

June 30, 1989

Docket No. 50-255
Serial No. PAL-89-023

Mr. Kenneth W. Berry
Director, Nuclear Licensing
Consumers Power Company
1945 West Parnall Road
Jackson, Michigan 49201

Dear Mr. Berry:

SUBJECT: CORRECTION TO AMENDMENT NO. 122 TO PROVISIONAL OPERATING LICENSE
NO. DPR-20 (TAC NO. 72079)

On May 19, 1989, the Commission issued Amendment No. 122 to Provisional Operating License No. DPR-20 for the Palisades Plant. The amendment consisted of changes to the Appendix A Technical Specifications (TSs) in response to your application dated November 21, 1985.

The amendment revised the Palisades Plant TSs with regard to the requirement for the alternate shutdown system. Specifically, the changes added Specification 3.25, including Table 3.25.1, and Specification 4.21, including Table 4.21.1. The letter of issuance and the attached Safety Evaluation referred incorrectly to adding Specification 4.20 and Table 4.20.1. Additionally, the amendment reissued TS pages 4-86, 4-87 and 4-88 which had been deleted by Amendment No. 85. These reissued pages should have indicated that a change had been made by that earlier amendment.

These errors have been corrected. Complete copies of all pages affected by Amendment No. 122 and a corrected Safety Evaluation are provided herein.

Sincerely,

Original signed by

Albert W. De Agazio, Sr. Project Manager
Project Directorate III-1
Division of Reactor Projects - III,
IV, V & Special Projects
Office of Nuclear Reactor Regulation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

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These errors have been corrected. Complete copies of all pages affected by Amendment No. 122 and a corrected Safety Evaluation are provided herein.

Sincerely,

A handwritten signature in cursive script, reading "Albert W. De Agazio, Sr.", written in black ink.

Albert W. De Agazio, Sr. Project Manager
Project Directorate III-1
Division of Reactor Projects - III,
IV, V & Special Projects
Office of Nuclear Reactor Regulation

Enclosures:
As stated

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ATTACHMENT TO LICENSE AMENDMENT NO. 122

PROVISIONAL OPERATING LICENSE NO. DPR-20

DOCKET NO. 50-255

Revise Appendix A Technical Specifications by removing the pages identified below and inserting the attached pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

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3.25. ALTERNATE SHUTDOWN SYSTEM

LIMITING CONDITION FOR OPERATION

3.25.1 The Alternate Shutdown System instrumentation and components shown in Table 3.25.1 shall be OPERABLE. Operability shall be demonstrated by performing the surveillances in accordance with Section 4.20.

APPLICABILITY:

Reactor coolant temperature \geq 325°F.

ACTION:

- a. With less than the "Minimum Equipment" in Table 3.25.1 Operable, restore the inoperable equipment to Operable within 7 days, or provide equivalent shutdown capability and restore the inoperable equipment to Operable within 60 days; or be in Hot Shutdown within the next 12 hours and Cold Shutdown within the following 24 hours.
- b. The provisions of Specification 3.0.3 and 3.0.4 do not apply.

Basis

The operability of the Alternate Shutdown System ensures that any fire will not preclude achieving safe shutdown. The Alternate Shutdown System components are independent of areas where a fire could damage systems normally used to shut down the reactor. This capability is consistent with Regulatory Guide 1.97 and Appendix R to 10CFR50.

Table 3.25.1

ALTERNATE SHUTDOWN MINIMUM EQUIPMENT

| <u>No</u> | <u>Instrumentation</u> | <u>Minimum Equipment</u> | <u>Readout Location</u> |
|-----------|---|--------------------------|-------------------------|
| 1 | Pressurizer Pressure (PI-0110) | 1 | C150 |
| 2 | Pressurizer Level (LI-0102E) | 1 | C150 |
| 3 | Reactor Coolant Hot Leg Temperature (TI-0112HAA) (TI-0122HAA) | 1/Loop | C150A |
| 4 | Reactor Coolant Cold Leg Temperature (TI-0112CAA) (TI-0122CAA) | 1/Loop | C150A |
| 5 | Steam Generator Pressure (PI-0751E) (PI-0752E) | 1/S.G. | C150A |
| 6 | Steam Generator Level (LI-0757C) (LI-0758C) | 1/S.G. | C150 |
| 7 | Start-up Range Neutron Monitor (N-001A) | 1 | C150A |
| 8 | Auxiliary Feedwater Suction Pressure (PS-0741D) | 1 | C150 |
| 9 | SIRW Tank Level (LT-0332B) | 1 | C150A |
| 10 | Auxiliary Feedwater Flow Rate (FI-0727B) (FI-0749B) | 1/S.G. | C150 |

Table 3.25.1

(Continued)

ALTERNATE SHUTDOWN MINIMUM EQUIPMENT

| <u>No</u> | <u>Transfer Switches</u> | <u>Minimum Equipment</u> | <u>Switch Location</u> | <u>Function</u> |
|-----------|--------------------------|--------------------------|------------------------|---|
| 11 | HS-0102A | 1 | C150 | Control Room Alarm |
| 12 | HS-0102B | 1 | C150 | S/G Level Indications Pressurizer Level Indications Aux. FW Flow Indication Aux. FW Flow Control |
| 13 | HS-0522C | | C150 | Opens Aux. FW Pump Steam Valve CV-0522B |
| 14 | HS-0102C | 1 | C150A | Control Room Alarm S/G Pressure Indications Hot/Cold Leg Temperature Indications |

| <u>No</u> | <u>Control Circuits</u> | <u>Minimum Equipment</u> | <u>Controls From</u> | <u>Function</u> |
|-----------|---------------------------------------|--------------------------|----------------------|--|
| 15 | Auxiliary FW Flow Control (HIC-0727C) | 1 | C150 | Controls B S/G Aux. FW Flow Control Valve (CV-0727) |
| 16 | Auxiliary FW Flow Control (HIC-0749C) | 1 | C150 | Controls A S/G Aux. FW Flow Control Valve (CV-0749) |

4.20

MODERATOR TEMPERATURE COEFFICIENT (MTC)

SURVEILLANCE REQUIREMENTS

- 4.20.1 The MTC shall be determined to be within its limits by confirmatory measurements prior to initial operation above 2% of rated thermal power, after each refueling. /

4.21 ALTERNATE SHUTDOWN SYSTEM

SURVEILLANCE REQUIREMENTS

- 4.21.1 Each alternate shutdown monitoring instrumentation channel shall be demonstrated OPERABLE by performing a channel check and a channel calibration per Table 4.21.1.
- 4.21.2 Each alternate shutdown system transfer switch and control circuit shall be demonstrated OPERABLE by operating each activated component from the alternate shutdown panel, at least once per refueling cycle.

TABLE 4.21.1

ALTERNATE SHUTDOWN MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

| <u>Channel Description</u> | <u>Surveillance Function</u> | <u>Frequency</u> | <u>Surveillance Method</u> |
|---|------------------------------|------------------|--|
| 1. Pressurizer Pressure Indication (PI-0110) | a. Check(1) | Quarterly | a. Compare independent pressure readings |
| | b. Calibrate | Refueling Cycle | b. Known pressure applied to pressure sensor |
| 2. Pressurizer Level Indication (LI-0102E) | a. Check(1) | Quarterly | a. Compare independent level readings |
| | b. Calibrate | Refueling Cycle | b. Apply known differential pressure to level sensor |
| 3. Reactor Coolant Hot Leg Temperature Indication (TI-0112HAA) (TI-0122HAA) | a. Check(1) | Quarterly | a. Compare independent temperature readings |
| | b. Calibrate | Refueling Cycle | b. Substitute known resistance for RTD |
| 4. Reactor Coolant Cold Leg Temperature Indication (TI-0112CAA) (TI-0122CAA) | a. Check(1) | Quarterly | a. Compare independent temperature readings |
| | b. Calibrate | Refueling Cycle | b. Substitute known resistance for RTD |
| 5. Steam Generator Pressure Indication (PI-0751E) (PI-0752E) | a. Check(1) | Quarterly | a. Compare independent pressure readings |
| | b. Calibrate | Refueling Cycle | b. Apply known pressure to pressure sensor |
| 6. Steam Generator Level Indication (LI-0757C) (LI-0758C) | a. Check(1) | Quarterly | a. Compare independent level readings |
| | b. Calibrate | Refueling Cycle | b. Apply known differential pressure to level sensor |

TABLE 4.21.1 (Continued)

ALTERNATE SHUTDOWN MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

| Channel Description | Surveillance Function | Frequency | Surveillance Method |
|---|-----------------------|---------------------|--|
| 7. Start-up Range Neutron Monitor (N-001A) | a. Test | Prior to startup(4) | a. Internal test signal |
| 8. Auxiliary Feedwater Low Suction Pressure Switch (PS-0741D) | a. Calibrate | Refueling cycle | a. Apply known pressure to pressure sensor |
| 9. SIRW Tank Level Indication (LI-0332B) | a. Check(1) | Quarterly | a. Compare independent level readings |
| | b. Calibrate | Refueling cycle | b. Apply known differential pressure to level sensor |
| 10. Auxiliary Feedwater Flow Rate(2) Indication (FI-0727B) (FI-0749B) | a. Calibrate | Refueling cycle | a. Apply known differential pressure to sensor(s) |
| 11. Auxiliary Feedwater Flow Control(3) Valves (CV-0727 & CV-0749) | a. Check | Refueling cycle | a. Verify Control |
| 12. Auxiliary Feedwater Pump Inlet Steam Valve (CV-0522B) | a. Check | Refueling cycle | a. Verify Control |

NOTES:

- (1)Quarterly checks are not required when the plant is less than 325°F.
- (2)Satisfies Table 4.1.3-15 Requirement.
- (3)See Specification 4.9b.
- (4)Prior to each startup, if not done previous week.

(Next page is 4-90)

Amendment No. 88, 122



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 122 TO PROVISIONAL OPERATING LICENSE NO. DPR-20

CONSUMERS POWER COMPANY

PALISADES PLANT

DOCKET NO. 50-255

1.0 INTRODUCTION

By letter dated November 21, 1985, Consumers Power Company (licensee) proposes to amend Appendix A Technical Specifications (TSs) to Provisional Operating License No. DPR-20 for the Palisades Plant. The proposed amendment would change the TSs relating to the alternate shutdown system and to the emergency lighting systems requirements. This amendment addresses only the proposed changes to the alternate shutdown system. The proposed changes relating to the emergency lighting systems are being denied at this time because it is our understanding that Consumers Power Company will soon commit to a schedule for including fire protection requirements in the FSAR.

This amendment revises the TSs to require specific alternate shutdown system equipment and instrumentation to be operable whenever the reactor coolant temperature is at or above 325° F and imposes periodic surveillance requirements to demonstrate operability of the system. The changes add Specification 3.25, including Table 3.25.1 and Specification 4.21, including Table 4.21.1.

2.0 EVALUATION

On May 26, 1983, the Commission issued a Safety Evaluation documenting our review of Consumers Power Company's proposed modifications and alternate capability for achieving safe shutdown in the event of fire in certain areas of the Palisades Plant. Those proposed modifications were reviewed against the requirements of Sections III.G and III.L of Appendix R to 10 CFR Part 50. Our review concluded that the Palisades plant would be in compliance with Sections III.G and III.L upon implementation of the modifications. Consumers Power Company has verified that the modifications were completed and the alternate shutdown system was declared operable by February 1, 1986.

We have reviewed Consumers Power Company's November 21, 1985, application for amendment. We have determined that the proposed changes to add operability requirements for the alternative shutdown system, to specify the minimum associated equipment required to be operable, and to specify surveillance requirements are consistent with our Safety Evaluation dated May 26, 1983. We have compared the list of instrumentation and equipment associated with the alternate shutdown system upon which we based our earlier evaluation to the

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list of minimum equipment required to be operable (Table 3.25.1) as proposed in the application. Our review revealed no omissions in the proposed changes.

The proposed action required in the event the minimum equipment specified is not operable would be to either restore the equipment to operable status or to provide equivalent shutdown capability within 7 days; otherwise hot and cold shutdown would be required in the next 12 and 24 hours, respectively. Furthermore, within 60 days the equipment would have to be restored to operable status even if equivalent protection is provided. We believe that the time specified to take compensatory or corrective actions is reasonable and commensurate to the risk of a fire in one of those fire areas for which the alternate shutdown system is required.

Based on the considerations discussed above, we conclude that the TS requirement for operability will provide additional assurance that a fire at the Palisades Plant will not prevent safe shutdown of the facility.

We have reviewed the proposed list of equipment (Table 4.21.1) that would be subject to periodic surveillance tests to demonstrate alternate shutdown system operability. Our review shows the list to be consistent with the minimum equipment required to be operable. We, therefore, conclude that the proposed surveillance requirements are adequate to demonstrate the required operability of the alternate shutdown system

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to the surveillance requirements. We have determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

We have concluded, based on the considerations discussed above, that (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: May 19, 1989

Principal Contributor: Albert W. De Agazio