

List of Attendees - NRC / NEI Meeting - February 27, 2002	
Name	Organization
Richard Eckenrode	NRC / HQ
Ted Quay	NRC / HQ
Richard Conte	NRC / RI
Kent Hamlin	INPO
Dave Muller	NRC / HQ
Jeff Hansen	Exelon
Dave Trimble	NRC / HQ
Mike DeFrees	STPNOC
Chuck Sizemore	NMC
George Usova	NRC / HQ
Mike Ernstes	NRC / RII
Fred Guenther	NRC / HQ
John Munro	NRC / HQ
Jim Kelly	First Energy
David Hills	NRC / RIII
Tom Stetka	NRC / RIV
Don Jackson	PSEG
Gregg Ludlam	Progress Energy / CP&L
Jim Davis	NEI
Fred Riedel	APS
Robert Evans	NEI
Rusty Quick	SCE&G
Kurt Rauch	SCE
Charles Phillips	NRC / RIII
Charles Sawyer	Duke Power
Gary Ellis	TXU

AGENDA FOR NRC/NEI  
MEETING ON OPERATOR LICENSING ISSUES

February 27, 2002; 8:30 a.m. - 12:00 noon  
1776 I St., NW, Washington, DC

<u>TOPIC</u>	<u>LEAD</u>
● Introductions and Opening Remarks	NRC/NEI
● NRC Experience Since the Last Meeting <ul style="list-style-type: none"><li>- Requal lessons learned (IP2 / Cooper / SDP / integrity / overlap)</li><li>- INPO exam bank usability / K/A links</li><li>- "Peer Checker" guidance</li></ul>	NRC
● Industry Experience Since the Last Meeting <ul style="list-style-type: none"><li>- Upward "Creep" in requal pass/fail decisions</li><li>- Potential for sample plan banks</li><li>- Examination experiences at McGuire (RO/SRO only questions)</li></ul>	NEI
● Proposed Long-term Examination Options <ul style="list-style-type: none"><li>- Eliminate normal operations from the simulator test</li><li>- Industry feedback on written options discussed at last meeting</li><li>- NRC feedback on operating test options discussed at last meeting</li></ul>	NRC/NEI
● Operator License Eligibility Issues	NRC/NEI
● Generic Fundamentals Examination Issues <ul style="list-style-type: none"><li>- NRC - Explore increased frequency and computerization</li><li>- NEI - Explore industry development with NRC audit</li></ul>	NRC/NEI
● Reactivity Manipulation Rule Change Implementation <ul style="list-style-type: none"><li>- Examiner guidance</li><li>- Do we need a national workshop?</li></ul>	NRC
● Summary and Conclusion	NRC/NEI

Operator Licensing Meeting With NEI on February 27, 2002	
Agenda Item	Discussion Summary
1. NRC Experience Since the Last Meeting	<ul style="list-style-type: none"> <li>- With regard to the recent requalification testing issues at Indian Point 2, the NRC staff indicated that it expects facility licensees to establish and follow their own accredited/approved training and testing programs. If a facility licensee decides to fail an operator or crew during a requalification examination, the NRC will consider them failures as well when it assesses the plant's performance using the significance determination process (SDP).</li> <li>- With regard to the requalification exam issue at Cooper, the NRC staff noted that the facility had good intentions, but the process it used to validate its 2000 examinations was clearly inappropriate because it appeared to alter the outcome and diminish the integrity of those examinations.</li> <li>- The NRC staff reiterated its concern that, in the absence of an explicit industry standard or regulatory guidance, some facility licensees are repeating too many test items during successive requalification examinations. The staff shared its view that limiting test item repetition from prior exams in a testing cycle to no more than 50 percent would maintain an acceptable level of test integrity without placing an undue burden on facility licensees. The staff agreed to solicit industry input before issuing final guidance in this area.</li> <li>- The NRC staff summarized the results of its recent effort to evaluate the usability of the national examination question bank. The staff noted that 1) the practice of entering both the RO and SRO examinations in their entirety is inflating the bank with duplicate questions; 2) several facilities appear not to have any questions in the bank at all, even though they have had recent examinations; 3) many of the questions use the old K/A numbering format, which makes finding them difficult; and 4) recent examinations do not appear to be making it into the bank. The INPO representative acknowledged the staff's findings and noted that they have recently resumed entering new questions. An examiner from NRC Region II is planning to meet with INPO to determine if there is any way that the NRC can facilitate the data submittal and entry.</li> <li>- The "peer checker" issue, which was on the agenda as a close-out item, was not discussed so that more time could be devoted to higher priority issues.</li> </ul>
2. Industry Experience Since the Last Meeting	<ul style="list-style-type: none"> <li>- The utility representative from Duke Power discussed some apparent conflicting guidance in NUREG-1021 and the K/A Catalogs (NUREGs-1122 and 1123) related to the development of SRO-level questions for the initial licensing written examination. The NRC staff briefly clarified its expectations with regard to implementing the requirements of 10 CFR 55.41 and 55.43, noting that 55.41 topics that are unique to SROs at the facility can be used as SRO-level questions, that 55.43 topics can still be used for SRO-level questions even if the material is also taught to ROs at the facility, and that 55.43 topics can be included on the RO exam provided the facility has a learning objective that requires ROs to know the material. The NRC staff indicated that it will take this new information into consideration as it prepares additional guidance to clarify any inconsistencies that might exist.</li> <li>- Although it was not included on the planned agenda, the utility representatives requested the NRC staff to consider making public any internal NRC documents, such as examination audit reports and regional emphasis documents, that facility licensees might find useful when preparing examinations. The NRC staff noted that the audit reports and other internal documents generally reference existing guidance and do not provide new direction, but, nevertheless, agreed to consider making them public, as appropriate.</li> <li>- The planned agenda item regarding the industry's concern with upward "creep" in requalification pass/fail decisions, was not discussed in detail. The NRC staff's expectation in this area was briefly discussed in connection with the first agenda item.</li> <li>- The planned agenda item regarding the potential for sample plan banks was not discussed so that more time could be devoted to higher priority issues.</li> </ul>

<p>3. Proposed Long-term Examination Options</p>	<p>- As a follow-up item from the previous meeting, the industry representatives indicated their support for the NRC staff's proposal to shorten the RO written examination from 100 to 75 questions by proportionally decreasing every tier and group in the current examination outline. The industry representatives also expressed a willingness to work with the NRC to assess and revise the current examination outline, as deemed appropriate. Although the industry also</p>
<p>3. Proposed Long-term Examination Options (Continued)</p>	<p>supported retaining the current 100-question SRO written examination and grading format, it did not support decreasing the SRO-upgrade examination to 25 SRO-only questions or revising the regulation to facilitate a common RO and SRO written examination.</p> <p>- As a follow-up item from the previous meeting, the NRC staff reviewed a number of changes that are being considered for the operating test. With regard to the administrative category of the walk-through, the NRC staff reiterated its proposal to (1) improve reliability by using only job performance measures (JPMs) and no prescribed questions to conduct the evaluations; (2) enhance flexibility by eliminating the requirement to test every applicant on all four administrative topics; and (3) improve objectivity by implementing a more objective 80% cut score for this test category. Additionally, the staff indicated that it would be willing to combine the administrative and systems categories of the walk-through, as the industry has requested, if the industry agrees to work with the staff to address some long-standing problems the staff has had with the competencies and rating factors used to evaluate applicant performance on the simulator portion of the operating test. The combined walk-through would likely include 15 JPMs for ROs (12 systems and 3 admin) and instant SROs (10 systems and 5 admin) and 10 JPMs (5 systems and 5 admin) for upgrade SROs, which would be compatible with a simple 80% cut score. Some of the simulator competencies, rating factors, and behavioral anchors would likely be consolidated or edited to eliminate redundancy and subjectivity, and examiners should be allowed to assign and justify "not observed" grades to a limited number of rating factors if the simulator scenarios did not give an applicant the opportunity to demonstrate competence in a particular area. The industry representatives acknowledged the NRC staff's preference to implement these additional changes in a consolidated manner, and suggested that changes in job requirements and applicability to the requalification program also be considered if and when the simulator grading criteria are revised. All parties agreed that a number of details (e.g., the number of alternate path JPMs, limits on bank use, and how to address retakes if the walk-through categories are combined) would have to be resolved if the staff decides to implement these major changes.</p> <p>- As a separate issue, the utility representatives expressed a continued interest in eliminating normal operations from the simulator test because they are time consuming and predictable and never lead to failures. The NRC staff acknowledged the stated flaws, noted that the simulator scenarios need to include sufficient evolutions and events for the NRC to evaluate the applicants' competence, and reiterated its concern with "crash and burn" scenarios. The staff also noted that NUREG-1021 currently allows the use of controlled-upset power reductions for the required reactivity manipulation; however, a utility representative countered that most upset conditions require a plant shutdown rather than a power reduction. Subject to management approval, the NRC staff indicated a willingness to increase flexibility by allowing examination authors to substitute additional instrument and component malfunctions for some or all of the normal evolutions that are currently required during the simulator operating test; i.e., ROs / instant SROs / and upgrade SROs would be required to respond to at least 6 / 6 / and 3 normal / component / instrument malfunctions and at least 1 / 2 / and 1 major transient(s).</p>
<p>4. Operator License Eligibility Issues</p>	<p>The NRC staff noted that the question whether facility licensees could reference a National Academy for Nuclear Training document in their technical specifications still needs to be resolved. This issue is on the agenda for the upcoming NRC-INPO coordination meeting, but the staff has also been working with Exelon on a related licensing action in an effort to find an acceptable alternative.</p>

5. Generic Fundamentals Examination (GFE) Issues	<p>- The utility representatives reiterated their concern that the NRC is continually raising the bar on the GFE because it is raising the cognitive level of many knowledge and ability (K/A) statements thereby forcing facility trainers to continually upgrade their curricula and screening criteria in an effort to maintain or achieve their expectation of a 100% pass rate on the GFE. The NRC staff acknowledged that some of the K/As used as the basis for GFE questions are stated at one level (e.g., define), yet are tested at another (e.g., understanding). The staff noted that the GFEs have been testing primarily at the understanding level since 1991 and that it recently compared the number of higher cognitive level questions on the exams given in 1997 with those in 2001 and found them to be essentially equal. The staff agreed that its expectations in this area may need to be clarified but questioned the benefit of revising the K/A catalogs when utilities could ensure success by teaching all of the GFE K/As at the</p>
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<p>5. GFE Issues (Continued)</p>	<p>understanding level. Moreover, the staff noted that taking 80% of the GFE directly from question banks that are available on-line mitigates concern that the cognitive level of the GFEs is too high because the exposed items function at lower cognitive levels regardless of their face value. With regard to the screening of applicants, the NRC staff noted that it has not detected a trend in the GFE withdrawal rate - it has averaged about 9% per exam, since 1999.</p> <ul style="list-style-type: none"> <li>- The NRC staff updated the status of the following issues, which have been carried forward from prior meetings: <ul style="list-style-type: none"> <li>- With regard to the amount of systems knowledge required to pass the GFE, the staff reported that it has reviewed the issue and found that only three questions have ever been deleted during the grading process when it was determined that they had exceeded the acceptable scope of a fundamentals examination. Although the NRC staff and its contractor remain sensitive to this issue, the staff proposed to develop a trial protocol that would afford one or two industry representatives an opportunity to pre-review the 10 new questions (i.e., those most likely to exceed the expected scope of systems knowledge) on future GFEs; the staff agreed to consider making the modified questions available for review as well, based upon the outcome of the initial trial.</li> <li>- With regard to complaints that the increased demands of the GFE have driven up utility training costs, the staff reported that, with NEI's support, it has solicited utility-wide feedback on how much and why their GFE costs may have increased. The fact that only four comments were received suggests that this is not a wide-spread problem. The reasons for the cost increases included the declining experience level of the applicant pool, greater reliance on contractors, the desire for higher grades with no failures, and uncertainty regarding exam content. One utility representative noted that his plant had not conducted GFE training for some time, so they felt compelled to update their curriculum to prepare for the upcoming exam.</li> <li>- With regard to electronic administration of the GFE, the NRC staff indicated that it has explored the possibility of using a commercial testing service with outlets near most reactor facilities. Such a service would likely add about \$100K to the current annual cost of administering the GFE, which may not be justified in light of the small number of applicants that take the exam. The utility representatives, suggested that it should be possible to administer the GFE via the web using all bank questions as the FAA does or by selecting 10 "new" questions for each exam from a separate, closed bank. The NRC staff noted that the FAA tests primarily at the fundamental level and that the NRC does not want to compromise the integrity of the GFE by eliminating the new and modified questions. Moreover, providing examinations on-line at each facility would likely entail hardware and connectivity issues.</li> </ul> </li> <li>- As an added flexibility measure, the NRC staff indicated that starting in 2004 it could increase the frequency at which the GFEs are offered and limit the cost by shortening each exam from 100 to 50 questions. Although the utilities had previously rejected a similar proposal, the NRC staff asked that they reconsider this option in light of the other GFE changes that have been implemented since the original proposal was rejected - i.e., the number of bank questions on the GFE have been increased from 50 to 80 and the banks are now available for study on the NRC's web site.</li> <li>- The NRC staff summed up by recommending (1) that the GFE retain its current pencil and paper format; (2) that the staff work with the industry to develop a protocol for reviewing the new questions before the GFEs are administered; (3) that beginning in 2004, the exams be decreased from 100 to 50 questions, so that the resultant cost savings can be used to increase the GFE frequency from three to four times per year; and (4) that a decision whether or not to revise the K/A catalogs be deferred. The facility representatives agreed to recheck with their peers regarding the shorter GFE and to continue working with the NRC on the other issues.</li> <li>- The planned agenda item regarding industry development of the GFE with NRC audit was not discussed so that more time could be devoted to higher priority issues.</li> </ul>
<p>6. Reactivity Manipulation Rule Change Implementation</p>	<p>This planned agenda item was not discussed so that more time could be devoted to higher priority issues.</p>