to discuss a NEI draft "white paper" regarding cold licensing of operators. A consensus was reached that more detail was needed on the subjects covered in the draft "white paper" and NEI agreed to submit a revised version in late December 2007. A follow-up meeting is planned for January 2008. NRC staff indicated that it has developed a time line to identify the tasks required to complete its review of issues listed in the draft "white paper." The staff further noted that there are tasks that will require several years to accomplish which are captured in the time line.

The NRC staff indicated that the agency has received three combined operating license (COL) applications for new reactors. The applicants for the new reactors at the South Texas Project, Bellefonte, and North Anna sites have endorsed NEI 06-13, "Template for an Industry Training Program Description," with an addendum to include what will be developed in final "white papers."

The NRC staff indicated that it had met with the Institute of Nuclear Power Operations (INPO) last week and INPO provided the NRC a time line for its accreditation of new reactor training programs.

The NRC staff finally indicated that a Regulatory Issue Summary (RIS) will be issued in 2008 similar in content to RIS 07-17 to gather information for preparation and scheduling of operator licensing examinations, for both existing and new reactors. The staff further noted that the RIS will be issued a little earlier than last year due to NRC's budget and planning process starting earlier in 2008.

### 10 CFR Part 26 (Fatigue Rule and Fitness for Duty (FFD))

The NRC staff provided a brief update on the status of Subpart I, regarding the fatigue management provisions of the pending 10 CFR Part 26 rule change. The NRC staff noted that it is continuing the dialog with stakeholders and that another meeting is scheduled for January 2008. NEI's staff commented about concerns from industry that work hour changes would be implemented faster than previously expected as a result of recent industry issues. NEI also noted that the recent Peach Bottom augmented inspection team for inattentive security officers identified no nexus between inattentive personnel and work hours and cautioned against accelerating the implementation schedules because of the time required to change labor agreements. An NRC/NEI workshop is planned for early April 2008.

NRC staff informed the FG regarding a recent NRC Information Notice IN-2007-31, "US FDA Announcement Related to Certain Sleep Disorder Drugs." The notice alerts licensees to the potentially serious side effects of these drugs and recommends licensees review the IN for applicability to fitness-for duty, behavioral observation, and employee assistance programs.

## OTHER ISSUES RELATED TO OPERATOR LICENSING

### Potential Examination Integrity Issue Relating to Contractor-Prepared License Exams

The NRC staff provided background information on a concern arising from a recent NRC examination that some contractor-developed written examination content could be predictable. The NRC noted that the examination contained a high percentage of questions that were essentially the same as questions used on recent NRC examinations at other similar facilities in the same region. The examinations at these facilities were all developed by the same contract exam developer, apparently using a question bank maintained by the developer. The NRC noted that while these examinations did not exceed thresholds for repeat questions on any particular facility's previous two examinations, the potential existed for examination predictability due to use of similar questions from the other facility examinations. NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," provides guidance that applicants should not be able to predict specific examination content and requires random selection of bank questions relating to the selected knowledge and abilities in the examination outline. The FG indicated that it understood the staff's concern and noted that the facility licensees are responsible for examination development and content as it relates to this concern.

### Unsatisfactory Submittals of Licensee-Developed Initial License Examinations

A facility licensee representative described a potential concern with the high number of unsatisfactory examination submittals in one particular NRC region. He pointed out that eight examinations in the recent past were considered unsatisfactory by NRC reviewers from this region. However, he also indicated that, at this time, the concern is based on preliminary survey data. Therefore, the NEI FG will conduct additional reviews regarding the concern, including looking at root cause findings regarding the unsatisfactory examination submittals and the statistics regarding facility examination submittals in other regions. Depending on the results of these reviews, the FG will be prepared to discuss the concern at the next NRC/NEI OL FG meeting.

### License Class "Throughput"

The Professional Reactor Operator Society (PROS) representative stated the view that initial licensed operator applicant "throughput" – the number of final license applicants as a percentage of the number of students that begin training for a license – is unacceptably low. He opined that the low "throughput" is potentially due to a high difficulty level for NRC license examinations and proposed that the NRC consider changing initial license written examinations to allow for increased numbers of open-reference questions, similar to that employed for facility licensee-developed licensed operator requalification examinations. He also expressed the view that many examination question topics have low safety significance.

### Changes to License Applicant Eligibility Requirements

A facility licensee representative proposed that the FG continue a dialogue to consider enhancements to current licensed operator eligibility requirements. He noted apparent inconsistencies in that credit given for responsible power plant experience for certain US Navy nuclear submarine shift positions was not also recognized for analogous shift positions on US Navy surface vessels. He stated that the NRC staff frequently approves waiver requests for these types of situations and suggested it would reduce unnecessary effort if additional flexibility was introduced into the process. A NEI representative stated that this was a subject in an NEI

white paper currently in draft. The NRC staff stated that much of the problem resulted from facility licensee commitments to 5 or 6 overlapping standards and that all INPO accredited facilities should use INPO ACAD-00-003 to determine eligibility. The staff further noted that the NRC is reluctant to waive requirements for minimum time on site. The NEI representative stated that chief nuclear officers are asking if it is time to rethink the approach and whether the apprenticeship approach is outdated.