POLICY ISSUE (Information)

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SECY-94-039

FOR:

The Commissioners

FROM:

James M. Taylor

Executive Director for Operations

SUBJECT:

ANNUAL STATUS REPORT ON THE ADMINISTRATION OF THE NEC'S REQUALIFICATION PROGRAM AND INITIAL OPERATOR LICENSING

EXAMINATIONS (WITS 8800098)

PURPOSE:

To inform the Commission of the status of the NRC's licensed operator requalification program and the results of the NRC's initial licensing examinations for reactor operator (RO) and senior reactor operator (SRO) applicants. To inform the Commission of the status of the followup actions of the Operator Licensing Program Recentralization Study recommendations, and the results of the industry feedback received regarding undue stress in the examination process.

BACKGROUND:

The staff issued its first periodic report on the status of the NRC's licensed operator requalification program on August 28, 1989, and continued to issue quarterly or semi-annual status reports through the end of calendar year 1991. In a staff requirements memorandum dated January 8, 1992, the Commission directed the staff to henceforth submit an annual report and combine the results of the NRC's initial RO and SRO licensing and requalification examinations. On February 25, 1992, the staff issued the first combined report, SECY-92-066, "Semi-Annual Status Report on the NRC's Requalification Program and Initial Licensed Operator Examinations." On February 5, 1993, the

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SECY NOTE: TO BE MADE PUBLICLY AVAILABLE IN 10 WORKING DAYS FROM THE DATE OF THIS PAPER.

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9403100032 940218 PDR SECY 94-039 PDR staff issued its first combined annual report, SECY-93-027, "Annual Status Report on the Administration of the NRC's Requalification Program and Initial Operator Licensing Examinations."

DISCUSSION:

NRC Requalification Examination and Inspection Summary for Fiscal Year 1993

Revision 7 of NUREG-1021, "Operator Licensing Examiner Standards," was published in January 1993. It was used on a voluntary basis for examinations conducted from January 1993 until August 1993, and has been used formally for all requalification examinations administered since August 1993. Revision 7 promulgated the crew-based dynamic simulator grading procedures that were discussed in last year's annual report. The staff believes that the revised procedures encourage better teamwork, communications, and command and control among the control room operators and thereby provides a more accurate measure of the operators' abilities.

During fiscal year 1993, the staff evaluated 43 requalification programs and examined 694 operators. The results are summarized in the following table. The enclosure gives detailed results of the examinations at each facility.

Requal 1	fication Results fo	r Fiscal Year 1993	
Element	Number Evaluated	Pass/Fail	Percent Pass (SAT)
Programs	43	43/0	100
Crews	157	153/4	97
SROs	409	387/22	95
ROS	285	268/17	94
Total (SRO + RO)	694	655/39	94

The overall requalification program pass rate for fiscal years 1989 through 1993, inclusive, has been 94 percent, and the overall individual operator pass rate during this same period has been 90 percent.

At the beginning of fiscal year 1993, only one facility (Millstone 1) had an unsatisfactory requalification program.

In September 1993, the staff reevaluated the requalification program at Millstone 1 and determined that the crews and operators had passed their examinations. However, the corrective actions for significant program weaknesses that were previously identified in Confirmatory Action Letter (CAL) 1-92-014, dated October 9, 1992, remained to be completed and evaluated by the NRC staff before the program status could be changed. The Millstone 1

facility licensee successfully completed the required corrective action items during the first quarter of fiscal year 1994. In a letter to the facility dated December 30, 1993, the NRC staff determined that the Millstone 1 requalification program was satisfactory.

As described in SECY-92-432, "Status of the Licensed Operator Requalification Program - Response to the Staff Requirements Memorandum (M920602)," the staff issued a temporary instruction (TI) for use during a number of trial inspections to evaluate the adequacy of the new requalification program inspection process in support of an amendment to 10 CFR 55. A total of 20 facility requalification programs and 168 licensed operators were evaluated using the TI during FY 1993. As described in SECY-93-333, "Final Amendments to 10 CFR Part 55 on Renewal of Licenses and Requalification Requirements for Licensed Operators," the staff concluded that the inspection program could adequately assess the facility licensees' operator requalification programs. The TI has been converted into an NRC Inspection Procedure which will be implemented along with the new 10 CFR Part 55 amendment that was approved by the Commission on January 19, 1994.

Summary of Requalification Examination Feedback

In a memorandum dated February 24, 1993, from Commissioner Rogers to James M. Taylor, Executive Director for Operations, the staff was asked to track the results of the ongoing program to obtain feedback on the NRC's and industry's efforts to minimize undue stress in the examination process. A feedback form to achieve this was included in Revision 7 of the Examiner Standards. The feedback form is given to the facility licensee before each requalification examination. Completion of the feedback form is voluntary. Completed feedback forms were received from 122 out of 332 examinees, or a 37 percent return rate.

While we continue to receive claims of examination stress, the comments were significantly fewer in number and less critical than previously received. The nature of the responses indicated that the dynamic simulator and job performance measures (JPMs) of the operating test are areas in which operators continue to experience undue stress. The responses indicated that the level of stress is related to the number and proximity of facility evaluators and NRC examiners present during simulator scenarios, the time spent waiting between scenarios, and the need to wait until the end of the exam week to learn the exam results. Overall, the respondents observed improved interpersonal skills by the NRC examiners and indicated that the examiners seemed intent on relieving undue stress associated with the examination process whenever possible.

In general, the responses indicate that efforts to minimize undue requalification examination stress are succeeding. The staff expects that the new amendment to 10 CFR Part 55 will further reduce examination stress because licensed operators will no longer be required to pass an NRC conducted requalification examination to renew their licenses.

Summary of Initial Examination Results

In SECY-93-027, the staff summarized the results of the NRC's initial operator licensing examinations for fiscal years 1987 through 1992. The following table includes the examination results for these years as well as FY 1993:

Examination		Percent Passed During Fiscal Year								
Exami	nation	1987	1988	1989	1990	1991	1992	1993		
RO	Written	88.8	90.0	89.9	92.1	92.6	92.2	91.5		
KU	Operating	95.7	94.7	95.3	95.1	95.6	98.2	93.		
SRO	Written	91.0	91.1	93.5	94.2	96.8	97.9	97.1		
	Operating	91.0	95.2	92.3	92.6	94.9	95.6	94.5		

The staff finds that facility operator training programs continue to produce applicants who pass the NRC's licensing examinations.

Operator Licensing Recentralization Study

On December 14, 1993, the staff briefed the Commission on the results of the operator licensing recentralization study and the staff's plans for implementing the study's four recommendations for improving examination consistency (i.e., expanded headquarters oversight, increased training for examiners, clarified guidance on simulator scenario complexity, and greater regional interaction). In a staff requirements memorandum dated December 22, 1993, the Commission requested the staff to summarize the status of implementing these recommendations in this annual report.

To address the study recommendation of expanded headquarters oversight, the staff plans to increase the test and measurement focus of its post examination audits. The audits will assess the level of difficulty of the written examinations and the walk-through portion (JPMs) of the operating test. The staff will perform the post-examination audits on a sampling basis and provide appropriate feedback to the regional offices. The staff expects to implement the revised audit process in 1994.

To address the study recommendation of increased training for examiners to assure greater consistency in the examination process, the staff is planning to conduct a training needs assessment this fiscal year to determine the specific training needs of operator license examiners. The assessment will be used to focus the development of future initial and continuing training for operator license examiners. The staff expects to implement any new or modified training for examiners during FY 95.

To address the study recommendation that additional guidance be developed to clarify the appropriate level of difficulty for simulator scenarios, the Operator Licensing Branch convened a simulator scenario analysis panel in January 1994, consisting of headquarters, regional, and contract examiners. The function of this panel was to perform the groundwork for establishing acceptable levels of difficulty for dynamic simulator scenarios used during initial licensing examinations. Additional analysis and review will be conducted during FY 94 prior to publishing clarifying examples and improved guidance to ensure that examiners achieve the expected level of difficulty when developing their simulator scenarios.

To address the study recommendation that increased regional interaction would provide more opportunities for examiners to interact and thus be more consistent with other examiners, the Operator Licensing Branch discussed this issue during an operator licensing counterpart meeting in January 1994. As a result of this meeting, Headquarters and regional managers agreed to establish a plan for rotating examiners among regions to perform peer evaluations. The staff believes this will improve inter-regional consistency. The staff expects to implement the plan on a trial basis in 1994.

CONCLUSION:

The NRC's initial and requalification examination programs continue to be effective methods for assessing operator competence in performing licensed duties and for evaluating the adequacy of facility requalification programs.

James M. Taylor Executive Director for Operations

Enclosure: Status Report on the NRC Requalification Program Fiscal Year 1993

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STATUS REPORT ON THE NRC REQUALIFICATION PROGRAM FISCAL YEAR 1993

Facility Evaluated	Candidate Examined	s # P/F	Failed WRT/OP	RO P/F	SRO P/F	# Crews	Crew P/F	Program SAT/UNSAT	DATE
Calvert Cliff:	s 16	16/0	0/0	6/0	10/0	4	4/0	SAT	10-92
Seabrook	16	16/0	0/0	4/0	12/0	4	4/0	SAT	10-92
Surry	12	12/0	0/0	6/0	6/0	3	3/0	SAT	10-92
St. Lucie	24	21/3	3/1	9/3	12/0	6	6/0	SAT	10-92
Wolf Creek	13	12/1	1/0	3/0	9/1	3	3/0	SAT	10-92
Nine Mile 2	15	14/1	0/1	9/0	5/1	3	3/0	SAT	11-92
Crystal River	15	12/3	1/2	8/1	4/2	3	2/1	SAT	11-92
WNP-2	15	15/0	0/0	9/0	6/0	3	3/0	SAT	11-92
Millstone 2	5	5/0	0/0	2/0	3/0	1	1/0	SAT(2)	12-92
Millstone 3	4	4/0	0/0	2/0	2/0	1	1/0	SAT(2)	12-92
Wolf Creek	13	12/1	1/0	3/0	9/1	3	3/0	SAT	12-92
Browns Ferry	20	20/0	0/0	8/0	12/0	4	4/0	SAT	12-92
Sequoyah	24	23/1	0/1	7/1	16/0	6	6/0	SAT	12-92
Big Rock Point	9	8/1	0/1	4/1	4/0	2	2/0	SAT(2)	12-92
Davis-Besse	12	9/3	0/3	5/0	4/3	3	2/1	SAT	12-92
Indian Point 3	5	5/0	0/0	1/0	4/0	1	1/0	(1)	1-93
Zion	12	11/1	1/0	5/0	6/1	3	3/0	SAT	1-93
Robinson	12	12/0	0/0	3/0	9/0	3	3/0	SAT	1-93
Cook	12	11/1	0/1	6/0	5/1	2	2/0	SAT	1-93
TMI-1	15	15/0	0/0	8/0	7/0	3	3/0	SAT	2-93
Perry	12	12/0	0/0	5/0	7/0	3	3/0	SAT	2-93
Peach Bottom	8	8/0	0/0	4/0	4/0	2	2/0	(1)	3-93
Palisades	12	11/1	1/0	5/1	6/0	3	3/0	SAT	3-93

Point Beach	12	12/0	0/0	6/0	6/0	3	3/0	SAT	3-93
Palo Verde	47	38/9	0/9	17/5	21/4	9	7/2	SAT	3-93
Farley	16	16/0	0/0	4/0	12/0	4	4/0	SAT	4-93
Braidwood	12	11/1	0/1	4/0	7/1	3	3/0	SAT	4-93
Maine Yankee	12	12/0	0/0	4/0	8/0	3	3/0	SAT	5-93
Catawba	13	10/3	1/2	3/1	7/2	3	3/0	SAT	5-93
Hope Creek	4	4/0	0/0	2/0	2/0	1	1/0	(1)	6-93
Millstone 2	13	12/1	0/1	1/0	11/1	4	4/0	SAT	6-93
Summer	19	16/3	0/3	5/1	11/2	4	4/0	SAT	6-93
Byron	12	12/0	0/0	5/0	7/0	3	3/0	SAT	6-93
Comanche Peak	26	26/0	0/0	11/0	15/0	6	6/0	SAT	6-93
McGuire	15	14/1	1/0	5/1	9/0	3	3/0	SAT	7-93
Oconee	20	20/0	0/0	6/0	14/0	5	5/0	SAT	7-93
Oyster Creek	14	14/0	0/0	7/0	7/0	3	3/0	SAT	8-93
Grand Gulf	13	11/2	2/0	4/2	7/0	3	3/0	SAT	8-93
Shearon Harris	12	12/0	0/0	2/0	10/0	3	3/0	SAT	8-93
Beaver Valley 1	10	10/0	0/0	8/0	2/0	4	4/0	SAT	8-93
Dresden	16	15/1	0/1	6/0	9/1	3	3/0	SAT	8-93
Ft Calhoun	12	12/0	0/0	4/0	8/0	3	3/0	SAT	8-93
ANO 1	24	23/1	0/1	10/0	13/1	5	5/0	SAT	8-93
Millstone 1	15	15/0	0/0	8/0	7/0	3	3/0	(3)	9-93
Quad Cities	15	15/0	0/0	6/0	9/0	3	3/0	SAT	9-93
North Anna	16	16/0	0/0	8/0	8/0	2	2/0	SAT	9-93
Hatch	25	25/0	0/0	10/0	15/0	5	5/0	SAT	9-93

Notes:

- Program evaluation deferred until sample size meets the guidance of Examiner Standard ES-601 (12 operators).
- Program was considered satisfactory based on both the results of this examination and the results of the previous examination.
- 3. The results of the examinations were satisfactory and in accordance with Examiner Standard 601. However, the corrective actions for significant program weaknesses that were identified previously remained to be completed and evaluated by the NRC staff before the program status could be changed. The NRC staff subsequently determined that the facility's requalification program was satisfactory in December 1993.