

758 - 8 1993

Docket No. 50-454

Docket No. 50-455

Commonwealth Edison Company  
ATTN: Mr. L. O. DelGeorge, Vice President  
Nuclear Oversight and Regulatory Services  
Executive Towers West III  
1409 Opus Place, Suite 300  
Downers Grove, IL 60515

Dear Mr. DelGeorge:

SUBJECT: REQUALIFICATION PROGRAM EVALUATION

In a telephone conversation on February 3, 1993, Mr. L. Bunner and Mr. J. Lennartz arranged to evaluate the requalification program and licensed personnel at the Byron Nuclear Station. The evaluation is scheduled for the week of June 7, 1993. NRC examiners and evaluators from your facility will conduct requalification examinations, and the NRC will evaluate the facility licensee's requalification program in accordance with Sections ES-601 through ES-604 of NUREG-1021, "Operator Licensing Examiner Standards," Revision 7. You are encouraged to ensure that your training staff and proposed examinees are familiar with these standards.

For the NRC to adequately prepare for this evaluation, the facility licensee will need to furnish the NRC the approved items listed in Enclosure 1, "Reference Material Guidelines." You are also requested to submit, at your option, a proposed examination for use during the examination week. However, if you do submit a proposed examination, the personnel participating in its development may become subject to the security restrictions described in this letter.

Please review the guidance promulgated in Revision 7 to NUREG-1021 on the content and scope of simulator examination scenarios. The scenario examination bank should cover the entire spectrum of emergency operating procedures (EOPs), including alternative decision paths within the EOPs, and it should incorporate a range of failures with various degrees of severity for the same type of event. Each scenario should contain simultaneous events that require the senior reactor operator (SRO) to prioritize his/her actions and to assign other crew members particular tasks. Each scenario should also require the SRO to decide when to transition between EOPs and decide which actions to take within EOPs.

9302160059 930204  
PDR ADOCK 05000454  
V PDR

1 E42

FEB - 8 1993

You are requested to designate at least one employee to be a member of a joint NRC-facility examination team. The employee is expected to be an active senior reactor operator (SRO) as defined by 10 CFR 55.53(e) or (f) from the Byron Nuclear Station operations department. You are encouraged to designate a second employee from the training staff to be a member of the examination team. This employee should also be a licensed SRO, but may be a certified instructor. If desired and agreed to by the chief examiner, you may designate one additional employee from the training staff with appropriate qualifications to be a member of the examination team. In addition to these individuals, you will need to designate a simulator operator for scenario preview and validation during the on-site examination preparation week. In some cases, you may need to designate a simulator operator during the test item review period. All of these individuals will be subject to the examination security agreement.

The NRC restricts any facility representatives under the security agreement from knowingly communicating by any means the content or scope of the examination to unauthorized persons and from participating in any facility licensee programs such as instruction, examination, or tutoring in which an identified regualification examinee(s) will be present. These restrictions apply from the day that the facility licensee representative signs the examination security agreement indicating that the representative understands that he or she has specialized knowledge of the examination. The chief examiner will determine when a facility licensee representative has received specialized knowledge concerning the examination and will execute an examination security agreement. In most cases, the examination team members will not be required to enter into an examination security agreement more than 60 days before the examination week. The simulator operator will normally become subject to the security restrictions during the examination preparation and validation week; however, this may occur as much as 45 days before the examination week.

Sixty days before the examination administration date, please provide the NRC regional office with a list of proposed licensees, including crew composition, for the examination. The facility licensee training staff should send this information directly to the NRC's chief examiner.

The facility licensee may request that the NRC chief examiner or another NRC representative meet with the licensees to be examined and the licensee managers during the examination preparation week, normally 2 weeks before the examination. However, if the

FEB - 8 1993

schedule does not allow them to meet during the preparation week, they may meet at any mutually agreeable time. The NRC examiner will explain the examination and grading processes and will respond to any questions that licensees may have about NRC's examination procedures. The facility licensee training staff should schedule this meeting, if it is desired, with the NRC chief examiner.

The facility licensee is requested to distribute the, "Requalification Examination Feedback Form," attached as Enclosure 3. The NRC requests that this feedback form be completed by all operators, evaluators, and facility licensee representatives participating in the NRC requalification examination, including facility licensee managers. The results from this survey will be used to measure the success of the NRC and facility licensee's efforts to reduce undue stress during the requalification examination.

The facility licensee staff is responsible for providing adequate space and accommodations to properly develop and conduct the examinations. Enclosure 2, "Administration of Requalification Examinations," describes our requirements for developing and conducting the examinations. Also, a facility operations management representative above a shift supervisor level should observe the simulator examination process at the site.

The request for requalification examination material is covered by Office of Management and Budget Clearance Number 3150-0101, which expires October 31, 1995. The estimated average burden is 7.7 hours per response, including gathering, copying, and mailing the required material. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch, MNBB-7714, Division of Information Support Services, Office of Information Resources Management, U.S. Nuclear Regulatory Commission, Washington, DC 20555; and to the Paperwork Reduction Project (3150-0101), Office of Information and Regulatory Affairs, NFOB-3019, Office of Management and Budget, Washington, DC 20503.

The request for responses to the Requalification Feedback Form is covered by Office of Management and Budget Clearance Number 3150-0159, which expired February 28, 1992. A request for a clearance revision has been submitted to OMB and is expected to be granted. The estimated average burden is 30 minutes per response, including copying and mailing the completed responses.



FEB - 8 1993

Send comments about this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Records and Reports Management Branch, MNBB-7714, Division of Information Support Services, Office of Information Resources Management, U.S. Nuclear Regulatory Commission, Washington, DC 20555; and to the Paperwork Reduction Project (3150-0159), Office of Information and Regulatory Affairs, NFOB-3019, Office of Management and Budget, Washington, DC 20503.

Thank you for your cooperation in this matter. Mr. Bunner has been advised of the NRC guidelines and policies addressed in this letter. If you have any questions on the evaluation process, please contact Mr. C. Osterholtz at (708) 790-5293 or me at (708) 790-5602.

Sincerely,

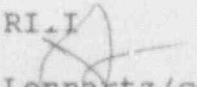
Original signed by Mark A. Ring


Mark A. Ring, Chief  
Operations Branch  
Division of Reactor Safety

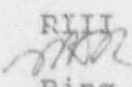
Enclosures:

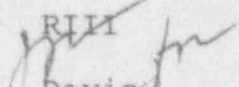
1. Reference Material Guidelines
2. Administration of Requalification Examinations
3. Requalification Examination Feedback Form

See Attached Distribution

RI-I  
  
Lennartz/cg  
02/08/93

RI-II  
  
Burdick  
02/08/93

RI-III  
  
Ring  
02/08/93

RI-IV  
  
Davis  
02/08/93

FEB - 8 1933

Distribution

cc w/enclosures:

K. Graesser, Site Vice President  
PWR Operations

K. Schwartz, Station Manager

D. Brindle, Regulatory Assurance  
Supervisor

D. Farrar, Nuclear Regulatory  
Services Manager

DCD/DCB (RIDS)

OC/LFDCB

Resident Inspectors, Byron,  
Braidwood, Zion

Richard Hubbard

J. W. McCaffrey, Chief, Public  
Utilities Division

Diane Chavez, DAARE/SAFE

Robert Newmann, Office of Public  
Counsel, State of Illinois Center

Robert M. Thompson, Administrator  
Wisconsin Division of Emergency  
Government

State Liaison Officer

A. Chernick, Training Manager

cc w/o enclosures:

R. M. Gallo, Branch Chief, OLB

J. B. Hickman, Project Manager, NRR

M. J. Farber, Section Chief, DRP

## ENCLOSURE 1

### Reference Material Guidelines

1. Provide test items to support all aspects of the regualification examination to the NRC 60 days before the examination date.
2. The following reference material:

A minimum of 700 test items for use in the written examination equally divided between the two sections of the written examination which cover all safety-related elements of the facility job-task analysis (JTA). The facility licensee is expected to maintain a dynamic bank by reviewing, revising or generating at least 150 questions a year. New questions should cover equipment and system modifications and recent industry and licensee events and procedural changes.

JPMs to evaluate each reactor operator and senior reactor operator safety-related task identified in the facility JTA, which meet the criteria in ES-603. The JPM bank should expand at a rate of at least 10 JPMs per year until this goal is reached. It is estimated that 125-150 JPMs will be the final result.

A bank of at least 30 simulator scenarios which reflect all abnormal and emergency situations to which a licensee is expected to respond or control. At least 5 scenarios per year should be generated until all aspects of the emergency operating procedures are covered with sufficient variation in the type and scope of initiating events and level of degradation. Emphasis should be placed on scenarios that include applicable industry events.

These target levels are expected to be attained by the facility licensees on 10/1/95, five years after the implementation of Revision 6 of NUREG-1021 (10/1/90).

3. For all licensee regualification examination and program evaluation visits, the facility shall:
  - Submit an Examination Sample Plan which meets the requirements of ES-601, Attachment 2;

ENCLOSURE 1 (Cont'd)

- Provide the associated examination banks (written, simulator and JPM) and associated reference material. At a minimum, the reference material should include Technical Specifications, abnormal and emergency operating procedures, and emergency plan procedures utilized in the regualification training; and
- Provide additional reference material as requested by the NRC chief examiner.



## ENCLOSURE 2

### Administration of Regualification Examinations

1. The NRC must evaluate at least 12 licensees to perform a program evaluation. Normally, the decision to select a licensee or crew for the regualification examination is based on license renewal needs. The regualification examination may also include other licensees who are not routinely performing shift duties or are not maintaining an active license as defined in 10 CFR 55.53(e). The restrictions on crew composition in the simulator are described in ES-601 Section C.2 and ES-604.
2. The simulator and simulator operators need to be available for examination development. The chief examiner and the facility representatives will agree on the dates and duration of time needed to develop the examinations.
3. The chief examiner will review the reference material used in the simulator. The NRC will not authorize the use of reference material that is not normally used for plant operation in the control room to be used during the simulator test.
4. The facility licensee will provide a single room for completing Section B of the written examination. The examination room and the supporting rest room facilities will be located to prevent the examinees from contacting all other facility and contractor personnel during the examination.
5. The chief examiner will inspect the examination room to see that it meets the minimum standard that will ensure examination integrity. The minimum spacing standard consists of one examinee per table and a 3-foot space between tables. No wall charts, models, or other training materials are allowed in the examination room.
6. The facility licensee is expected to provide a copy of each reference document for each examinee for Section B of the written examination. The material should include documents that are normally available to the licensees in the control room such as the technical specifications, operating and abnormal procedures, administrative procedures, and the emergency plans. The chief examiner will review the reference material before the examination begins.
7. The NRC regualification examination will attempt to distinguish between RO and SRO knowledge and abilities to the extent that the facility training materials allow the developers to make these distinctions.



ENCLOSURE 2 (Cont'd)

8. Prudent scheduling of examination week activities is important to help alleviate undue stress on the licensees. The facility training staff and the NRC chief examiner should attempt to formulate a schedule that will minimize delays while conducting the examination.

The following are some suggestions for structuring the examination activities to achieve this objective:

- Bring in licensees in accordance with their scheduled examination times.
  - It is better to segregate the group of licensees completing their examination, instead of the group of licensees that are scheduled to start their examination.
  - Following simulator scenarios, the facility evaluators and NRC examiners should quickly determine whether follow-up questioning is required so that the crew members may be released to talk among themselves about the scenarios.
  - Ensure that time validation of JPMs, particularly those performed in the simulator, is accurate. Establish a reasonable schedule to prevent licensees from waiting for simulator availability to complete their JPMs.
9. The NRC no longer requires the facility licensee to videotape dynamic simulator examinations. If the facility licensee requests to videotape the examination, any use of the tape must be completed before the NRC leaves the site at the end of the examination. If a disagreement over the grading of a licensee still exists at the end of the examination week, the facility licensee may retain the tape for the purpose of submitting it to support a request for regrade by the NRC. During the regrade, the NRC will review only the portion of the videotape under contention. After all requalification examination grades are finalized, including the review of any regrade requests, the facility licensee is expected to erase all video tapes made during the examination.

ENCLOSURE 3

REQUALIFICATION EXAMINATION FEEDBACK FORM

Introduction

The NRC is requesting feedback regarding the conduct of requalification examinations. The information provided will be used to monitor, on a generic basis, the effectiveness of the NRC's and facility licensee's efforts to minimize undue stress in the examination process.

This form is not intended as a means of resolving technical or process concerns pertaining to a specific examination. Such concerns will be resolved using the guidance in NUREG-1021, "Operator Licensing Examiner Standards."

Instructions

Completion of this form is voluntary. If you choose to provide feedback, please answer the questions in accordance with these instructions:

- The questions in this form regard the examination administered by Region III at (facility licensee) during (exam dates); however, comparisons with previous examinations may be appropriate.
- Any examinee or individual involved in the development or administration of this examination is encouraged to complete this form.
- Mail completed forms to: U.S. Nuclear Regulatory Commission  
Region III  
ATTN: Mark A. Ring, Chief  
Operations Branch  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Your Background

Please check the boxes that describe your involvement in this examination.

I was:

\_\_\_\_\_ an examinee  
\_\_\_\_\_ involved in developing the examination  
\_\_\_\_\_ involved in administering the examination  
\_\_\_\_\_ an examination observer  
\_\_\_\_\_ other: \_\_\_\_\_

ENCLOSURE 3 (Cont'd)

Please check the boxes that describe your current position.  
(Check all that apply)

\_\_\_\_\_ RO \_\_\_\_\_ SRO \_\_\_\_\_ operating crew member  
\_\_\_\_\_ training department \_\_\_\_\_ operations department  
\_\_\_\_\_ other: \_\_\_\_\_

Stress vs. Undue Stress

The following questions require you to make a judgment of whether there was **undue** stress during the examination. Examinations are inherently stressful events and, therefore, it is important that you make a distinction between stress and **undue** stress when making your judgments. **Undue** stress is unnecessary or inappropriate stress which can be practically eliminated without compromising the validity of the examination. The distinction between stress and **undue** stress is not a matter of whether the stress was extreme or mild. When making your judgments you should follow these steps:

First, consider the **cause** of the stress. Would it have been possible and practical to eliminate the cause of the stress without compromising the validity of the examination? If your answer is no, then no undue stress was present. (See point #1 on the rating scale below.)

If your answer is yes, consider the **magnitude** of the stress. A source of stress may be unnecessary but also sufficiently small in magnitude to be unlikely to affect an individual's performance in the examination. (See point #2 on the rating scale below.) The alternative is that the source may be unnecessary and also of sufficient magnitude to be likely to affect an individual's performance in the examination. (See point #3 on the rating scale below.)

Rating Scale:

1. No undue stress
2. Some undue stress

Inappropriate stress was present that could have been practically avoided but would not likely affect an individual's examination performance.

3. Significant undue stress

Inappropriate stress was present that could have been practically avoided, and it would likely affect an individual's examination performance.

ENCLOSURE 3 (Cont'd)

Examination Feedback

Ratings: Please use the rating scale described on the preceding page to indicate your judgment of the degree of **undue** stress that was present in each aspect of the examination identified below. Write the number (1, 2, or 3) in the space preceding the section.

Comments: Please comment about the source or cause of any **undue** stress, including who was affected (e.g., examinees, examiners) and suggested practical solutions. Attach additional sheets if necessary.



ENCLOSURE 3 (Cont'd)

\_\_\_\_\_ Pre-examination Interactions with NRC

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Written Examination: Administrative Controls/Procedural  
Limits

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Dynamic Simulator

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ Job Performance Measures

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Please comment on any practices which you believed were  
successful in reducing **undue** stress.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Your cooperation in completing this form is appreciated.