

October 21, 2002

MEMORANDUM TO: Christopher I. Grimes, Director
Policy and Rulemaking Program
Division of Regulatory Improvement Programs, NRR

FROM: Peter C. Wen, Project Manager */RA/*
Policy and Rulemaking Program
Division of Regulatory Improvement Programs, NRR

SUBJECT: SUMMARY OF OCTOBER 4, 2002, MEETING WITH NUCLEAR
ENERGY INSTITUTE REGARDING OPERATOR LICENSING ISSUES

On October 4, 2002, the NRC staff held a public meeting with the Nuclear Energy Institute (NEI) to discuss issues related to the development of Revision 9 of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." Attachment 1 lists the attendees at the meeting.

This was the latest in a series of public "focus group" meetings intended to promote the efficient, effective, and consistent preparation and administration of initial operator licensing examinations. The meeting focused primarily on the resolution of outstanding issues related to proposed changes in the initial operator licensing examination process that were discussed during prior meetings, the last of which was held on August 29, 2002. (Refer to ADAMS Accession Number ML022670055 for a summary of that meeting). Attachment 2 is the agenda for the meeting; the discussion topics are summarized in Attachment 3.

Representatives of the NRC and the industry agreed that this meeting was useful for the exchange of information on this subject.

Project No. 689
Attachments: As stated
cc w/attns: See list

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ADAMS Accession Number: ML022940561

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Project No. 689

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List of Attendees - NRC / NEI Meeting - October 4, 2002	
Name	Organization
Bruce Boger	NRC / HQ
Ted Quay	NRC / HQ
Dave Trimble	NRC / HQ
Richard Conte	NRC / RI (via telephone)
George Usova	NRC / HQ
Fred Guenther	NRC / HQ
John Munro	NRC / HQ
Chuck Sizemore	NMC
Gregg Ludlam	Progress Energy / CP&L
Fred Riedel	APS
Robert Evans	NEI
Richard Chin	PPL

AGENDA FOR NRC/NEI
MEETING ON OPERATOR LICENSING ISSUES

October 4, 2002; 9:00 a.m. - noon

<u>TOPIC</u>	<u>LEAD</u>
9:00 Introductions and Opening Remarks	NRC/NEI
9:10 Public Input	
9:15 Written Examination Changes	NRC
- Length of the SRO exam	
- SRO exam cognitive level	
- SRO cut score	
- Bank limits	
10:30 Operating Test Changes	NRC
- Length of the RO walk-through	
- SRO retakes for administrative failures	
- Simulator grading criteria	
- "Normalizing" rating factors	
11:30 Implementation Schedule	NRC
- Draft Revision 9	
- Pilot program	
- National workshop	
11:45 Public Input	
11:50 Summary / Conclusion / Action Item Review	NRC/NEI

Operator Licensing Meeting With NEI on October 4, 2002

Agenda Item	Discussion Summary
1. Written Examination Changes	<p>- During the previous meeting, the industry had asked the NRC staff to consider the possibility of reducing the length of the SRO examination to 75 questions, the same as the proposed RO exam. The NRC staff reported that it considered the industry's proposal but preferred to keep the SRO examination at 100 questions for the following reasons: (1) the original proposal to have SROs take the RO exam plus a separate 25-question exam on the topics in 10 CFR 55.43 was intended to improve efficiency and clarity by eliminating the overlapping outlines under the current process; (2) the staff is concerned that having SROs take only 50 of the RO questions may be insufficient to test §55.41 topics for instant SROs; and (3) the industry's proposal would require the development of a separate outline or process to determine which of the 75 RO questions would be used on the SRO examination. The staff informed the industry that it does plan to allow SRO-upgrade applicants to take only the 25-question exam on §55.43 topics if they are current in the requalification program and apply for a waiver. The industry representatives agreed with the NRC staff's reasoning for Revision 9 of NUREG-1021 but asked that the NRC keep the possibility of a shorter SRO examination in mind when considering future changes. The industry also asked the staff to consider whether an RO applicant could voluntarily take the SRO written examination and later only have to take an SRO operating test to upgrade to the higher license level. The staff agreed to consider the industry's request but noted that there would likely be other issues, such as appeal rights and, as a minimum, requiring the applicant to remain current in the SRO requalification training program.</p> <p>- During the previous meeting, the industry had expressed concerns regarding the NRC staff's proposal to allow the number of higher cognitive level (HCL) questions on the SRO examination to exceed the 60% limit that applies to the RO examination. The staff noted that it has carefully considered the industry's concerns but decided to maintain its original proposal for the following reasons: (1) the staff believes that the existing policy requiring written exam questions to adhere to the intent of the randomly selected K/A statements is valid and should remain in effect, and examination authors should not have to compromise that policy in order to keep the SRO exam below 60% overall; (2) depending on the number of HCL questions on the RO exam, the SRO exam would range between 63% and 70% HCL overall, even if all the SRO-only questions are HCL, which is not considered likely; and (3) it appears reasonable to the staff that the SRO exam should have more HCL questions than the RO exam. The industry representatives acknowledged the NRC staff's reasoning on this issue and agreed to proceed with this approach under Revision 9.</p> <p>- During the previous meeting, the industry had expressed concerns regarding the NRC staff's proposal to implement a separate 70% cut score on the SRO portion of on the written exam. The staff noted that it has carefully considered the industry's concerns and decided to adhere to the original proposal for the following reasons: (1) the staff believes that it would be unacceptable for an SRO applicant to be able to obtain a license by correctly answering all 75 of the RO questions plus only 5 of the SRO-level questions; (2) that the 70% proposal is below the 80% cut score originally envisioned by the staff and represents the minimum threshold acceptable to the NRC; (3) that it does not matter that an exact 70% score may not be achievable because question deletions often result in fractional grades anyway; (4) that there is historical precedent for the 80% overall, 70% per category grading criteria; and (5) that any close calls would likely be mitigated through the appeal process. The staff also reported that, since the last meeting, it has conducted a limited review of the results of the 2002 SRO examinations with marginal passes and found that the 70% cut score will not have a significant impact on the industry. In answer to a question raised during the previous meeting, the staff noted that an applicant who fails the examination based on the SRO-only cut score would only have to retake the SRO portion of the examination, but, based on prior Commission direction, would have to achieve at least 80% to pass.</p> <p>- The NRC staff indicated that it would discard the proposal to "round off" the limits on written examination bank use and adhere as closely as possible to the limits that are in place today. Specifically, the RO examination would consist of no more than 56 bank questions, at least 11 modified questions, and at least 8 new questions. The 25-question SRO-only examination would include no more than 19 bank questions, at least 4 modified questions, and at least 2 new questions. The industry representatives agreed that this would be acceptable.</p>

2. Operating Test Changes

- With regard to the **length of the RO walk-through**, the NRC staff reiterated its position that a sample of only ten tasks for the combined administrative and systems portions of the test would be too small to make comfortable licensing decisions, particularly when some of the selected tasks include minimal performance criteria. The staff noted that the smaller test could increase the possibility of sampling error, which raises a fairness issue with applicants. The industry representatives acknowledged the staff's concerns and agreed to go forward with the staff's original proposal for a 15-JPM RO walk-through, but they indicated that they may want to revisit the possibility of shortening the test sometime in the future. The staff acknowledged the industry's request and suggested that it may be more receptive to such a proposal if it included provisions to ensure that the selected tasks include more meaningful performance criteria that will better enable examiners to assess the applicants' understanding of the plant (e.g., implementing a lower limit on the number of critical steps).

- During the previous meeting, the industry had questioned how the NRC staff intended to handle **SRO retakes for administrative failures**: would they be required to retake the entire walk-through or only the administrative portion? The NRC staff indicated that, consistent with current policy in Section D.1.a of ES-204 of NUREG-1021, Revision 8, applicants who achieve an overall walk-through score of 80% or better and pass both the simulator operating test and the written examination on their first attempt, may request waivers of those parts of the exam that they passed. However, the staff noted that, consistent with Commission direction, the administrative subcategory cut score for the retake would be 80% (not 60% as it was on the initial test). The industry representatives acknowledged the staff's position and asked the staff to consider another proposal: whether RO applicants who failed their first exam by getting 3/4 of the administrative tasks wrong could similarly be allowed to retake 5 administrative tasks (one more than the initial test) with a cut score of 80%. The staff indicated that it would consider the industry's proposal.

- With regard to the **simulator grading criteria**, the staff noted that it has carefully considered the industry's concerns but decided to adhere to its original proposal for the following reasons: (1) the staff can not justify a grade above "1" when an applicant makes 2 or more non-critical errors and demonstrates no positive performance related to same rating factor; (2) the consistency of current grading guidance needs to be improved regardless whether we develop Revision 9; (3) the revised criteria will still require an applicant to make errors related to multiple rating factors in order to justify a failure; (4) non-critical errors must be based on facility procedures and requirements as documented on the expected operator action sheets; (5) the fact that the simulator uses a competence-based grading system means that all errors, regardless of their consequences in a particular scenario, reflect on the applicants' competency; (6) if only critical errors that have significant consequences are gradable, then it may be necessary to adjust the content of the test (e.g., the number and distribution of critical tasks) to ensure fairness and discrimination; and (7) the grading criteria will allow the regions to request program office exceptions if they believe that a process-driven failure is not justified. The industry representatives continued to express their belief that the changes are unnecessary because the current criteria give examiners the flexibility they need, and it does not appear that the criteria are being abused. Although they expressed confidence that experienced examiners would continue to do the right thing, they were somewhat concerned about how new examiners might implement the more stringent criteria. The industry representatives concluded by conceding that the NRC staff should do what it believes is necessary, even though the industry does not feel comfortable with the change. The staff acknowledged the industry's concerns and noted that it would closely monitor the simulator grading during the pilot program.

- During the previous meeting, the industry had questioned exactly what the NRC staff meant by "**normalizing**" rating factors, so the staff provided a brief explanation and an example. It noted that if a rating factor is "not observed," its weighting value must be distributed proportionally among the remaining rating factors under that competency in order for the total to equal "1." For example, if a competency has 3 rating factors weighted at 0.3, 0.3, and 0.4, and the second rating factor is not observed, then its value would be proportionally distributed among the remaining rating factors, making them worth 0.43 and 0.57. The industry representatives agreed with the concept.

3. Implementation Schedule	<ul style="list-style-type: none"> - The NRC staff indicated that it would begin developing Draft Revision 9 of NUREG-1021 as soon as possible and hoped to issue the document for public comment and trial use early in 2003. - The NRC staff expressed a preference to apply the pilot program to all initial operator licensing examinations conducted during the pilot period that will begin sometime after the issuance of Draft Revision 9. The industry representatives indicated that they would poll their members and provide feedback to the NRC regarding voluntary or mandatory participation in the pilot program. - The industry representatives did not feel the need to meet again prior to the publication of Revision 9 and expressed a preference for a national workshop instead of smaller regional meetings to familiarize licensees with the changes. The NRC staff indicated that it would try to communicate an estimated publication date for Revision 9 to the NEI contact by the first of December, so that the industry can establish a workshop date and venue.
4. Public Input	No members of the public were present.
5. Other Topics	<ul style="list-style-type: none"> - The NRC staff noted that it had received informal comments from a facility licensee regarding the limited senior reactor operator (LSRO) examination process in ES-701 and that it would be interested in determining whether other facility licensees that use LSROs concur with those comments or have additional feedback. The industry representatives indicated that they would check with other members and provide input for the NRC to consider as it develops Revision 9. - The NRC staff noted that it is still working on a final position clarifying the requalification testing requirements. The industry representatives reiterated their desire for possible clarification of the regulation after the NRC issues Revision 9. - The NRC staff provided a brief update regarding the simulator fidelity changes to IP 71111.11 (the licensed operator requalification program inspection procedure) and the outcome of some recent inspections conducted using the revised procedure. Some of the industry representatives expressed concern that the procedure goes beyond what they thought 10 CFR 55.46 is all about. The staff indicated that the questions in the procedure come right out of the regulation and that inspectors will be focusing on those simulator deficiencies that are significant to the operators to ensure that they are being tracked and corrected. Where licensees are taking credit for reactivity manipulations performed on the simulator in lieu of the plant, inspectors will additionally confirm that the simulator replicates the most recent core load. Although the industry representatives noted that the proposed procedure changes had not been issued for comment prior to their implementation, the staff indicated that comments are always welcome.