

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-255/OL-92-01

Licenses No. DPR-20

Docket No. 50-255

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

Facility Name: Palisades Nuclear Generating Plant

Examination Administered At: Palisades Nuclear Generating Plant

Examination Conducted: March 23 - 27, 1992

Chief Examiner: J. R. Walker

4-10-92
Date

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

4-10-92
Date

Examination Summary

Examination administered during the week of March 23, 1992, (Report No. 50-255/OL-92-01(DRS)) to five Senior Reactor operators and three Reactor operators. Crew performance as well as individual performance was evaluated on the dynamic portion of the operating examination. The written examinations were administered on March 24, 1992 at the Palisades Training/Outage Building. The operational examinations were administered at Palisades simulator facility on March 25. The walk-through portions of the examination were administered both at the Palisades simulator facility and in-plant on March 26, 1992. An exit meeting was conducted on March 27, 1992, with plant management. The full examination was administered to three reactor operator and five senior reactor operators.

Results: All three reactor operators and all five senior reactor operators passed all sections of the examinations. In addition, all crews received satisfactory evaluations for their performance on the dynamic simulator examination.

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

Strengths

- Good use of alarm response procedures.
- Operators and evaluators demonstrated a thorough knowledge of plant equipment locations.

Weaknesses

- Communications between crew members during dynamic simulator examinations were weak.
- Some SROs showed weaknesses in control board operations.

These events are addressed in the report details.

REPORT

1. Examiners

*J. Walker, NRC
T. Burdick, NRC
J. Hansen, NRC
G. Wheale, Sonalysts (SON)

*Chief Examiner

2. Exit Meeting

An exit meeting was held on March 27, 1992, with facility management and training staff representatives, to discuss the examiner's observations.

NRC Representatives in attendance were:

J. Walker, Chief Examiner
T. Burdick, Chief, OL Section 2
J. Hansen, Examiner RIII
G. Wheale, Sonalyst
J. Heller, SRI

Facility Representatives in attendance were:

G. Slade, Plant General Manager
R. Rice, Operations Manager
D. Rogers, Training Superintendent
P. Schmidt, Supervisor Instructor
R. Heimsath, Supervisor Instructor
T. Horan, Senior Nuclear Instructor
W. Pratt, Senior Nuclear Instructor
B. Bauer, Supervisory Instructor
B. Dusterhoft, Simulator Supervisory Instructor
R. Scudder, Simulator Support Supervisor
J. Werner, NPAD Assessor
R. Frigo, Operations Staff Support Supervisor
D. Malone, Operations Support Coordinator
J. Kuemin, Licensing Administrator
L. Morse, Licensing Clerk

3. Examination Development

The NRC and licensee members of the examination team validated the proposed examination developed by the licensee during the examination preparation week of March 9, 1992.

The examination validation was accomplished by comparing the proposed examinations with the applicable guidance of NUREG 1021, "Operator Licensing Examiner Standards," Revision 6.

a. Reference Material

The reference material sent to the NRC for use during examination development of the requalification examination was adequate.

b. Requalification Written Examination

The licensees' proposed written examination generally met the guidance as stated in ES-602. The following are specific observations that were made by the NRC examiners regarding the written examination:

In general, the licensees' examination continues to improve in content and style of examination questions. Some deficiencies that were identified on previous examinations still exist such as: 1) non-discriminating distractors; 2) the use of the terms "best" or "most correct" in the stem of multiple choice questions and 3) the use of a "yes, yes, yes, no" format in distractor of multiple choice questions.

Various questions on both part A and part B examinations had to be rewritten to clarify information being sought.

c. Job Performance Measures (JPM)

The Job Performance Measures (JPM) were evaluated during the preparation week. The JPMS met the guidance provided in ES-603.

The use of alternate success path JPMS will continue. In the event the license has no JPMS of this type in their examination bank, the NRC will make every effort to prepare them for validation by the facility as soon as practicable.

d. Dynamic Simulator

One of the proposed simulator scenarios had to be replaced due to a conflict with the static simulator examination. The following are some examples of items that needed to be changed per Attachment ES-604-1 of ES-604.

No simultaneous events were present during the scenarios.

The depth of scenarios to test the EOPs were initially inadequate. One scenario had no transitions beyond EOP-2 until modified. All scenarios are required to go into depth in the EOPs.

An improvement was noted this year as to the identification of critical tasks (ISCTs). There were none that needed to be changed or modified. Some were added by the addition of events to the scenarios.

4. Examination Administration

The licensee was responsible for examination administration while NRC observed the process which allowed the NRC to evaluate the licensees' requalification program as well as the individual operators. The following observations were made by the NRC concerning examination administration:

Written Examination

The licensee did a good job of scheduling the examination which reduced the amount of "dead time" associated with the examination. This was a positive attribute in reducing operator stress during the examination process.

The location for the Part B written examination required additional personnel for escort due to the possibility for inadvertent examination compromise.

Dynamic Simulator Examination

During the dynamic simulator examinations, the events were well timed, and all of the facility and NRC evaluators were kept informed of each specific event initiation.

Job Performance Measures (JPM)

The use of notebooks for JPM administration provided the evaluators with a concise and easily managed evaluation package for each individual operator.

The use of "extra" training staff personnel at the simulator, to answer phones and role play as auxiliary operators and other plant personnel, enhanced the JPM examination process by adding realism to the task being performed.

5. Evaluation of Facility Evaluators

During examination administration, the NRC assessed each licensee evaluator's ability to conduct consistent and objective examinations, and their ability to provide unbiased evaluations of the operators. The following observations were made regarding the facility evaluators:

During a scenario the evaluators gave cues to the crew that the scenario should have already ended. This could distract the crew and add to the stress of the operators.

Followup questions, in a few minor cases, tended to lead the operator to the answer looked for.

Overall the facility evaluators did a good job of identifying individual operator and crew performance strengths and deficiencies during the dynamic simulator examinations.

6. Examination Evaluations

Co-evaluation of the operators performance was performed by the NRC and the facility. This provided the NRC with the necessary information to assess the individual operator's performance, as well as the licensees' requalification program performance.

In general, the overall evaluation on all phases of the examination were consistent between the NRC and the facility. Minor differences were noted on the grading of a few JPM questions.

Two out of two SROs failed to successfully perform a Quadrant Power Tilt calculation JPM because neither operator checked to see if the information they were using was valid.

7. Requalification Program Evaluation

The overall program evaluation for the Palisades facility, based on the examinations given the weeks of March 25, 1991, and March 23, 1992 was satisfactory. A two year evaluation was required per NUREG 1021, ES-601 Revision 6, Section C.1.b.4 since less than 12 candidates were examined in either year.

8. Additional Examiner Observations

The following items are additional observations made during the examination administration:

Strengths:

All crews showed good use of alarm response procedures.

All individuals involved in the examination as either operators or evaluators demonstrated a thorough knowledge of locations of plant equipment.

All crews demonstrated an adequate ability to operate the new turbine control system.

Weaknesses:

Communications between crew members during the dynamic simulator examination were often incomplete or nonexistent as evidenced by the following examples. This is similar to a concern in Section 8 of Examination Report 50-255/OL-91-01 (DRS). This information is being provided for evaluation by the facility's SAT based training program.

Many "open ended" communications occurred wherein crew members receiving information frequently responded with "OK" or "yes" and no effort was made by the operator providing the information to ensure it was fully understood. In some cases this resulted in delays in accomplishing necessary tasks.

Plant PA announcements were not made for starting and/or stopping major plant systems components.

Plant PA announcements were not made for major events such as reactor trips or safety injections.

Three of Five Senior Reactor operators gave incorrect responses on the written examination when asked to explain the response of the main feedwater system following a turbine trip.

General Comments:

Two of the three SROs examined on the control boards showed weaknesses in board operators as demonstrated by the following examples:

- 1) One operator did not use the manual control for the Pressurizer Spray valve properly.

- 2) Various controllers when placed in manual were manipulated in the reverse of how they were required to be operated such as going open vice close on valves.
- 3) Allowing the Primary Coolant System to over-pressurize during an event by not monitoring plant parameters.

Operators could not locate specific tools designated for use with the EOP/AOP procedures. This was evidenced by their inability to locate the tool for opening the air vent on the steam dump valves air controller. This also is a continuing concern from the previous requalification examination.

SIMULATION FACILITY REPORT

Facility Licensee: Palisades

Facility Licensee Docket No. 50-255

Operating Tests Administered On: Week of March 23, 1992

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

<u>ITEM</u>	<u>DESCRIPTION</u>
1.	Orientation of the auxiliary shutdown panels C150/150A was different from the orientation used in the plant.
2.	Use of the turbine control panel in the simulator was locked into the limiter when in manual. In the plant the limiter is not limited in manual.
3.	Control board cabinet in the simulator have doors installed on back of the cabinets. These doors do not exist in the control room.

ENCLOSURE 3

REQUALIFICATION PROGRAM EVALUATION REPORT

Facility: Palisades Nuclear Generating Plant

Examiners: J. Lennartz, J. Walker, G. Wheale, I. Kingsley

Dates of Evaluation: Weeks of March 25, 1991 and March 23, 1992

Areas Evaluated: Written, Oral, Simulator

Examination Results:

	RO <u>Pass/Fail</u>	SRO <u>Pass/Fail</u>	Total <u>Pass/Fail</u>	<u>Evaluation (S or U)</u>
Written Examination	7/0	9/0	16/0	S
Operating Examination				
Oral	7/0	9/0	16/0	S
Simulator	7/0	9/0	16/0	S
Evaluation of facility written examination grading				S

Crew Examination Results:

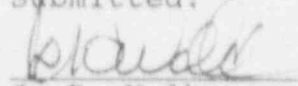
	Crew 1	Crew 2	Crew 3	Crew 4	Evaluation
Operating Examination	Pass	Pass	Pass	Pass	S

Overall Program Evaluation

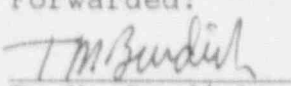
Satisfactory

This evaluation includes the results of the examination administered the weeks of March 25, 1991 and March 23, 1992. This is in accordance with NUREG 1021 "Operating Licensing Examiner Standards", ES-601, Rev 6, Section C.1.6.4. Reference Examination Report No. 50-255/OL-91-01(DRS).

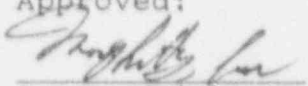
Submitted:


J. R. Walker
Examiner
04/ /92

Forwarded:


T. M. Burdick
Section Chief
04/10/92

Approved:


G. C. Wright
Branch Chief
04/10/92

DIVISION OF REACTOR SAFETY

FACILITY Palo Verde (L 92-01)

REPORT NO. _____

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