

U. S. NUCLEAR REGULATORY COMMISSION
REGION III

Report No. 50-266/94003(DRS); 50-301/94003(DRS)

Docket Nos. 50-266; 50-301

License Nos. DPR-24; DPR-27

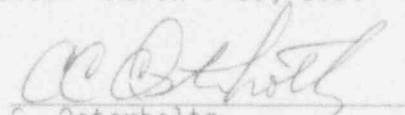
Licensee: Wisconsin Electric Power Company
231 West Michigan Street - P379
Milwaukee, WI 53201

Facility Name: Point Beach Nuclear Plant

Inspection At: 6610 Nuclear Road
Two Rivers, WI 54241

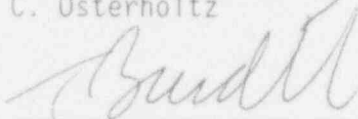
Inspection Conducted: March 7-11, 1994

Lead Inspector:


C. Osterholtz

3/25/94
Date

Approved By:


T. Burdick, Chief
Operator Licensing Section 2

3/25/94
Date

Inspection Summary

Inspection conducted on March 7-11, 1994 (Report Nos. 50-266/94003(DRS); 50-301/94003(DRS)).

Areas Inspected: Special, announced inspection of the licensed operator requalification program to include a review of training administrative procedures, requalification training records and examination material; observation and evaluation of operator performance and of licensee evaluators during requalification examination administration; an evaluation of the program controls to assure a systems approach to training, remediation training administered; and an assessment of simulator fidelity. The inspectors used the guidance in Temporary Instruction (TI) 2515/117.

Results: Job performance measures (JPMs) and written examinations were determined to be adequate with some written questions being identified as non-discriminating between a competent and incompetent operator (Section 2.1.3). Operator performance was satisfactory during the dynamic simulator and in-plant JPMs (Section 2.2). Licensee evaluators were considered adequate (Section 2.3). The requalification program contained evidence of being based on a systems approach to training (SAT) (Section 2.4). Remediation training administered was sufficient (Section 2.5).

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Strengths: Scenario de-briefs, the Training Advisory Committee, surrogate auxiliary operator selection, exam sequestering, and licensed operator physical examination verification frequency (Section 2.1.1); time validation for locally operated valves for the dynamic simulator (Section 2.1.3); simulator operability (Section 2.7).

Weaknesses: An absence of a formalized plan and administrative requirements to ensure adequate requalification training is provided (Section 2.1.1); training attendance tracking (Section 2.1.3); simulator scenario depth (Section 2.1.3); simulator evaluation forms (Section 2.1.3); JPM operational aids (Section 2.1.3).

Additionally, one minor deficiency in an abnormal operating procedure was noted (Section 2.6).

The inspectors concluded that the licensee was implementing the licensed operator requalification training program in accordance with 10 CFR Part 55 requirements.

REPORT DETAILS

1. Persons Contacted

Licensee Representatives

- +A. Cayia, Production Manager
- +J. Becka, Regulatory Services Manager
- +R. Grigg, Operations Support
- +T. Koehler, Engineering Manager
- *+A. Morris, Training Coordinator
- +F. Padovano, Corporate Licensing
- *+R. Seizert, Training Manager

U. S. Nuclear Regulatory Commission (NRC)

- +J. Gadzala, Resident Inspector

*Denotes those present at the training exit meeting on March 10, 1994.

+Denotes those present at the management exit meeting on March 11, 1994.

Other persons were contacted as a matter of course during the inspection.

2.0 Introduction

The purpose of this inspection was to assess the licensee's requalification program for licensed operators to determine whether the program incorporated 10 CFR Part 55 requirements for evaluating operator mastery of training objectives and revising the program. The licensed operator requalification program assessment included a review of training administrative procedures, requalification training records, licensed operator physical examination tracking records, and examination material. The inspectors conducted an evaluation of operator performance and the ability of licensee evaluators to administer and objectively evaluate during requalification examinations. In addition, an evaluation of the effectiveness of the program controls to assure a systems approach to training and remediation training was conducted. Further, the inspectors assessed simulator fidelity.

2.1 Licensed Operator Requalification Program Assessment

2.1.1 Program Administration

The inspectors concluded that the licensee was implementing the licensed operator requalification training program in accordance with the licensee's administrative procedures and that the licensee's program was in accordance with a systems approach to training.

The inspectors identified the following strengths regarding requalification program administration:

- The de-brief following simulator scenario administration to the candidates was supplied by operations management. This contributed to crew participation and interaction during the de-brief.
- The establishment of a Training Advisory Committee to provide a monthly interface between operations and training management to determine present and future training needs.
- Personnel taking the role of the surrogate auxiliary operator during the dynamic simulator scenarios are provided from the shift crew being examined. This contributes to increased crew interaction and involvement even when some members are not being evaluated.
- Sequestering methods applied during the examination, ensured no undue personnel contact occurred while minimizing operator stress.
- The tracking system incorporated for ensuring licensed operators receive a biennial physical examination appeared well organized and provides for a weekly verification to ensure program compliance.

The following weaknesses regarding requalification training program administration were noted:

- The licensee had no formalized plan for ensuring adequate requalification training takes place. Specifically, there are no administrative requirements in place to provide for:
 - Operations and training management concurrence and approval of the training plan.
 - Minimum attendance requirements for classroom and simulator training.
 - Time requirements for operator enrollment in the requalification program following initial licensing.
 - Regular audits and observations of training by operations and training management.
 - Training management audit of trainers' evaluation techniques, particularly during administration of in-plant job performance measures (JPMs).
 - Safeguards to ensure an operator is not examined on the same scenarios or JPMs that he was previously trained or evaluated on during the training cycle.

Licensee management indicated that formal standards regarding requalification training would be developed and in place by 1995.

2.1.2 Requalification Training Records Review

The inspectors reviewed requalification training records of selected licensed operators for the current requalification cycle and concluded that the operators had satisfied watchstanding requirements and performed the necessary reactivity manipulations as required by their program.

The following weakness regarding requalification training records was noted:

- Training attendance can only be verified by using a database retrieval system to recall the attendance information from each individual lesson plan given. This increases the possibility of an operator missing requalification training or make-up training. When the inspectors ran a random attendance check, one operator was identified as having missed training on reduced inventory operations.

2.1.3 Requalification Examination Material Review

The inspectors reviewed the simulator scenarios and job performance measures administered during the week of March 7, 1994. The part B written examination from the 1993 requalification cycle was also reviewed. The inspectors concluded that the examinations were adequate. The inspectors also noted that only minimal overlap existed for the written and JPM examinations.

The following strength regarding requalification examination material was noted:

- Local valve manipulations that are required to line up the plant to the recirculation mode following a loss of coolant accident were time validated during an outage and the times were subsequently incorporated into the loss of coolant accident scenario. This added to the realism of the scenario and reinforced its validity.

The following weaknesses regarding requalification examination materials were noted:

- The simulator scenarios administered only moderately challenged the operators. The scenarios met the minimum guidance of NUREG 1021, Rev. 7. However, they did not exercise the emergency operating procedures to significant depth. In particular, the scenario set did not contain any use of emergency contingency action (ECA) procedures.
- The criteria provided within the scenarios for evaluating actions taken by the operators was difficult to use because it was extremely condensed. In one instance, the several EOP steps involved in isolating a steam generator due to a tube rupture were condensed to a single evaluation criteria. The evaluation criteria stated the "DOS/CO identifies and isolates ruptured SG" but gave no additional guidance on what EOP steps must actually be

completed to satisfy this task. This weakness was previously identified in NRC report No. 50-266/OL-93-01.

- One in-plant JPM required the operator to perform actions inside a cabinet containing a pressure gage that could only be simulated open due to actual plant operating requirements. No operational aid (photograph or diagram) was provided to describe the inside of the cabinet to the operator. This caused some confusion among the operators being examined.

Some questions from the part B written examinations administered during the 1993 requalification cycle were constructed such as to be considered non-discriminating between a competent and incompetent operator.

The following are some examples noted:

With Unit 2 at 20% power, what will cause an auto start of turbine-driven auxiliary feed pump 2P29?

- a. S/G "A" low-low level 20%
- b. S/G "B" low-low level 15%
- c. S/G "A" and "B" low-low level 15%
- d. S/G "A" and "B" low-low level 20%

ANS: c

Answer "c" would have to be correct for any of the other three distractors to be correct. It therefore can automatically be concluded to be the correct answer.

Given: Saturated steam at 1400 psia is released from the pressurizer to the PRT at 0 psig.

Using a Mollier diagram, determine the temperature of the steam at the end of the process.

- a. 197° F
- b. 213° F
- c. 233° F
- d. 260° F

ANS: d

This question specifically directs the examinee to the correct reference to answer the question. Use of analysis skills to discern applicable references is therefore eliminated.

Assume:

- "B" steam generator is faulted.
- You have transitioned to EOP-2, "Faulted Steam Generator Isolation".
- Both steam generators are depressurizing at a rapid, but approximately equal, rate.

What procedure should you transition to?

- a. ECA-2.1, "Uncontrolled Depressurization of Both Steam Generators".
- b. EOP-3, "Steam generator Tube Rupture".
- c. EOP-1, "Loss of Reactor or Secondary Coolant".
- d. ECA-1.2, "LOCA Outside Containment".

ANS: a

The correct answer is provided in the stem of the question. The third assumption contains the words rapid, depressurizing, both, and steam generators. This directs the examinee to the correct answer without the use of reference material or knowledge of procedural requirements.

2.2 Operator Performance Evaluation

The inspectors evaluated the operators' performance during the in-plant job performance measures and the dynamic simulator operational examination. The inspectors concluded that operator performance was satisfactory.

2.3 Evaluation of Licensee Evaluators

The licensee evaluators agreed with or were more conservative than the NRC inspectors on the overall assessment of operator performance. The inspectors concluded that the licensee evaluators could adequately administer the requalification examinations and objectively evaluate the performance of the operators.

2.4 System Approach to Training Controls

The inspectors reviewed the process for students to provide feedback to the training program. A "Student Feedback" form can be filled out by individuals to express any concerns or suggestions regarding the training program. These forms are routinely reviewed by the training staff and any suggestions are incorporated into the program as appropriate. However, there was no formalized direct feedback to the individuals who submitted the student feedback forms to inform them of the action taken in response to the comments.

Training management indicated that closing that loop by formalizing a method for direct feedback to the individuals was a priority.

The inspectors reviewed the last QA licensee audit report (A-TS-92-08) of licensed operator requalification training to see if appropriate comments had been incorporated into the training program. The audit identified a deficiency in the tracking system used for documenting on-shift time logged by staff licenses. The licensee subsequently incorporated a tracking system to verify these requirements were fulfilled.

The inspectors concluded that the licensee's program had controls in place to revise the training program as needed based on facility and industry events as well as system and procedure modifications. If no training revision is deemed necessary for these concerns, the training manager's written approval is required.

2.5 Remediation Training

The inspectors reviewed the remediation training provided to a crew dynamic simulator failure, a crew dynamic simulator pass with remediation, and an individual written failure. In each case, the documented remediation action included deficiency identification, a remedial action plan which include re-test requirements, and the date the operators completed the remediation. The inspectors concluded that the training sufficiently provided the operators with adequate remediation.

2.6 Procedures

During the course of the dynamic simulator examination, the inspectors identified the following minor procedural deficiency:

- Abnormal Operating Procedure (AOP) - 3A, "Steam Generator Tube Leak", only provides general guidance (i.e., "Isolate steam drains upstream of the main steam isolation valves.") and does not provide the operator with enough information (valve numbers) to accomplish its requirements without using other reference material. This delayed steam generator isolation and caused some confusion among the operating crew observed.

2.7 Staff Interviews

The inspectors conducted interviews with four members of the training staff and four members of the operations staff to both acquire information and gain perspective on the staff's perceptions.

Generally, both operations and training personnel believed there was a good relationship between the two groups. The managers interviewed emphasized the importance of this relationship and felt the formation of the Training Advisory Committee would help to strengthen it further.

Most operations personnel felt that simulator training was the most beneficial to them, and that written examinations provided the least amount of effective feedback.

2.8 Simulator Fidelity

No simulator discrepancies were identified during the course of the inspection. Additionally, a marked improvement was noted in the licensee's ability to operate the simulator since the initial examination of September, 1992.

3.0 Exit Meeting

The lead inspector conducted exit meetings on March 11, 1994, with plant management, and on March 10, 1994, with the training staff to discuss the major areas reviewed during the inspection, the strengths and weaknesses observed, and the inspection results. Licensee representatives in attendance at the exit meetings are documented in Section 1.0 of this report. The lead inspector also discussed the likely informational content of the inspection report with regard to documents reviewed during the inspection. The licensee did not identify any documents or processes as proprietary.