Mary Ann Bess

FEB 12 1993

Docket No. 50-315
Docket No. 50-316

Indiana Michigan Power Company
ATTN: Mr. E. E. Fitzpatrick
Vice President
1 Riverside Plaza
Columbus, OH 43216

Dear Mr. Fitzpatrick:

SUBJECT: REQUALIFICATION EXAMINATION REPORT

During the week of January 25, 1993, Mr. John Walker and others administered requalification examinations to employees of your organization who operate your D. C. Cook Nuclear Power Station. At the conclusion of the examination, findings that were identified as a result of the examinations were discussed with those members of your staff identified in the enclosed report.

As a result of this evaluation, your requalification program has been assigned an overall program rating of satisfactory in accordance with the criteria of NUREG-1021, Revision 6, Operator Licensing Examiner Standards, ES-601.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosures will be placed in the NRC Public Document Room.

Should you have any questions concerning this examination, please contact us.

Sincerely,

Original signed by Mark A. Ring

Mark A. Ring, Chief
Operations Branch

Enclosures:
1. Examination Report No. 50-315/OL-93-01
2. Requalification Program Evaluation Report
3. Simulation Facility Fidelity Report
4. Facility Comments and NRC Resolution of Comments

See Attached Distribution

RIII	RIII	RIII	RIII
Walker/cg	Burdick	for Jorgensen	Ring
02/12/93	02/12/93	02/12/93	02/12/93

FEB 12 1993

Distribution

cc w/enclosures:
A. A. Blind, Plant Manager
DCD/DCB(RIDS)
OC/LFDCB
Resident Inspector, RIII
James R. Padgett, Michigan
  Public Service Commission
EIS Coordinator, USEPA,
  Region V Office
Michigan Department of
  Public Health
D.C. Cook, LPM, NRR

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-315/OL-93-01

Docket Nos. 50-315; 50-316 Licenses No. DPR-58; DPR-74

Licensee: Indiana Michigan Power Company
1 Riverside Plaza
Columbus, OH 43216

Facility Name: D. C. Cook Nuclear Power Station, Units 1 and 2

Examination Administered At: D. C. Cook Nuclear
Plant Training Center
P. O. Box 458
Bridgman, MI

Examination Conducted: Week of January 25, 1993

Examiners: Contract Examiner, Mark Parrish, INEL
Contract Examiner, Bill Steinke, INEL

Chief Examiner: John R. Walker 2/12/93 Date

Approved By: Thomas M. Burdick, Chief
Operator Licensing Section 2 2/12/93 Date

Examination Summary

Examination Administered on week of January 25, 1993 (Report No. 50-315/OL-93-01(DRS))
Written and operating requalification examinations were administered to six Senior Reactor Operators (SROs) and six Reactor Operators (ROs). Two crews comprised of three SRO and three RO operators each were evaluated on the simulator portion of the NRC examination. In addition, initial examination retakes (written portion only) were administered to one SRO and one RO on January 13, 1993.

Results: All crews satisfactorily passed the NRC requalification examination. Six ROs and five SROs passed all sections of their examinations. One SRO failed the Job Performance Measures (JPM) portion of the examination. In

accordance with the criteria of NUREG-1021, Revision 6, Operator Licensing Examiner Standards, ES-601, the Donald C. Cook Requalification Training Program was rated as satisfactory. One SRO and one RO passed the initial retake examinations. The following is a summary of the strengths and weaknesses noted during the performance of this examination.

Strengths

- Both crews made good use of alarms and alarm response procedures where appropriate.
- Both crews use of extra personnel was effective in combating various failures. (For details see Section 3)
- Both crews reacted well to events occurring in both units simultaneously. (For details see Section 3)

Weaknesses

- Communications on one of two crews were weak with little or improper feedback. At times information was not being freely exchanged. (For details see Section 3)
- One crew made an unnecessary EOP transition resulting in a delay in recovery of the plant. (For details see Section 3)

REPORT DETAILS

1. Examiners

*+John R. Walker, Chief Examiner, NRC, Region III
Mark Parrish, INEL
Bill Steinke, INEL

2. Persons Contacted

Facility

+Ken R. Baker, Assistant Plant Manager, Production
+J. R. Sampson, Operations Superintendent
+Joel S. Wieke, Superintendent Safety and Assessment
*+Paul F. Carteaux, Training Superintendent
*+William R. Burgess, Simulator Supervisor
*+William J. Davidson, Administrator
*+William A. Nichols, Operations Training Supervisor
*+David G. Seipel, Senior Training Instructor
*+Scott F. Vince, Senior Training Instructor

U. S. Nuclear Regulatory Commission (NRC)

Thomas Burdick, Chief, Operator Licensing Section 2
Jim Isom, Senior Resident Inspector
+David Passehl, Resident Inspector

*Denotes those present at the Training Staff exit meeting on January 28, 1993.

+Denotes those present at the Management exit meeting on January 28, 1993.

3. Requalification Training Program Observations

The DC Cook training program was found to be adequate in providing the necessary training to ensure that the licensed operators maintained the qualifications necessary to operate the facility in a safe and legal manner.

The following information is provided for evaluation by the licensee via their System Approach to Training (SAT) based training program. No response is required.

a. Written Examination

Strengths:

- The examinations were well planned to ensure proper length and content.

- The static portion of the examination essentially met the Examiner Standard guidance.

Weaknesses:

- The Part B portion of the written examination required extensive modification. Many questions were unclear regarding the knowledge that was being elicited. Rewording was required to ensure that the questions were clear and concise.

- Many questions on Part B were considered to have no real operational relevance or discrimination value. The following are two examples of these type of questions.

In order to isolate a leaking in-core detector tube the seal table valve is closed. How do you prevent tube damage when closing the valve?

a. Use a torque wrench
b. Close until hand tight, then rotate 3-5 more turns.
c. Use 30-35 rotations for closure.
d. Close until leak detection alarms clears.

ANSWER: c.

Which one of the following provides a positive isolation point?

a. Check valve
b. Manual valve
c. Air operated fail open valve
d. Elevation difference

ANSWER: b.

The first question has little relevance to safe operation of the plant. The question fails to elicit knowledge that discriminates between a competent and incompetent operator.

The second question deals with a knowledge level below that required to determine if an operator is minimally competent. In all cases, examination questions should be developed to test the ability of the operator to perform his or her job at least a minimum competency level. These two questions fail to adequately test at that level.

b. Job Performance Measures (JPMs)

Strengths/Weaknesses:

- No strengths or weaknesses were observed in this category during this examination.

c. Dynamic Simulator Scenarios

Strengths:

- Both crews made good use of alarms and alarm response procedures where appropriate.

- Personnel, in general, knew locations of control board components.

- Both crews made effective use of extra personnel though in some cases it was requested earlier than would be expected in an actual situation (assuming minimum shift administrative manning).

  For example, during scenario RQ-E-1708, the first event was an oil leak on the East Main Feed Pump. This required a power reduction to 60% be performed. The Assistant Shift Supervisor and Second Reactor Operator from unit one were immediately called in. A power reduction is a routine evolution which should not require the extra personnel to be accomplished.

- Both crews reacted well to events occurring in both units simultaneously. The facility stated that dual unit problems had been used in training, but that support for the second unit had not been a part of the evaluation process. The exam was conducted more realistically with a call for support from the other unit, initiating the dual unit event.

Weaknesses:

- Communications on one of two crews were poor at times due to little or improper feedback. Communications at times demonstrated the lack of freely exchanging necessary information for decision making. This delayed some actions and caused other unnecessary actions to be taken.

- One crew made an unnecessary EOP transition resulting in a delay in recovery of the plant. During a small break LOCA with a Steam Generator Tube Rupture, the crew transitioned to E-2, "Faulted Steam Generator Isolation" upon the assumption that all four steam generators were depressurizing in an uncontrolled manner. Upon followup questioning of the crew, by both the facility and NRC evaluators, the crew realized that the steam generators had not been depressurizing in an uncontrolled manner. This added a delay in completing the actions of E-3 and making the proper ECA transition.

4. Training, Operations, Security, Rad Protection

Strengths:

- In general, the facility evaluators did a good job of evaluating and identifying concerns with both individuals and crews.

- Cooperation between the facility and the NRC evaluation teams was good. This helped to ensure an adequate and fair examination for all personnel.

- The variance between the NRC and the facility grading on the written and operating portions of the examination conformed with existing standards.

- Cooperation between the training and operations departments appeared to be strong. This ensured that the content of the examination met the needs of both the Examiner Standards and the operations department.

Weaknesses:

- Some instances of unintentional cuing were identified during the administration of JPMs. These instances were, in most cases, communicated to the evaluators involved by the NRC for correction.

- No JPMs were identified as being applicable at the SRO level only. Though this is not a requirement, it does allow the SROs to be examined closely in the specific areas in which they function.

5. Simulator Observations

No simulator discrepancies were identified during this examination. Two cases were identified in which personnel errors caused problems with the simulator.

- During one morning scenario the Radiation Monitoring Section of the simulator stopped working properly. This was caused by a simulator technician requesting a printout of data in the computer room.

- During the same scenario in the afternoon session the core model quit working. This was also later identified as a simulator technician error.

In both cases the events occurred late in the scenario so that the events did not invalidate the examination. The facility is installing administrative safeguards to prevent this from happening again.

6. Initial License Training Program Observations

The initial training program was evaluated based on the administration of two initial written retakes. Both the RO and the SRO successfully passed the examination. Based upon these two examinations only, the initial training program appears to have adequately provided remedial training for NRC license candidates.

7. Exit Meeting

A preliminary exit meeting with the facility training department was held at the DC Cook training center on January 28, 1993, and a final exit meeting with DC Cook Nuclear Plant management was held at the DC Cook training center on January 28, 1993. Those attending the meetings are listed in Section 2 of this report. The following items were discussed during the exit meeting:

- Strengths and weaknesses noted in this report.

- The general observations relating to the requalification program as noted in Section 4.

The preliminary rating of the DC Cook Nuclear plant requalification training program was presented at the exit meeting. The facility was informed that the results will be documented in this examination report.

ENCLOSURE 2

REQUALIFICATION PROGRAM EVALUATION REPORT

Facility: D. C. Cook Nuclear Power Station, Units 1 and 2

Examiners: John R. Walker, Chief Examiner
Mark Parrish, Contract Examiner, INEL
Bill Steinke, Contract Examiner, INEL

Date of Evaluation: Week of January 25, 1993

Areas Evaluated: X Written X Oral X Simulator

Examination Results:

	RO Pass/Fail	SRO Pass/Fail	Total Pass/Fail	Evaluation (S or U)
Written Exam:	6/0	6/0	12/0	S
Operating Exam				
Oral	6/0	5/1	11/1	S
Simulator	6/0	6/0	12/0	S

Evaluation of facility written examination grading S

Crew Examination Results:

	Crew 1 Pass/Fail	Crew 2 Pass/Fail
Operating Examination	Pass	Pass

Overall Program Evaluation

Satisfactory

ENCLOSURE 3

SIMULATION FACILITY REPORT

Facility: D.C. Cook Nuclear Power Station

Docket Nos. 50-315; 50-316

Operating Tests Administered On: Week of January 25, 1993

The following documents observations made by the NRC examination team during the January, 1993, requalification examination. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of non-compliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information which may be used in future evaluations. No licensee action is required in response to these observations.

During the conduct of the simulator portion of the operating tests, the following items were observed:

ITEM	DESCRIPTION
None	None

ENCLOSURE 4

FACILITY COMMENTS AND NRC RESOLUTION OF COMMENTS

QUESTION 85 on the SRO/RO:

IF 2-OHP 4023.ES-0.2 "Natural Circulation Cooldown" has been entered from OHP 4023.ES-0.1 "Reactor Trip Response," which ONE of the following indications is used to recognize void formation in the reactor vessel head?

a. Pressurizer level increasing and RVLIS Upper Plenum Indication greater than 93%.

b. Pressurizer level decreasing and RVLIS Upper Plenum Indication greater that 100%.

c. RCS pressure less than 1000 psig and pressurizer level decreasing.

d. RCS pressure less that 1000 psig and RVLIS Upper Plenum Indication greater than 100%.

ANSWER: 085 (1.00)
b.

REFERENCE:

2-OHP 4023.ES-0.2, Rev. 2, Page 9, Step 14
RO-C-ER04, Rev 1. Page 33, Objective 16.

FACILITY COMMENT:

This question was commented on during the pre-examination review conducted the week of January 5, 1993. The attached page from the original review indicates that distractors (b) and (d) were changed. These changes made (a) the correct answer. These changes were accepted by the Chief Examiner but the examination key was not changed. Request that the answer key for this question be changed to (a) and the examination be graded accordingly.

NRC RESOLUTION:

Comment accepted - Key changed.