

March 13, 2001

MEMORANDUM TO: William D. Beckner, Acting Chief  
Generic Issues, Environmental, Financial  
and Rulemaking Branch  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

FROM: Peter C. Wen, Project Manager/**RAI**  
Generic Issues, Environmental, Financial  
and Rulemaking Branch  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF FEBRUARY 9, 2001, MEETING WITH THE NUCLEAR  
ENERGY INSTITUTE REGARDING OPERATOR LICENSING ISSUES

On February 9, 2001, the NRC staff participated in a public meeting with the Nuclear Energy Institute (NEI) in its offices at 1776 I Street (NW), Washington, DC, to discuss issues related to the implementation of Revision 8 of NUREG-1021, "Operator Licensing Examination Standards for Power Reactors." A complete list of attendees is attached in Attachment 1. The staff distributed NRC Form 569, "NRC Public Meeting Feedback," to all the industry participants. However, as of February 28, 2001, no written feedback has been received.

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 now that facility licensees are preparing approximately 75 percent of those examinations in accordance with 10 CFR 55.40, "Implementation." The meeting focused primarily on the status of outstanding issues that had been raised during prior meetings (the last of which was held on August 16, 2000; refer to Accession Number ML003749531 for a summary of that meeting). The issues discussed are summarized in Attachment 2. The materials handed out at the meeting (long-term examination process options developed by the industry and provided to the NRC for consideration) are included as Attachment 3 (LOTF Option 3 Concept Paper) and Attachment 4 (INPO Option 4 Concept Paper).

Attachments: As stated  
cc w/atts: See next page

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Nuclear Energy Institute

Project No. 689

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PUBLIC MEETING WITH NEI REGARDING OPERATOR LICENSING ISSUES  
February 9, 2001

| List of Attendees  |                               |                             |
|--------------------|-------------------------------|-----------------------------|
| Name               | Company                       | E-mail                      |
| Richard Conte      | NRC/RI                        | rjc@nrc.gov                 |
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| Operator Licensing Meeting With NEI on February 9, 2001                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Agenda Item                                                                             | Discussion Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 1. NUREG-1021 Supplement                                                                | <p>- The NRC staff indicated that it considers the trial period using the supplementary guidance a success and that it wanted to use this meeting to give stakeholders one last opportunity to make comments before Final Supplement 1 is published. The staff briefly reviewed the following additional changes that are being considered in response to lessons learned and comments provided since the proposed changes were issued: (1) Subject to NRC managerial approval, the staff is planning to revise the ratio of bank/modified/new questions for the written exam from 50/40/10 to 75/15/10 because experience during the trial exams revealed that the number of bank questions is being limited by the availability of questions that fit the randomly selected K/As. The actual use of bank questions is expected to increase as the local and national exam banks grow in size. (2) Some recent appeals have revealed an inconsistency in examiner response and prompted the staff to consider incorporating guidance for examiners on when to terminate a job performance measure if an applicant implements an incorrect procedure or stops making progress toward completing the task standard. (3) In the interest of consistency, the staff is considering the establishment of a six-hour time limit for the written examination, with extensions permitted under extenuating circumstances. (4) The guidance is being clarified to advise facility licensees that elect to prescreen inappropriate K/As from the NRC's catalogs to submit those documents for NRC review in advance of the examination outline.</p> <p>- The industry representatives appeared to agree that these were reasonable clarifications and changes. They reiterated their concern that the administrative topics (Category A) on the operating test were weighted too heavily and suggested two options to address the problem: (1) take credit for the administrative topic coverage on the written exam and delete those topics from the operating test entirely; or (2) refocus one or two of the 10 job performance measures (JPMs) in Category B from systems to administrative topics. The industry representatives also raised a new concern regarding the value added by the normal operations portion of the dynamic simulator test (Category C). They indicated that the JPMs in Category B adequately test those skills and that the time spent waiting to perform the normal operations could be raising the applicants' stress levels. Moreover, there was too much to do in the nominal 60-90 minutes of simulator time per scenario.</p> <p>- The NRC staff acknowledged the industry's new concerns and suggestions. However, it noted that the guidance in NUREG-1021 allows the use of controlled upset conditions to evaluate power/reactivity changes and that the normal operations help keep the scenarios from becoming unrealistic "crash and burn" exercises that the industry had found objectionable when the NRC conducted requalification examinations.</p> |
| 2. Regulatory Issue Summary (RIS) 2001-01, "Eligibility of Operator License Applicants" | <p>- The industry representatives indicated that the RIS was a good document that clearly summarized the NRC's position regarding operator license eligibility. They raised two questions regarding the treatment of technical specification (TS) changes and the documentation of exceptions and waivers on the license application.</p> <p>- The NRC staff indicated that any exceptions and waivers from the guidelines established by the National Academy for Nuclear Training should be briefly described in the comments section of NRC Form 398. If the NRC needs more information to make a decision regarding an applicant's qualifications, it will ask for it or review it on-site. The staff indicated it would evaluate and clarify its position regarding the handling of TS change requests.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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| 3. Proposed Long-Term Examination Options | <p>- The industry representatives provided copies of Option 3 (under which utilities would prepare and administer the written exams without prior NRC review), which remains unchanged since the last meeting, and recently completed Option 4 (a variant of Option 3 with oversight by the Institute of Nuclear Power Operations). They indicated that the regional training associations have discussed Option 3, that the majority of facility licensees favor exploring it as a voluntary alternative to the current exam process, and that there was little interest in pursuing Option 4. They speculated that most facilities would still support Option 3 even if participation were mandatory but expressed concern regarding how to get facilities that have, as yet, not prepared a licensing exam into such a program. At this point, the industry has not made a decision whether to invest the resources that it would take to develop a detailed petition for rulemaking. They would like for the NRC to continue refining the current process while the industry evaluates its options, which they indicated could take several months.</p> <p>- The NRC staff indicated that it has discussed Option 3 internally. While the concept is appropriate for future consideration, there are several issues to resolve regarding the details with this initiative. For example: (1) The NRC can not budget and manage a program that offers too many variations. In one region, the level of facility participation in the current exam process is only 25 percent. Three different methods of licensing reactor operators seems inappropriate and unmanageable. If the industry is serious about pursuing Option 3, it needs to consider the possibility of mandatory participation. (2) Some of the exam guidance that currently relies on examiner judgment and discretion would have to be more precisely defined in order to mitigate concerns regarding the delegation of a governmental function to facility licensees. (3) Detailed "rules of engagement" would have to be developed so that the NRC can calibrate its level of response toward the facility licensee if the examination is determined to be invalid after the licenses are issued. Moreover, the NRC can not guarantee that individual licenses would not be affected. (4) Questions regarding the applicants' and prospective applicants' appeal rights would have to be resolved. (5) Criteria would have to be developed for facility licensees to enter the program, and for the NRC to remove facilities from the program if their performance is inadequate. (6) Issues regarding the training and qualification of facility examination authors would also have to be addressed. (7) The resource implications for both the industry and the NRC would have to be assessed, and possible backfit issues would have to be resolved.</p> <p>- The NRC staff indicated that it is not prepared to devote significant resources to assess and develop Option 3 while, at the same time, trying to evaluate and implement other efficiencies and enhancements that might be possible under the current examination process. The staff briefly reviewed some of the improvements that it might consider if the decision is made to retain the existing framework (e.g., combining the administrative and systems sections of the operating test, as the industry has previously suggested, and amending the regulation to clarify the written exam requirements, possibly with a common exam for RO and SRO applicants). The staff suggested that the industry consider submitting a petition for rulemaking if and when it makes a decision to pursue Option 3.</p> |

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| 4. Generic Fundamentals Examination (GFE) Update            | <ul style="list-style-type: none"> <li>- The industry representatives reiterated their concern that the GFEs have become more difficult over time. The industry asked that the NRC consider increasing the time limit for the examination from three to four hours to take the pressure off the applicants until this issue is resolved. The industry also asked for a copy of the NRC's item analysis for the last two GFEs so they can evaluate the data before the next focus group meeting.</li> <li>- The NRC staff indicated that its data suggests that the level of difficulty of the GFEs is stable, pointed out that there are other variables (e.g., fewer former Navy operators entering the training program) that could explain the industry's perception that the exams are getting harder, and asked that the industry consider those factors as well. The staff also noted that it has sensitized its GFE contractor and reviewers to the level of difficulty issue and informed the industry that every question having a high miss-rate is reviewed for validity even in the absence of a post-exam comment from the industry. The staff reiterated its belief that the new 80/10/10 (bank, modified, new) question distribution may result in a slight increase in the average grades because the examinees have historically scored higher on the previously-validated, bank questions. The staff indicated that there would be no problem increasing the time limit for the exam from three to four hours and that it would provide a copy of the item analyses to NEI. Lastly, the staff noted that it expects to have the GFE web site, which will provide access to past exams and the GFE question banks, operational in March.</li> </ul> |
| 5. Reactivity Manipulation Rule Change Update               | <ul style="list-style-type: none"> <li>- The NRC staff indicated that it expects to forward the final rulemaking to the Commission in July, and that it plans to concurrently issue Regulatory Guide 1.149, "Nuclear Power Plant Simulation Facilities for Use in Operator Licensing Examinations," endorsing ANSI/ANS 3.5-1998, "Nuclear Power Plant Simulators for Use in Operator Training and Examination," with clarifications but no exceptions. To date, the NRC has granted one exemption authorizing applicants to perform the 5 reactivity manipulations required by 10 CFR 55.31(a)(5) on a simulator; a second exemption is undergoing review. Licensees having exams between now and the end of 2001 should plan to do the manipulations on the reactor or apply for an exemption. The implementation schedule for the final rule should become clear by September.</li> <li>- The industry representatives solicited feedback on the exemption request submitted by Exelon because it is being circulated among other facility licensees as a template. They also indicated that they plan to review and address implementation issues regarding ANSI/ANS 3.5-1998 so that licensees know what they are getting into.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 6. Requalification Significance Determination Process (SDP) | <ul style="list-style-type: none"> <li>- The industry representatives raised some questions regarding the genesis of the recently issued SDP and indicated that it might be beneficial to conduct workshops to explore its ramifications.</li> <li>- The NRC staff indicated that the SDP was developed because the revised oversight process (ROP) was not designed to handle the types of issues that often come out of the requalification inspection procedure. This SDP allows us to more consistently characterize those findings. The staff briefly discussed the process for providing feedback regarding the ROP.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |