

OCT - 7 1992

Docket No. 50-255

Consumers Power Company  
ATTN: Gerald B. Slade  
General Manager  
Palisades Nuclear Generating Plant  
27780 Blue Star Memorial Highway  
Covert, MI 49043

Dear Mr. Slade:

SUBJECT: EXAMINATION REPORT

During the week of September 21, 1992, the NRC administered examinations to employees of your organization who had applied for licenses to operate your Palisades Nuclear Plant. At the conclusion of the examination, the examination questions and preliminary findings were discussed with those members of your staff identified in the enclosed report.

The training department's pre-administration exam review contributed significantly to the exams quality.

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 GEOFFREY C. WRIGHT

Geoffrey C. Wright, Chief  
Operations Branch

Enclosures:

1. Examination Report  
No. 50-255/OL-92-02
2. Examinations and  
Answer Keys (SRO/RO)
3. Simulation Facility Report

See Attached Distribution

RIII  
*[Signature]*  
Walker/cg  
10/7/92

RIII  
*[Signature]*  
Bursick  
10/7/92

RIII  
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Jorgensen  
10/7/92

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Wright  
10/7/92

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OCT - 7 1992

Distribution

cc w/enclosures:

David P. Hoffman, Vice President  
Nuclear Operations

P. M. Donnelly, Safety and  
Licensing Director

DCD/DCB (RIDS)

OC/LFDCB

Resident Inspector, RIII

James R. Padgett, Michigan Public  
Service Commission

Michigan Department of  
Public Health

SRI, Big Rock Point

D. Rogers, Plant Training Manager

A. S. Masciantonio, Project Manager, NRR

G. L. Jones, Contract Exam Supervisor, INEL

R. M. Gallo, Branch Chief, OLB

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-255/OL-92-02

Docket No. 50-255

License No. DPR-20

Licensee: Consumers Power Company  
27780 Blue Star Memorial Highway  
Covert, MI 49043

Facility Name: Palisades Nuclear Plant

Examination Administered At: Covert, Michigan 49043

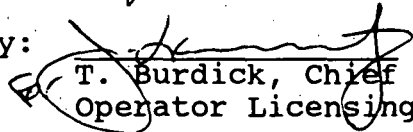
Examination Conducted: Week of September 21, 1992

Chief Examiner:

  
J. Walker

10/7/92  
Date

Approved By:

  
T. Burdick, Chief  
Operator Licensing Section 2

10/7/92  
Date

Examination Summary

Examination administered during the week of September 21, 1992, (Report No. 50-255/OL-92-02(DRS)) to one reactor operator (RO) and six senior reactor operators (SRO). The written examinations were administered on September 21, 1992 at the Palisades Training Building. The operational examinations were administered at Palisades simulator facility on September 22, 1992. The Job Performance Measure (JPM) portion of the examination was administered on September 21 and September 23, 1992.

Results: All candidates passed the examinations.

The following are examples of the strengths and weaknesses identified by the NRC evaluators.

Strengths

- Good use of alarm response procedures by the crew to help in diagnosing events and leading to recovery response.
- Overall procedure usage was good.

Weaknesses

- Communications between crew members and personnel outside the control room during dynamic simulator examinations was weak.

## REPORT DETAILS

### 1. Examiners

\*J. Walker, Nuclear Regulatory Commission (NRC)  
F. Jagger, Idaho National Engineering Labs (INEL)  
S. Johnson, INEL  
M. Jones, INEL

\*Chief Examiner

### 2. Exit Meeting

An exit meeting was held on September 24, 1992, with facility management and training staff representatives, to discuss the examiner's observations contained in this report.

#### NRC Representatives in attendance were:

J. Walker, Chief Examiner

#### Facility Representatives in attendance were:

T. Palmisano, Operations Manager  
J. Hanson, Operations Superintendent  
D. Rogers, Training Administrator  
J. Kuemin, License Administrator  
P. Donnelly, Safety and Licensing Director  
P. Rewa, Instructor Supervisor II  
T. Horan, Director Nuclear Training  
P. Kluskowski, Simulator Engineer  
P. Schmidt, Supervisory Instructor  
W. Pratt, Senior Nuclear Instructor  
R. Frigo, Supervisory Instructor

The licensee representatives acknowledged the examiner observations discussed in Sections 3 and 4 of this report as well as the items identified in Enclosure 3, the Simulation Facility Report.

### 3. Examination Development

The reference material that the licensee sent to the NRC for examination preparation was properly bound and labeled, and for the most part, the NRC examiners were able to extract the needed information.

The pre-examination review conducted by the licensee on the written examinations was very productive. The licensee's input to the examination ensured that the terminology used on the examination was plant specific, thus avoiding confusion on the part of the candidates during the examination. In addition, the review process ensured that the examinations were technically correct and appropriate for each license type as specified by the licensee's job description.

4. Examination Administration

During the administration of the examinations, the examiners observed both strengths and weaknesses on the part of the Senior Reactor Operator and Reactor Operator candidates.

The following strengths in the candidates' performance were observed in the majority of the candidates that were examined in each particular knowledge or ability:

- 1) Use of the alarm response procedures during both the Simulator Scenarios and Simulator JPM's was very good. Each candidate showed a thorough knowledge and understanding of the ARP's and their importance.
- 2) All candidates demonstrated complete and thorough knowledge of equipment locations. This demonstrated an active effort on the candidates part to spend time in the plant.

The following weaknesses in the candidates' performance were observed in the majority of the candidates that were examined in each particular knowledge or ability:

- 1) Crew communications deteriorated during the scenario performance.
  - a. At each scenario start each crew maintained good close ended communications. As the scenario progressed communications became more open ended. This resulted in at least two cases when crew members did not receive valuable information.
  - b. Communications between the crew and personnel outside the control room was poor. Only two plant wide announcements concerning plant status were made during seven scenarios.

- 2) During one JPM, candidates were unable to determine reduced inventory levels within the RCS. The methods used by each candidate to finally determine this level were varied and could present actual problems during a reduced inventory evolution.

During the grading of the written examination a variety of weaknesses were identified in the following knowledge or ability areas:

- 1) Requirements to enter the RCA during an abnormal event.
- 2) Actions to be taken in the event of a "RED" CAM Alarm while in the RCA.
- 3) Various shift turnover items and when they are required to be performed.
- 4) Conditions which would result in an AUTOMATIC start of the Primary Coolant Pump Backstop oil pump.
- 5) Which ESFAS equipment has bypass ability.
- 6) What causes an automatic start of various ventilation fans.
- 7) The preferred method of draining water from the reactor cavity to the SIRWT following refueling.
- 8) Primary method to index the bridge of the refueling machine.
- 9) Priority of boration methods during a loss of Reactivity Control.
- 10) Technical Specification requirements for operable Gaseous Effluent monitors.
- 11) Knowledge of the automatic actions associated with a loss of preferred AC Bus Y20.

5. Written Examination Review

Facility representatives were allowed to review the written examinations prior to their administration as discussed in Section 3 of this report, and any applicable comments from the review were incorporated into the examinations.

Following the conclusion of the written examinations, the facility was given a copy of the Senior Reactor Operator and Reactor Operator examinations and answer keys. The facility had until the end of the examination administration week to provide any additional comments in writing to the NRC.

The facility provided no additional comments on the written examination.

ENCLOSURE 3

SIMULATION FACILITY REPORT

Facility Licensee: Palisades Nuclear Plant

Facility Licensee Docket No.: 50-255

Operating Tests Administered On: Week of September 21, 1992

This form is to be used only to report observations. These observations do not constitute audit or inspection findings and are not, without further verification and review, indicative of noncompliance with 10 CFR 55.45(b). These observations do not affect NRC certification or approval of the simulation facility other than to provide information that may be used in future evaluations. No licensee action is required in response to these observations.

While conducting the simulator portion of the operating tests, the following items were observed:

ITEM

DESCRIPTION

1. The simulator demonstrated an inability to recover from a simulated station blackout. To enable the machine to continue operation, it was required to do a hard reset on the computers controlling the simulator.
2. The simulator failed to initially restore the PIP and CFMS computers following their loss during two scenarios.
3. High Pressure Injection Flow (HPSI) is indicated with all pumps secured and the valves open.
4. Various area radiation monitors are not modeled in the simulator that are present in the control room.
5. The simulator is not modeled to place an RPS channel in the tripped condition.