

**LOTF Option 3 Concept Paper****Option 3: Utility preparation and administration of written exam without prior NRC review (NRC oversight and inspection similar to the Requalification Program)**

The purpose of this concept paper is to outline the Option 3 process as the Industry would suggest it be implemented. This concept paper therefore outlines the model, assumptions and pros/cons involved with implementation of the option for utility preparation and administration of ILO written exams with NRC oversight.

**The Model**

1. A written examination would no longer be conducted during the NRC initial license examination process. The NRC Initial License Exam would consist of an Operating Examination as currently outlined in NUREG 1021, ES-301 through ES-303.
2. The facility would develop a comprehensive final written examination in accordance with NUREG 1021 and administer the examination through each utility's established program.
3. Successful completion of the written examination would be an activity necessary for utility certification as a license candidate on the final application.
4. Challenges to the written examination would fall under the process the utility would normally utilize for any other written exam challenge; the NRC would no longer be involved in written exam challenges or issues. In cases where the NRC would provide the written examination, the current process as outlined in 10 CFR 55, including appeals, still applies.
5. The NRC would provide oversight of the program through an inspection process similar to that established and utilized for the Licensed Operator Requalification program.
6. The NRC would maintain final licensing authority through implementation of the Operating Exam process. The development and administration process for the Operating Exam remains unchanged.
7. This process as defined above would be voluntary for utilities and therefore would not be subject to the "backfit rule".

## Assumptions

1. The individual candidate/license holder will not be subject to any post-exam scrutiny by the NRC as a result of their inspection process. Any issues developing from an NRC inspection process would be treated programmatically.
2. The NRC maintains the licensing decision.
3. The utility has demonstrated the ability to successfully prepare and administer a comprehensive final written examination in accordance with NUREG 1021.

## Pros and Cons of Option 3

The following table outlines potential benefits and issues with the Option 3 concept. Every attempt has been made to consider both the NRC and Utility position in developing this table.

### Pros

- A similar successful process (for Licensed Operator Regualification) has already been established and is familiar to both the NRC and utilities
- Reduced utility costs through elimination of audit exam duplication, development time and NRC billable costs
- Reduced NRC resource requirements for examination review
- Reduced scope, cost, and number of appeals under 10 CFR 2.103
- Reduced candidate stress
- Consistency in development of the written exam is maintained through continued use of NUREG 1021 and the K/A catalogs
- NRC maintains oversight and control of license issuance
- Program flexibility is enhanced to allow for remediation and retest
- Only candidates who have successfully completed the final comprehensive written exam are administered an operating exam by the NRC

### Cons

- NUREG 1021 and K/A Catalog still cumbersome and complicated; continued revisions to both documents and processes would need to continue
- Requires a rule change and associated administrative changes (and costs) for the NRC

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Feb 9, 2001

- Change management issues similar to those experienced during requalification program changes

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Feb 9, 2001

## **INPO Option 4 Concept Paper**

**Option 4: Utility preparation and administration of written exam under the auspices of the National Academy and its accredited training programs with INPO oversight.**

This concept paper outlines the assumptions, model, and pros and cons involved with the implementation of the option for utility preparation and administration of ILO written exams with National Academy/INPO oversight.

### **Assumptions**

1. The candidate must not be subject to post-exam scrutiny as a result of the National Academy/INPO review process. Any issues developing during this process would be treated programmatically ("once licensed - always licensed").
2. The NRC maintains the licensing decision through administration of an operating exam.
3. The utility will have demonstrated the ability to successfully prepare and administer a comprehensive final written examination prior to assuming responsibility for the process.

### **The Model**

1. A written examination would no longer be conducted during the NRC initial license examination. The NRC Initial License Exam would consist of an Operating Examination as currently outlined in NUREG 1021, ES-301 through ES303.
2. The facility would develop a comprehensive final written examination in accordance with National Academy guidance contained in the *Training System Development (TSD) Manual, INPO 88-002* and administer the examination through each utility's established program. This guidance includes a prerogative to continue to use a one hundred question, multiple choice examination.
3. Any appeal on the final written examination would fall under the utility process for written exam challenges. The right to appeal a refusal to license is gained by individuals upon final utility certification as a license candidate. Successful completion of the written examination would be an activity necessary for utility certification as a license candidate on the final application (NRC Form 398).

4. The National Academy/INPO would provide oversight of the program through the review process used to maintain accreditation for all accredited programs. A focused review visit would be used to determine the utility's readiness to prepare its initial final written examination.
5. The NRC would maintain final licensing authority through the conduct of an Operating (simulator and JPM) Examination. The development process for the Operating Examination remains unchanged.
6. The process as defined above would not be voluntary any more than any other element of a systematic approach to training as outlined in *The Process for Accreditation of Training in the Nuclear Power Industry, ACAD 00-001*.

#### **Pros and Cons of Option 4**

The following are the potential benefits and drawbacks of Option 4

##### **Pros**

- NRC maintains oversight and control of license issuance
- Removal of uncertainties involved in NRC staffing levels to support licensing process because this option is not voluntary
- Reduced NRC resource requirements
- Reduced scope and number of appeals under 10 CFR 2.103
- Increased quality of final candidates because they will have successfully completed the final comprehensive written exam before they are administered an operating exam by the NRC
- Reduced utility costs through elimination of audit exam duplication, development time and NRC billable costs
- Reduced candidate stress
- Removal of restriction to use only multiple choice questions in developing a comprehensive higher cognitive level examination
- Increased program flexibility to allow for remediation and retest of low-testing candidates

##### **Cons**

- Required rule change and associated administrative changes and costs for the NRC
- Risk of change management issues similar to those experienced during the changes made in the requalification process

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Feb 9, 2001

- Risk of decreased consistency in development of the written examination without use of NUREG 1021 and the K/A catalogs
- Increase in INPO resources necessary to administer review visits and any guideline revision necessary to implement this option. Estimate 1-2 head count for conduct of initial examination review visits.