



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

July 31, 1992

① Bill Morris  
② John Telford  
"AE39-2"  
"PDR"

Morris  
~~Telford~~  
File  
dm

MEMORANDUM FOR: C. J. Heltemes, Jr., Deputy Director  
for Generic Issues and Rulemaking  
Office of Nuclear Regulatory Research

FROM: Frank P. Gillespie, Director  
Program Management, Policy Development  
and Analysis Staff  
Office of Nuclear Reactor Regulation

SUBJECT: REVISION OF 10 CFR PART 55,  
"OPERATOR REQUALIFICATION EXAMINATION  
REQUIREMENTS" (TAC NO. M83023)

NRR has reviewed the issue paper on the proposed revisions to the operator requalification examination requirements, enclosed in C. J. Heltemes, Jr.'s memorandum to Frank J. Miraglia, Jr. and Martin G. Malsch, dated July 23, 1992. NRR concurs with the content and rationale of the issue paper for preparing to revise 10 CFR Part 55.

Additionally, we recommend that the following two items be included in the proposed rule:

1. Change Section 55.2, "Scope," to include facility licensees; and
2. Add a schedular requirement so that facility licensees will be required to submit to the NRC their annual requalification operating tests and biennial written requalification examinations at least 30 days prior to the conduct of these tests and examinations.

The first item will eliminate currently existing ambiguities between the regulations of Parts 50 and 55. The second item establishes a timeframe for the proposed information collection requirements.

Frank P. Gillespie, Director  
Program Management, Policy Development  
and Analysis Staff  
Office of Nuclear Reactor Regulation

Enclosure:  
As stated

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UNITED STATES  
 NUCLEAR REGULATORY COMMISSION  
 WASHINGTON, D. C. 20555

FROM: J. J. HELTEMES, JR.  
 IC

ORIGINAL DUE DT: 07/31/92

TICKET NO: C900173  
 EDC DT: 07/23/92  
 NRC RVD DATE: 07/23/92

TO: MURPHY

BY SIGNATURE OF: \*\* YEL \*\*

STILESPIE

ESU: ROUTING:

REVISION OF 10 CFR PART 55, "OPERATOR REQUALIFICATION EXAMINATION REQUIREMENTS" (LRC NO. K63023)

MURPHY  
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 PARTLOW  
 RUSSELL  
 CAUTIONFIELD  
 STILESPIE  
 NRC MAILROOM

ASSIGNED TO: PHAS CONTACT: BODY (

Please review the due date immediately.

If the due date does not allow adequate time to respond to this request, you may request a revised due date. The request must have prior approval from the appropriate Associate Director or NRC Deputy Director and must include a valid justification. Contact RR mailroom with the new due date (Celeste Byrne, ext-21279).

Please do not carry concurrence packages to Directors office without first going through the NRC mailroom.



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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20565

JUL 23 1992

MEMORANDUM FOR: Frank J. Miraglia, Jr., Deputy Director  
Office of Nuclear Reactor Regulation

Martin G. Malsch, Deputy General Counsel  
for Licensing and Regulations  
Office of General Counsel

FROM: C. J. Heltemes, Jr., Deputy Director  
for Generic Issues and Rulemaking  
Office of Nuclear Regulatory Research

SUBJECT: REVISION OF 10 CFR PART 55, "OPERATOR REQUALIFICATION  
EXAMINATION REQUIREMENTS" (TAC NO. M83023)

The purpose of this memorandum is to request your concurrence on the extent and substance of a rulemaking in preparation to revise 10 CFR Part 55, "Operator Requalification Examination Requirements."

1. Title: Revision of 10 CFR Part 55
2. RES Section-Task Leader: Rajender Auluck (492-3794)
3. Cognizant Individual: NRR: David J. Lange (504-3171) *JLFG*
4. Requested Action: Concurrence on enclosed Issue Paper
5. Requested Completion Date: July 31, 1992
6. Summary: By memorandum dated April 14, 1992, the Office of Nuclear Reactor Regulation requested the subject amendments. The planned amendments are: 1) to eliminate the requirement for each licensed operator to pass a comprehensive requalification written examination and operating test administered by the NRC during the term of the operator's 6-year license, and 2) to require each facility licensee to submit a copy of each comprehensive requalification written examination and annual operating test to the NRC for review as part of a revised inspection program.

By SRM dated June 23, 1992 (enclosed), the Commission approved the staff's plans for developing the proposed amendments related to the Operator's requalification examination requirements and recommended that the staff utilize results-based approaches to the maximum extent possible.

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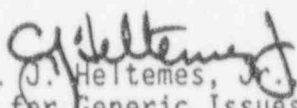
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On April 20, 1992, staff members from NRR and RES met to develop a strategy for drafting the proposed amendments. RES has prepared, with the assistance of NRR, an "issue paper" outlining: 1) the issue to be resolved, 2) the proposed resolution, 3) the benefits of resolving the issue, and 4) the costs of the proposed resolution on the licensee and the NRC. This issue paper has been drafted to allow cognizant offices to voice their opinions and provide their approval of the extent and substance of the issue and its suggested resolution. The paper, after resolving office comments, will be used to prepare the Federal Register Notice for the proposed rule. To accelerate the process of final concurrence on the FRN, your careful attention to the text and the rationale presented is requested.

We are requesting that you review the enclosed issue paper and provide us with your recommendations and approval by the date requested above.

  
C. J. Heltemes, Jr. Deputy Director  
for Generic Issues and Rulemaking  
Office of Nuclear Regulatory Research

Enclosures:

1. SRM dated June 23, 1992
2. Issue Paper

cc: Stuart A. Treby  
Jack W. Roe  
Robert M. Gallo

Staff Requirement Memorandum



OFFICE OF THE SECRETARY

UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555

June 23, 1992

ACTION - Murley, NRR

Cys: Taylor Bernero Sniezek Beckjord Thompson Jordan Blaha Scroggins IN RESPONSE, PLEASE REFER TO: M920602

MEMORANDUM FOR: James M. Taylor Executive Director for Operations

William C. Parler General Counsel

FROM: Samuel J. Chilk, Secretary

SUBJECT: STAFF REQUIREMENTS - BRIEFING ON STATUS OF LICENSED OPERATOR REQUALIFICATION PROGRAM AND COMPLEX SIMULATOR SCENARIOS (SECY-92-100 AND SECY-92-154), 10:30 A.M., TUESDAY, JUNE 2, 1992, COMMISSIONERS' CONFERENCE ROOM, ONE WHITE FLINT NORTH, ROCKVILLE, MARYLAND (OPEN TO PUBLIC ATTENDANCE); AND SECY-92-100 - STATUS AND DIRECTION OF THE LICENSED OPERATOR REQUALIFICATION PROGRAM

The Commission<sup>1</sup> was briefed by the NRC staff on the status of licensed operator requalification program and complex simulator scenarios.

The Commission (with all Commissioners agreeing) has approved the implementation of the pilot examination method for operating tests administered at each facility, with the understanding that the NRC has the authority to address potential concerns that might arise from subsequent licensee modifications of crew makeup. The Commission has noted the staff's intent to implement the pilot method at the facility's option until the examination procedures are revised, published for public comment, and incorporated in a revision to NUREG-1021.

SECY NOTE: THIS SRM AND THE VOTE SHEETS OF ALL COMMISSIONERS WILL BE MADE PUBLICLY AVAILABLE WHEN ISSUED TO THE STAFF. SECY-92-100 WAS RELEASED TO THE PUBLIC AT THE COMMISSION BRIEFING ON JUNE 2, 1992.

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<sup>1</sup> Commissioner de Planque was on travel and did not attend this briefing.

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Rec'd Off. EOO Date 6-24-92 Time 7:45

The staff should continue to provide the Commission with information on the pass/fail rates for operator requalification examinations on an annual basis. This should include a comparison of the pass rate using the pilot method with the pass rate based on the historical individual requalification criteria, similar to that provided in Enclosure 1 to SECY-92-100.

(EDO) (NRR)

(SECY Suspense: 2/26/93)

9100105

In both developing the proposed rule changes to eliminate the requirement for the NRC to examine each operator during a 6-year license as well as a revised inspection program for this area, the staff should -- consistent with provision IV.B.(i) of the Charter for the Committee to Review Generic Requirements (CRGR) -- utilize results-based approaches to the maximum extent possible. The Commission should be apprised of several items:

- o A detailed discussion of the proposed inspection program that will accompany the new approach, including a discussion of -- (i) how the results of the inspections will be used in the SALP evaluation process; (ii) how other related inspections (e.g. EOP inspections) will be integrated into the overall inspection program envisioned by the staff, so as to ensure appropriate licensee attention to these inspection reports; and (iii) how licensee adherence to appropriately high standards for examination development and grading will be verified;
- o The resource projections for the next four years for implementation of the new approach, compared to the resources that would be required under the existing approach; and
- o A review of the legal issues associated with the proposed approach, including a discussion of the extent to which this approach comports with section 306 of the Nuclear Waste Policy Act of 1982 and with the statements and assurances that the Commission has made in the litigation of this provision.

(EDO/OGC)  
NRR

(SECY Suspense: 9/30/92)

9200152

In formulating the rule, the staff should:

- o Provide a strong technical justification for initiation of the rulemaking and should indicate at what point in time the idea of rulemaking on this matter was first discussed,
- o Consider the use of human cognitive reliability (HCR) techniques in the evaluation of individual and crew

performance during the simulator tests,

- o Provide a more flexible grading system for use when conducting a follow-up on performance deficiencies identified in the simulator test. The follow-up should be graded in a different manner than the historical method, which used rigid criteria whereby one error resulted in automatic failure, and
- o Provide for explicit criteria to be used in making the decision to administer the NRC requalification examination.

(EDO) (NRR)

(SECY Suspense: 9/30/92) 9200:52

The staff, in developing inspection guidance for the requalification programs, should ensure that the guidance is not used as a mechanism to drive licensees' programs in a direction which causes the scope of those programs to reach beyond the continuing training found necessary for the sustained safe operation of the plants.

While this rule change should result in safer operations, the staff should inform the Commission if the margin to safe operations is discovered to be lost as a result of this change.

cc: The Chairman  
Commissioner Rogers  
Commissioner Curtiss  
Commissioner Renick  
Commissioner de Planque  
OCAA  
OIG  
ACRS  
PDR - Advance  
DCS - P1-24



Issue Paper

07/13/92

## I. Statement of the Issue

In 1987, the NRC amended 10 CFR Part 55 to add requirements for the requalification and renewal of operators' licenses. In accordance with Section 55.57(b)(2)(iii), licensed operators are required to pass facility-administered requalification examinations and annual operating tests. In Section 55.57(b)(2)(iv), licensed operators are also required to pass a comprehensive requalification written examination and operating test administered by the NRC during the term of a 6-year license. These regulations establish a dual responsibility for the facility licensee and the NRC to administer individual operator requalification examinations for the purpose of license renewal. At the time the regulation was amended in 1987, the NRC did not have the full confidence that each facility would administer its annual operating tests and written examinations in accordance with the staff's expectations for the evaluation process outlined in 10 CFR 55.59(c)(4). Section 55.59(c) provides that, in lieu of Paragraph 10 CFR 55.59(c)(4), the Commission may approve a program developed by using a systems approach to training. However, in 1987, INPO had not yet developed the criteria for accrediting the licensed operator requalification program even though some facilities had implemented a systems approach to training. Therefore, the NRC determined that during the first term of a 6-year license issued after the 1987 amendment to Part 55, the staff would administer NRC requalification examinations to operators for the purpose of license renewal. As a result of administering these examinations over a 3-year period, the staff has found that the NRC examiners are largely duplicating the tasks

already required of, and routinely performed by, the facility licensees. Based on the results of the requalification examinations administered to date, the staff now has the confidence that facility licensees can implement their own requalification program for evaluating licensed operators for license renewal in accordance with 10 CFR 55.59(c)(4). The current requirement that each licensed individual pass a comprehensive requalification written examination and operating test administered by the NRC during the term of the license gives the NRC the responsibility for certifying that each licensed individual meets the application requirements for license renewal. Rather than administering these requalification examinations, the NRC now believes that it can ensure safety and more effectively and efficiently use its resources by periodically inspecting the licensee's requalification program.

## II. Benefits of Resolving the Issue

The staff believes that it could ensure operational safety at each facility by directing the experienced NRC examiners to inspect and oversee facility requalification programs rather than administering requalification examinations. The staff's experience since the beginning of the requalification program in 1988, indicates that weaknesses in the implementation of the facility program are generally the root cause of significant deficiencies in the performance of operators. The NRC could more effectively allocate its examiners to perform onsite inspections of facility requalification examination and training programs in accordance with indicated programmatic weaknesses rather than scheduling examiners in accordance with the number of individuals requiring license renewal. By redirecting the

examiners, the staff expects to find and correct programmatic weaknesses more rapidly. The proposed amendment would continue to ensure that licensed individuals and operating crews are qualified to safely operate the facility.

Currently, facility licensees assist in the development and administration of the NRC requalification examinations. This assistance includes providing to the NRC all the material used for development of the written and operating examinations and providing facility personnel to work with the NRC during the development and administration of the examinations. This amendment would reduce the regulatory burden on the facility licensees by removing the dual effort expended by the facility to assist the NRC in developing and administering NRC requalification examinations for all licensed operators.

### III. Relevant Regulations

Section 306 of the Nuclear Waste Policy Act of 1982 (42 USC 10226, Public Law 97-425, January 7, 1983) authorized and directed the Commission to promulgate regulations or other appropriate regulatory guidance for the training and qualifications of civilian nuclear power plant operators. Such regulations or regulatory guidance were required to establish, among other things, requirements governing the NRC's administration of requalification examinations. The NRC accomplished this objective by revising 10 CFR Part 55, to add Section 55.59(a)(2)(iii) to provide that the NRC could administer a comprehensive requalification written examination and operating test in lieu of accepting certification that the licensee had passed written examinations

and operating tests administered by the facility. The NRC developed such guidance for examiners to conduct NRC-administered requalification examinations and published that guidance in NUREG-1021, "Operator Licensing Examiner Standards." In SECY-86-348, dated November 21, 1986, the staff described the revisions that it made to 10 CFR Part 55 in response to Section 306 of the Nuclear Waste Policy Act. On February 12, 1987, the Commission approved the proposed amendments in SECY-86-348, adding the requirement in 10 CFR 55.57(b)(2)(iv) for each licensee to pass an NRC-administered requalification examination during the 6-year term of the individual's license.

The current regulations in 10 CFR 55.57, "Renewal of Licenses," and 10 CFR 55.59, "Requalification," will continue to meet the requirements of Section 306 of the Nuclear Waste Policy Act (NWPA) even if the NRC deleted the requirement for each licensed individual to pass an NRC-administered requalification examination during the 6-year term of the individual's license. The regulations will continue to require facilities to have requalification programs and conduct requalification examinations. The NRC will provide oversight for these programs and examinations through inspections. In addition, Section 55.59(a)(2)(iii) provides that the NRC may administer requalification examinations in lieu of accepting the facility licensee's certification that a licensed individual has passed the facility-administered requalification examination. The NRC may find that in some limited cases this option is warranted after conducting an onsite inspection of the facilities requalification program. The proposed rule would not affect the regulatory and other appropriate guidance required by Section 306 of the

NWPA and described in Section 55.59(a)(2)(iii) for administering NRC requalification examinations in lieu of facility-administered examinations.

IV. Actions to be taken by the licensees to resolve the issue and regulations that must be amended to resolve the issue

The licensed operators would need take no additional actions. Each operator would continue to meet all the conditions of his or her license described in 10 CFR 55.53, which includes passing the facility-administered requalification examinations for license renewal.

As part of the rule change, the facility licensees would be required to submit to the NRC their annual operating tests and biennial written examinations used for operator requalification. The NRC would review these examinations for conformance with 10 CFR 55.59(c)(4) and the Examiner Standards (NUREG-1021). The staff would conduct this review and review other information already available to the staff to determine the scope of an onsite inspection of the facility requalification program. The NRC would continue to expect each facility to meet all of the conditions required for conducting a requalification program in accordance with 10 CFR 55.59(c).

The regulations need to be amended in two places to resolve the issue. First, 10 CFR 55.57(b)(2)(iv) would need to be deleted. Each licensed individual would then no longer be required to pass an NRC-administered requalification examination during the term of his or her license. Second, the NRC would amend 10 CFR 55.59(c) to require each facility licensee to submit a copy of

each requalification written examination and annual operating test to the NRC for review.

#### V. Actions to be taken for reaching the desired conditions

The staff has concluded that Section 55.57(b)(2)(iv) must be removed from the regulation to enable the NRC to resolve the issue. The staff has also concluded that each facility licensee should be required to submit a copy of each requalification examination to the NRC for review, as stated previously. These actions will ensure that the margin of safety for plant operations is not reduced and remove the dual responsibility of the facility licensee and the NRC for the administration of licensed operator requalification examinations.

#### VI. Costs or burdens on licensees and the NRC of the options for solutions

The staff expects that each facility licensee would continue in its present manner of conducting requalification training programs. However, the proposed amendment would reduce the burden on the facility licensee because each facility licensee would have its administrative and technical staff expend fewer hours than are now required to assist in developing and administering the NRC requalification examination. Currently, the NRC requires that an examination team, made up of NRC examiners and facility evaluators, co-develop, validate, and co-administer the NRC examinations, to ensure that the NRC examinations are valid and appropriate for the facility at which the examinations are being given. Also, the amount of material that each facility

licensee currently submits to the NRC for the routine NRC-administered requalification examinations is much larger than the amount expected under the proposed amendments.

Each licensed operator would be expected to continue to meet the requirements of the facility requalification training program. However, the licensed operator would no longer be required to pass an NRC-administered requalification examination during the term of his or her license as a condition of license renewal.

The staff believes that the proposed amendments to 10 CFR Part 55 would reduce the cost to implement the operator licensing program. The staff also believes that the current NRC resources used in the operator licensing program could more effectively be used by allocating examiners according to the indicated performance of each facility's requalification training program rather than according to the number of licensed individuals at a facility. The NRC would direct these resources to find programmatic weaknesses earlier, correct safety issues, and implement an onsite inspection program instead of routinely administering individual requalification examinations.

The NRC would retain the option of administering requalification examinations to assure that the operators are performing satisfactorily. The proposed amendment would delete the redundant requirement that each licensee pass both the NRC-administered and the facility-administered requalification examinations as a condition for license renewal.