September 20, 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 AUGUST 29, 2002, MEETING WITH NUCLEAR ENERGY INSTITUTE REGARDING OPERATOR LICENSING ISSUES

On August 29, 2002, the NRC staff held a public meeting with the Nuclear Energy Institute (NEI) to discuss issues related to the implementation of Revision 8 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 status of outstanding issues that had been raised during prior meetings, the last of which was held on February 27, 2002. (Refer to ADAMS Accession Number ML020860504 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/atts: See list

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List of Attendees - NRC / NEI Meeting - August 29, 2002	
Name	Organization
Bruce Boger	NRC / HQ
Ted Quay	NRC / HQ
Dave Trimble	NRC / HQ
Richard Conte	NRC / RI
Kent Hamlin	INPO
Kurt Markling	NMC
Gerald Allex	NMC
Kerry Wright	Seabrook / NAESCO
Chuck Sizemore	NMC
George Usova	NRC / HQ
Mike Ernstes	NRC / RII
Fred Guenther	NRC / HQ
John Munro	NRC / HQ
Roger Huston	Licensing Support Services
Roger Lanksbury	NRC / RIII
Philip Nielsen	Exelon
Don Jackson	PSEG
Gregg Ludlam	Progress Energy / CP&L
Jim Davis	NEI
Fred Riedel	APS
Robert Evans	NEI
William Quick	SCE&G
Kurt Rauch	SCE
Richard Chin	PPL
Richard Baldwin	NRC / RII
Gary Ellis	TXU
Marvin Sykes	NRC / HQ

ATTACHMENT 1

AGENDA FOR NRC/NEI
MEETING ON OPERATOR LICENSING ISSUES
August 29, 2002; 9:00 a.m. - 2:00 p.m.

TIME	TOPIC	LEAD
9:00	Introductions and Opening Remarks	NRC/NEI
9:15	NRC Experience Since the Last Meeting	NRC
	- Requalification Issues (cycle requirements, item repetition) - LSRO reactivations - “Peer Checker” guidance issued	
9:45	Industry Experience Since the Last Meeting	NEI
10:15	INPO Update	INPO
10:30	Public Input	Public
10:45	Proposed Long-term Examination Options	NRC/NEI
11:45	Operator License Eligibility Issues	NRC/NEI
12:00	Lunch	
12:30	Generic Fundamentals Examination Issues	NRC/NEI
	- Frequency and length - GFE K/As - How early can it be taken / how long is it good?	
1:15	Reactivity Manipulation Rule Change Implementation	NRC
	- Examiner guidance - Do we need a national workshop?	
1:30	Public Questions and Answers	Public
1:45	Summary / Conclusion / Action Item Review	NRC/NEI

ATTACHMENT 2

Operator Licensing Meeting With NEI on August 29, 2002	
Agenda Item	Discussion Summary
1. NRC Experience Since the Last Meeting	- The NRC staff summarized the recent issues related to the **scheduling of requalification training programs** pursuant to 10 CFR 55.59(c)(1) and the requirement for every licensed operator to pass a comprehensive requalification written examination pursuant to 10 CFR 55.59(a)(2). The staff noted that it considers the comprehensive written exam to be part of the requalification program, which can not exceed 24 months in duration. The exams should be given at or near the end of the program, therefore, consecutive exams may be separated by slightly more than 24 months as long as the program limit is not exceeded. The industry representatives questioned the basis for the rigid regulatory requirement and suggested that it needs to be more flexible, with greater consideration given to SAT (systems approach to training) principles. The staff noted that: (1) the 24-month program limit is consistent with the 2-year license term that existed prior to 1987, when the current regulation was written; (2) that including the comprehensive exam within the program is consistent with the definition of SAT in 10 CFR 55.4; and (3) that prior to 1987 licensed operators were required to pass a written requalification examination annually. The staff indicated that it plans to update the related questions and answers on the web site and develop a regulatory issue summary (RIS) addressing this matter. The industry representatives indicated that they would develop some more flexible regulatory options for future discussion. - The NRC staff distributed and discussed a draft paper (issued since the last focus group meeting as an attachment to ML021160697) summarizing its position regarding the **repetition of test items on successive comprehensive written requalification examinations**. The staff noted that its recommended 50% limit is intended to promote good practices and enhance public confidence. The industry representatives reiterated their position that the absence of an actual integrity problem makes the limit unnecessary, but they indicated that they would more closely review the staff's position paper and provide feedback. The NRC staff indicated that it would defer issuing a final guideline but noted that, subject to industry feedback and NRC management approval, it is planning to amend IP 71111.11 (the "Licensed Operator Requalification Program" baseline inspection procedure) to require examiners/inspectors to evaluate the examination results for evidence of integrity problems if the level of test item repetition exceeds a specific threshold. - The NRC staff raised a new issue associated with the **reactivation of SRO licenses** for the purpose of supervising refueling activities. The staff briefly summarized a number of recent inspection findings that have raised questions regarding the maintenance of proficiency between refueling outages and the proper location, timing, and level of supervision required for a valid under-direction watch to reestablish proficiency pursuant to 10 CFR 55.53(f)(2). The industry representatives noted that SROs limited to fuel handling have far more expertise and experience than the normal control room SROs when it comes to supervising refueling activities, and they asked that the NRC take a flexible, practical approach to this issue. The industry representatives agreed to further review the issue prior to the next focus group meeting. - The NRC staff indicated that guidance related to the **"peer checker"** issue, which was a subject of discussion during previous focus group meetings, is now available on the NRC's operator licensing web page. - The NRC staff noted that it is prepared to take a more active role in **developing the examination outlines** as a means of enhancing flexibility and efficiency in the initial exam process. Facility licensees that are interested in exploring this option should contact their NRC Regional Office branch chief.
2. Industry Experience Since the Last Meeting	The industry representatives indicated that they had no new issues to discuss.
3. Institute of Nuclear Power Operations (INPO) Update	The INPO representative indicated that the revised accreditation process is going well and that there are currently no programs on probation. He reported that the examination question bank now has over 19,000 questions and that the NRC Regional Offices have been very responsive in providing input in the desired format. INPO is continuing to identify and correct problems with the exam bank. A recent survey indicated that about 1/3 of the plants are using the bank, about 1/3 have not yet tried it, and about 1/3 have tried it but have not used it since. The NRC Region II branch chief indicated that they are using the bank and have found it to be a good source of ideas for new questions.

4. Public Input	Only one member of the public was present, and he had no comments or questions.
5. Proposed Long-term Examination Options	- The NRC staff briefly reviewed the **proposed written examination changes** that were outlined in an attachment to the meeting notice (ML022000021) and provided an overview of the risk-informed written examination outline that would be included in draft Revision 9 of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." The industry representatives supported Proposal #1 (shorten the RO exam from 100 to 75 questions) and Proposal #2 (risk-inform the systems and emergency/abnormal plant evolutions groupings) without comment, but they raised the following concerns related to Proposal #3 (the SRO exam) and Proposal #4 (other written exam criteria): They perceived the allowance for more than 60% higher cognitive level (HCL) questions on the SRO exam to be regressive, they questioned the basis for the separate 70% cut score on the 25 SRO-only questions, they enquired whether the NRC would consider a 75-question SRO exam (only 50 of the RO questions plus 25 SRO-only items), and they noted that the proposed limits on bank use did not exactly conform with the current ratios (i.e., 75/15/10). The NRC staff responded that the cognitive level of the SRO questions should conform with the applicable knowledge and ability (K/A) statement even if it causes the exam to exceed the current 60% limit on HCL questions; the staff further noted that it did not expect the 60% level to be exceeded unless the RO exam is near the upper limit itself. [Note that the staff subsequently calculated that the SRO exam could not exceed 70% even if the RO exam is at the 60% limit and all the SRO-only questions are HCL, which is unlikely.] The staff pointed out that the separate SRO cut score is a public confidence issue in that it would not be appropriate to issue an SRO license to an applicant who got a perfect score on the 75 RO-level questions but got only 5 of the 25 SRO-only questions correct. - Similarly, the NRC staff reviewed the proposed **operating test changes** that were outlined in an attachment to the meeting notice (ML022000021). The industry representatives had no comments on Proposals #1 - 4 involving the exclusive use of job performance measures (JPMs) for the walk-through, greater flexibility on the distribution of RO administrative topics, the implementation of an 80% administrative cut score, and increased flexibility regarding normal evolutions on the dynamic simulator test. With regard to Proposal #5, the industry thought that permitting a limited number of "not observed" grades on the dynamic simulator was a good idea, subject to clarification of what it means to "normalize" the weighting of gradable rating factors. However, with respect to the remaining simulator grading criteria, the industry representatives questioned how the staff intended to define "non-critical" errors and expressed concern over the small number of non-critical errors allowed for each level of the three-point rating scale. The NRC staff responded that the applicants' performance would be measured against the facility licensee's operating standards and procedures as detailed in the examination materials and noted that the staff does not expect the pass-fail results to change since multiple errors have to be focused in one competency to justify a failing grade. The staff further noted that its goals with respect to Proposal #5 are to promote consistency, fairness, and public confidence and that examiners can and do arrive at the same outcomes based on the current grading criteria. With regard to Proposal #6, the industry representatives did not have a problem with the separate administrative cut score for SRO applicants under the combined walk-through or the recommended consolidation of the RO and SRO rating factors and competencies for the dynamic simulator exam. The only industry comments related to this proposal were to suggest reducing the RO walk-through from 15 to 10 total JPMs (with 2-3 in the administrative area, 6 in the simulator or control room, and 1-2 in the plant) and to question the basis for setting a range of alternate path JPMs rather than a specific number. The industry appeared to accept the NRC staff's response that it would not feel comfortable with a sample of only 10 RO tasks and that the range of alternate path tasks would provide greater flexibility during test development. - The industry representatives questioned whether SRO applicants would have to retake the entire written exam or operating test if they fail based solely on the separate SRO cut scores, and they suggested that the examples in Revision 9 should be revised to reflect the shift from questions to JPMs. The NRC staff indicated that these items would be addressed in Revision 9. - In the interest of expediting the development of draft Revision 9 of NUREG-1021, the NRC staff and industry representatives agreed to meet again in October or November to resolve the remaining issues discussed above. The NRC staff indicated that it might be possible to issue a draft of Revision 9 and initiate a year-long pilot program to evaluate and refine the changes during the first quarter of 2003. The NRC staff and industry representatives also reached tentative agreement to convene a national workshop to review the changes.

6. Operator License Eligibility Issues	The NRC staff reported that it is continuing to work with Exelon and Wolf Creek in an effort to finalize their technical specification amendments related to licensed operator eligibility.
7. Generic Fundamentals Examination (GFE) Issues	- The NRC staff briefly reviewed its prior proposal to **shorten the GFE** from 100 to 50 questions starting in 2004 and to use the resultant savings to **administer a fourth examination** per year. The staff solicited additional feedback regarding the proposal, noting that four facility licensees had supported the proposal in written correspondence that NEI had forwarded to the NRC. Although some of the utility representatives still expressed concern that the amount of system knowledge required to answer some of the questions and the lack of an upper limit on the number of HCL questions might have a greater impact with a shorter exam, the industry overall endorsed the proposed changes. The utility representatives agreed to reach consensus on the best dates for the new GFEs and to provide a recommendation to the NRC. The utilities also indicated that they would develop a list of reviewers from which two individuals would be selected to review the newly developed questions on future pressurized water reactor (PWR) and boiling water reactor (BWR) GFEs. Although the utilities also requested to review the modified questions, the NRC staff noted that the additional effort could make it difficult to meet the contractor's schedular requirements but agreed to reconsider the request at a later date if the new question reviews proceed smoothly. - As a follow-up item from the previous meeting, the NRC staff reported that it is **analyzing the GFE K/A statements** to determine the extent to which the lower cognitive level (LCL) K/As are backed up by other HCL K/A statements elsewhere in the catalog. To date, the staff has determined that all of the LCL GFE K/As in the PWR catalog are supported by a HCL K/A statement; the BWR catalog analysis is expected to yield similar results. Therefore, the staff conceded that it will no longer develop new HCL GFE questions based on the LCL K/A statements; however, it will continue to use banked HCL questions based on those K/As because they tend to function at the memory level after initial exposure. - The NRC staff introduced a new issue regarding the **"shelf life" of the GFE**, which has a bearing on how early in their careers non-licensed operators can take the GFE and how long an operator who has passed the GFE can forego refresher training before having to retake the GFE. The staff reminded the utility representatives that the GFE is a part of the initial licensing examination and that GFE candidates should be enrolled in the initial license training program, as defined by the utility, at the time they take the GFE. The staff noted that 10 CFR 55.47 allows the NRC to waive the requirement for a written examination for up to 2 years provided the applicant is qualified to competently and safely operate the facility; the staff further noted that applying this concept to the GFE suggests that non-licensed operators should take the GFE no more than 2 years before the site-specific licensing examination. Similarly, operators who terminate their license (and participation in a requalification program that maintains their proficiency in generic fundamentals topics) for more than 2 years would be expected to retake the GFE as well as a site-specific exam. The staff acknowledged that participation in a non-licensed operator requalification program that reviews generic fundamentals topics might be sufficient to extend the "shelf life" of the GFE beyond 2 years and agreed to work with the industry to resolve this issue. The staff noted that individuals currently enrolled in a license training program based on passing a GFE in accordance with ES-205 of NUREG-1021 would not be affected by any future changes. The industry representatives indicated that they would further review the issue and provide feedback to the NRC.
8. Reactivity Manipulation Rule Change	- The NRC staff indicated that it has developed **implementation guidance** for the subject rule change (10 CFR 55.46) in the form of a revision to IP 71111.11, the "Licensed Operator Requalification Program" baseline inspection procedure. The staff noted that it expects the revised IP to be available shortly in ADAMS (ML022350085) and on the NRC's web site and that it will be assessing the procedure at Catawba and Kewaunee. The staff noted that the changes adhere very closely to the regulation. - The NRC staff questioned the industry representatives whether a **national workshop** would be useful in explaining the NRC's expectations regarding the revised rule and suggested that this issue could be addressed in conjunction with the long-term (Revision 9 of NUREG-1021) examination program changes (refer to Agenda Item 5) during a possible workshop early next year. The industry representatives agreed to consider the proposal.
9. Public Questions and Answers	Only one non-industry representative attended the meeting, and he departed without comment prior to its conclusion.