

U. S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-255/OL-93-01

Docket No. 50-255

License No. DPR-20

Licensee: Consumers Power
Palisades Nuclear Plant
27780 Blue Star Memorial Highway
Covert, MI 49043

Facility Name: Palisades Nuclear Plant

Examination Administered At: Palisades Training Center

Examination Conducted: March 22 through 25, 1993

Examiner: Art Lopez, PNL

Chief Examiner: Thomas Burdick per
John R. Walker

4/2/93
Date

Approved By: Thomas Burdick
Thomas M. Burdick, Chief
Operator Licensing Section 2

4/2/93
Date

Examination Summary

Examination Administered on Inclusive Examination Dates (Report No. 50-255/OL-93-01(DRS))

Written and operating requalification (requal) examinations were administered to 6 Senior Reactor Operators (SROs) and 6 Reactor Operators (ROs). Three crews, 1 operations and 2 staff, were evaluated on the simulator portion of the NRC examination.

Results: All crews satisfactorily passed the NRC requal examination. Five ROs and 6 SROs passed all applicable sections of their examinations. One RO failed the written portion of the examination. In accordance with the criteria of NUREG-1021, Revision 7, Operator Licensing Examiner Standards, ES-601, the Palisades Nuclear Power Plant Requalification Training Program was rated as satisfactory.

The following is a summary of the strengths and weaknesses noted during the performance of this examination.

Strengths

- All crews made consistent good use of procedures. (For details see Section 3)

- All crews made firm conservative classifications of emergency events. (For details see Section 3)
- Personnel demonstrated a thorough knowledge of control board equipment locations and operation. (For details see Section 3)
- During performance of the dynamic simulator portion of the examination, the crews demonstrated good team work which helped to alleviate the severity of some events. (For details see Section 3)

Weaknesses

- All three crews failed to properly follow the subsequent actions during a loss of component cooling. (For details see Section 3)
- During performance of inplant Job Performance Measures (JPMs), some operators failed to properly verify required indications. (For details see Section 3)
- During performance of control room JPMs senior operators had difficulty performing an off-site dose calculation. (For details see Section 3)
- Two of three crews had trouble tripping the reactor from the control room during an ATWS condition. (For details see Section 3)

REPORT DETAILS

1. Examiners

*+John R. Walker, Chief Examiner, NRC, Region III
*+Art Lopez, PNL

2. Persons Contacted

Facility

+T. J. Palmisano, Operations Manager
+R. A. Vincent, Plant Safety and Licensing
*+David W. Rogers, Training Administrator
*+Bruce M. Dusterhoff, Simulator Supervisory Instructor
*+Ronald Frigo, Nuclear Instructor
*+Robert Heimsath, Operations Training Supervisor
*+Timothy P. Horan, Senior Nuclear Instructor
*+Daniel G. Maloné, Operations Staff Support Supervisor
*+Paul M. Schmidt, Supervisory Instructor

U. S. Nuclear Regulatory Commission (NRC)

Jim Heller, SRI

*Denotes those present at the Training Staff exit meeting on
date.

+Denotes those present at the Management exit meeting on
date.

3. Qualification Training Program Observations

The requalification program appeared to meet the guidance outlined in
the 600 series of the Examiners Standard.

The following information is provided for evaluation by the licensee via
their SAT based training program. No response is required.

a. Written Examination

Strengths/Weaknesses:

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

b. Job Performance Measures (JPMs)

Strengths:

- The operators demonstrated a thorough knowledge of system function and operation during performance of inplant JPMs.

Weaknesses:

- (JPM-RO-139, "Switching of battery chargers") Operators tended to look at inverter amps vice charger amps as required by the procedure.
- (JPM-500-007A, "Calculate off-site dose") During performance of a quick off-site dose calculation three of four senior operators had difficulties determining the proper recommendations. One person demonstrated that he was unfamiliar with the computer operation. The other two had difficulty with either obtaining or inputting correct data. Two of four operators failed this JPM.

c. Dynamic Simulator Scenarios

Strengths:

- All crews consistently made use of alarm response procedures, normal operating procedures and abnormal/emergency procedures. A few minor exceptions to this are noted below.
- All crews made firm conservative classifications of emergency events.
- Crews demonstrated good team work which helped to alleviate the severity of some events.

Weaknesses:

- All three crews failed to properly follow the subsequent actions during a loss of component cooling which required the tripping of P-55A charging pump due to loss of cooling. Two crews failed to trip it at all while the third crew tripped it and then decided to let it run later when it automatically started with a safety injection.
- Two of three crews had trouble ensuring that all rods had been tripped by interrupting clutching power to the rods. In one case, one rod was missed while in the other, approximately one half of the rods were missed. Both crews also had the reactor trip breakers opened manually at the same time which allowed the reactor to be tripped.

4. Training, Operations, Security, Rad Protection

Strengths:

- Evaluators were conservative in their evaluations. No problems existed with cuing. When the operators deviated from what was expected the evaluators did a good job of modifying cues to ensure that they were appropriate for the conditions.
- Use of a substitute Shift Supervisor and auxiliary operators during the simulator JPM portion of the examination added to the reality of the situation enhancing the process.
- The variance between the NRC and the facility grading on the written and operating portions of the examination conformed with existing standards.

Weaknesses:

- Numerous questions on the Part B written examination had to be either replaced or rewritten. The following are two examples of questions that had to be replaced.

While performing EOP 3.0, attachment 11, "Actions to Minimize Hydraulic/Thermal Shock to Service and CCW", step 4 states to "Unlock, close and then throttle open two turns the discharge valve(s) for the first CCW Pump(s) to be started." Which of the following describes the operator action that is expected?

- a. Unlock the valve. Fully close the valve. Operate the valve handwheel two turns in the "OPEN" direction.
- b. Unlock the valve. Fully open the valve. Operate the valve handwheel two turns in the "CLOSE" direction.
- c. Unlock the valve. Operate the valve handwheel two turns in the "OPEN" direction.
- d. Unlock the valve. Operate the valve handwheel two turns in the "CLOSE" direction.

Answer a.

A _____ is used to provide additional information to aid the user in performing the procedure.

- a. NOTE
- b. CAUTION

- c. WARNING
- d. procedure step

Answer a.

In the first question, the answer is given in the stem of the question. No knowledge is asked for by the question beyond that which is given in the stem. The second question has little discrimination value and would be more appropriate for a facility administered general knowledge examination.

- Simulator scenarios required modifications to ensure that enough problems existed to allow for the evaluation of all crew competencies.
- Training appears to put effort into what was identified as a problem in the previous examination vice ensuring that the entire process is at the level it should be. During the previous requalification examination, Part A, of the written examination required extensive rework to ensure it would meet the examination requirements. This year the Part A portion of the written examination required little rework, but the other portions of the examination may have been neglected as a result.

5. Simulator Observations

No simulator discrepancies were identified.

6. Exit Meeting

A preliminary exit meeting with the facility training department was held at the Palisades Nuclear Plant on March 25, 1993, and a final exit meeting with Palisades Nuclear Plant management was held at Palisades Nuclear Plant on March 25, 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.
- During validation of the simulator portion of the examination, the facility training staff was reluctant to run a steam break scenario that would completely depressurize both steam generators into containment. The training staff had a concern about using an event which is not directly covered by the EOPs and could require the shift supervisor to declare that he was utilizing actions in accordance with 10 CFR 50.54x.

The events outlined in this scenario are possible at the Palisades Nuclear plant due to the type of main steam isolation valves (MSIVs) and the lack of non-return check valves in the main steam system. An SER was sent to the facility in February 1986. Section 6.5 of that document pointed out various procedural and training requirements that needed to be met due to this condition.

The excessive steam demand event caused by the blowdown of both steam generators will be pursued in an inspection effort separate from this examination report. The facility needs to provide documentation that the procedural and training requirements have been met.

The preliminary rating of the Palisades Nuclear plant requalification training program as satisfactory is confirmed by this report. All crew and individual results are confirmed by this report.

ENCLOSURE 2

REQUALIFICATION PROGRAM EVALUATION REPORT

Facility: Palisades Nuclear Power Plant

Examiners: John R. Walker, Chief Examiner

Art Lopez, Examiner

Date of Evaluation: March 22 through 25, 1993

Areas Evaluated: X Written X Oral X Simulator

Examination Results:

	<u>RO</u> <u>Pass/Fail</u>	<u>SRO</u> <u>Pass/Fail</u>	<u>Total</u> <u>Pass/Fail</u>	<u>Evaluation</u> <u>(S or U)</u>
Written Exam:	3/1	4/0	7/1	S
Operating Exam Oral	4/0	4/0	8/0	S
Simulator	6/0	6/0	12/0	S
Evaluation of facility written examination grading				S

Crew Examination Results:

	<u>Crew 1</u> <u>Pass/Fail</u>	<u>Crew 2</u> <u>Pass/Fail</u>	<u>Crew 3</u> <u>Pass/Fail</u>
Operating Examination	P	P	P

Overall Program Evaluation

Satisfactory

RIII
Sfor
Walker
Examiner
04/1/93

RIII
B
Burdick
Section Chief
04/2/93

RIII
mb
Ring
Branch Chief
04/2/93

ENCLOSURE 3

SIMULATION FACILITY REPORT

Facility: Palisades Nuclear Power Plant

Docket No. 50-255

Operating Tests Administered On: March 22 through March 25, 1993

The following documents observations made by the NRC examination team during the March 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.