Docket No. 50-255 LS05-81-02-017

FEBRUARY 1 0 1981

Mr. David P. Hoffman Nuclear Licensing Administrator Consumers Power Company 1945 W. Parnall Road Jackson, Michigan 49201

Dear Mr. Hoffman:



The Commission has issued the enclosed Amendment No. 64 to Provisional Operating License No. DPR-20 for the Palisades Plant. This amendment revised Paragraph 3.E of the license to incorporate Supplement Nos. 1 and 2 to the Fire Protection Safety Evaluation (FPSE). We are also enclosing Supplement No. 2 to the September 1, 1978 FPSE for the Palisades Plant. Supplement No. 1 was issued on March 19, 1980. In Section 3 of the FPSE, certain items were identified as incomplete and requiring certain information from Consumers Power Company and evaluation by the NRC staff. We have completed our review of the remaining incomplete items (Items 3.1.5, 3.1.15 and 3.2.2). We have also completed our review of your submittal dated September 28, 1979, which requested a deferral in the implementation of the alternative safe shutdown system until completion of the Systematic Evaluation Program (SEP) review.

The results of our review are described in Supplement 2. We find that all the incomplete items in the FPSE, except the design of the alternative safe shutdown capability, have been acceptably resolved. With respect to your request to change completion dates for the alternative safe shutdown system from October 1980 (the date presently referenced in your license, as contained in Table 3.1 of the EPSE) until the end of the SEP, completion dates are now governed by the Commission's new fire protection regulations, 10 CFR 50.48. Your request did not provide sufficient information to justify an extension of implementation dates beyond the periods of time provided in the rule. However, an extension from October 1980 to the dates provided in the rule is acceptable. Thus, we have granted your request in part. We have discussed this license amendment with members of your staff and we understand that you have agreed to this action.

As indicated in Section 3.1.11 of the SPSE for the Palisades Plant, you have already committed to provide an alternative safe shutdown system. This determination is based solely upon our fire protection review. However, other aspects of your facility currently under review in the SEP may impose

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additional requirements for shutdown capability of your facility. You also should be aware that the rule on fire protection requires you to submit your plans and schedules for implementing the installation of the dedicated shutdown system or alternative shutdown capability by March 19, 1981.

The Notice of Issuance is also enclosed.

Sincerely,

Uriginal signed by

Dennis M. Crutchfield, Chief Operating Reactors Branch #5 Division Of Licensing

Enclosures:

- 1. Amendment No. 64 to. License No. DPR-20
- 2. Supplement 2 to the Fire Protection SER
- Notice

cc w/enclosures: See next page **DISTRIBUTION:**

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

February 10, 1981

Docket No. 50-255 LS05-81-02-017

> Mr. David P. Hoffman Nuclear Licensing Administrator Consumers Power Company 1945 W. Parnall Road Jackson, Michigan 49201

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As indicated in Section 3.1.11 of the FPSE for the Palisades Plant, you have already committed to provide an alternative safe shutdown system. This determination is based solely upon our fire protection review. However, other aspects of your facility currently under review in the SEP may impose

additional requirements for shutdown capability of your facility. You also should be aware that the rule on fire protection requires you to submit your plans and schedules for implementing the installation of the dedicated shutdown system or alternative shutdown capability by March 19, 1981.

The Notice of Issuance is also enclosed.

Sincerely,

Dennis M. Crutchfield, Chief Operating Reactors Branch #5 Division Of Licensing

Enclosures:

- Amendment No. 64 to License No. DPR-20
- 2. Supplement 2 to the Fire Protection SER
- 3. Notice

cc w/enclosures:
See next page

cc w/enclosures: M. I. Miller, Esquire Isham, Lincoln & Beale Suite 4200 One First National Plaza Chicago, Illinois 60670

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Judd L. Bacon, Esquire Consumers Power Company 212 West Michigan Avenue Jackson, Michigan 49201

Myron M. Cherry, Esquire Suite 4501 One IBM Plaza Chicago, Illinois 60611

Ms. Mary P. Sinclair Great Lakes Energy Alliance 5711 Summerset Drive Midland, Michigan 48640

Kalamazoo Public Library 315 South Rose Street Kalamazoo, Michigan 49006

Township Supervisor Covert Township Route 1, Box 10 Van Buren County, Michigan 49043

Office of the Governor (2) Room 1 - Capitol Building Lansing, Michigan 48913

Director, Criteria and Standards
Division
Office of Radiation Programs
(ANR-460)
U. S. Environmental Protection
Agency
Washington, D. C. 20460

U. S. Environmental Protection Agency Federal Activities Branch Region V Office ATTN: EIS COORDINATOR 230 South Dearborn Street Chicago, Illinois 60604

Charles Bechhoefer, Esq., Chairman Atomic Safety and Licensing Board Panel U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dr. George C. Anderson Department of Oceanography University of Washington Seattle, Washington 98195

Dr. M. Stanley Livingston 1005 Calle Largo Santa Fe, New Mexico 87501

Resident Inspector c/o U. S. NRC P. O. Box 87 South Haven, Michigan 49090

Palisades Plant ATTN: Mr. J. G. Lewis Plant Manager Covert, Michigan 49043

William J. Scanlon, Esquire 2034 Pauline Boulevard Ann Arbor, Michigan 48103



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

CONSUMERS POWER COMPANY

DOCKET NO. 50-255

PALISADES PLANT

AMENDMENT TO PROVSIONAL OPERATING LICENSE

Amendment No. 64 License No. DPR-20

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The filings by Consumers Power Company (the licensee) dated June 19, 1978, September 15, 1978, September 29, 1978, March 1, 1979, March 15, 1979, September 28, 1979, April 24, 1980, May 2, 1980, September 9, 1980, and October 13, 1980, comply with the standards and requirements of the Atomic Energy Act of 1954 (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the filings, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

- Accordingly, Provisional Operating License No. DPR-20 is hereby amended by revising Paragraph 3.E to read as follows:
 - E. The Licensee may proceed with and is required to complete the modifications identified in Paragraphs 3.1.1 through 3.1.23 of the NRC's Fire Protection Safety Evaluation (SE) on the facility dated September 1, 1978, Supplement No. 1 to the SE dated March 19, 1980, and Supplement No. 2 to the SE dated February 10, 1981. These modifications shall be completed as specified in Table 3.1 of the SE, as supplemented, in accordance with the schedule contained therein.
- 3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Dennis M. Crutchfield Chief Operating Reactors Branch #5

Division of Licensing

Date of Issuance: February 10, 1981

SUPPLEMENT NO. 2 TO THE SEPTEMBER 1, 1978

FIRE PROTECTION SAFETY EVALUATION REPORT

BY THE OFFICE OF NUCLEAR REACTOR REGULATION

U. S. NUCLEAR REGULATORY COMMISSION

PROVISIONAL OPERATING LICENSE NO. DPR-20

CONSUMERS POWER COMPANY

PALISADES PLANT

DOCKET NO. 50-255

Date: February 10, 1981

1.0 INTRODUCTION

On September 1, 1978, the Commission issued Amendment No. 42 to Provisional Operating License No. DPR-20 for the Palisades Plant. This amendment added a condition to the license which required completion of the modifications identified in Paragraphs 3.1.1 through 3.1.23 of the NRC's Fire Protection Safety Evaluation (FPSE) for the Palisades Plant dated September 1, 1978.

By letter dated September 28, 1979, the licensee requested a delay in the implementation of the Independent Shutdown Path, Item 3.1.11 of Table 3.1 of the FPSE until completion of the Systematic Evaluation Program. The original implementation schedule in the FPSE is October 1980. This supplement to the FPSE addresses this proposed implementation schedule change and the impact of Appendix R to 10 CFR Part 50 and 10 CFR 50.48 on the licensee's request.

In Table 3.2 of the FPSE, certain items were identified as incomplete and requiring further information from the licensee and evaluation by the NRC staff. This supplement to the FPSE also addresses those items that were identified as incomplete.

2.0 DISCUSSION AND EVALUATION

The section numbers indicated are those corresponding to the section numbers in the FPSE.

3.1.5 FIRE BARRIERS

Our original concern expressed in our SER was that a single exposure fire could impair redundant cables in the cable spreading room, the switchgear room 1-c, the safeguards area, and the charging pump room. By letter dated April 24, 1980, the Consumers Power Company provided information on an open fire protection modification identified as item 3.1.5, "Fire Barriers."

We have reviewed this information for each of the affected areas.

a. Cable Spreading Room - Our concern stated in the SER was that an existing transformer could fail, possibly burn, and, thereby, present an excessive fire hazard for the cable spreading room cables. We requested that a fire barrier be installed to protect the cables located near the transformer. The licensee has now stated that the transformer is, in fact, a dry-type and sealed in a nitrogen filled case; therefore, an excessive fire hazard is not present. The licensee has proposed that no fire barrier be required in this area.

Based on our evaluation, we conclude that a fire barrier is not required for the cables near the cable spreading room transformer. The cable spreading room has a sprinkler system, smoke detection system, and is separated from the rest of the plant by fire rated walls, floors, and ceiling. In addition, the licensee will provide an alternate shutdown system independent of the cable spreading room. We find that the fire protection for the cable spreading room meets our guidelines, the proposed Appendix R, and, therefore, is acceptable.

b. Switchgear Room 1-C - Our concern stated in the SER was that ventilation duct penetrations in the fire barriers did not have fire rated dampers. The licensee proposes to install UL listed 3-hour fire dampers and drawings were provided showing locations and construction. We have reviewed this information and determined that an appropriate design has been selected.

Based on our evaluation, we conclude that the UL listed 3-hour dampers will adequately protect the duct penetration locations and, therefore, is acceptable.

c. Safeguards Area - Our stated concern in the SER was that redundant safety system cables could be affected by a single fire exposure. We requested that the licensee provide cable fire barriers to protect one of the systems. The licensee subsequently performed a detailed study of the cable tray contents and showed that, with two exceptions, only circuits of a single safety system existed in this room. The two exceptions were eliminated by re-routing their conduits outside of the area. Therefore, because redundant cable trays do not exist in this area, the licensee now proposed not to install fire barriers between the cable trays in this area.

Based on our evaluation, we conclude that with the absence of redundant cables in this area the lack of fire barriers is acceptable.

d. Charging Pump Room - Our concerns stated in the SER were that redundant cables could be exposed to a single fire and/or that an oil fire could spread between the pumps. The licensee has proposed to install a four-inch curb to contain any oil spills. To preclude the effects of a fire on redundant cables, the licensee will install an alternate shutdown system independent of this area and provide physical adequate separation for the redundant control cables within the area. Sprinklers and smoke detectors will also be provided in this area.

Based on our evaluation, we conclude that the fire protection for this area meets our fire protection guidelines and is, therefore, acceptable.

3.1.11 Alternate Safe Shutdown System

By letter dated September 28, 1979, the licensee requested that the implementation date of Item 3.1.11 Independent Shutdown Path (alternative safe shutdown system) be deferred until the completion of the Systematic Evaluation Program (SEP) review. The reason provided by the licensee for deferring the schedule for this item is that various topics currently being reviewed in the SEP (e.g., Topic VII-1.A, Isolation of Reactor Protection System from Non-Safety Systems; Topic VII-3, Systems Required for Safe Shutdown; Topic VII-4, Effects of Failure in Non-Safety Related Systems on Selected Engineered Safety Features, and Topic XV-23, Loss of All A-C Power) may result in additional requirements or modifications of the alternative shutdown capability. Because the SEP requirements could affect various parameters (e.g., location, size, detailed engineering design), adequate information is not available to design a system to meet all possible requirements.

However, on November 19, 1980, the Commission issued a revised 10 CFR 50.48 and a new Appendix R to 10 CFR 50 concerning fire protection in nuclear power plants. Section 50.48 specifies a schedule for implementation of modifications necessary to meet the requirements of Appendix R including those associated with alternative safe shutdown capability. Therefore, the requested delay until the end of the SEP is unacceptable and the licensee is expected to meet the requirements of 10 CFR 50.48.

3.1.15 REACTOR COOLANT PUMP OIL COLLECTION SYSTEM

In the SER, it was our concern that an unmitigated lube oil fire could cause loss of cables located in the vicinity of the reactor coolant pumps that may affect safe shutdown.

By letters dated May 2, 1980 and September 9, 1980, the licensee provided information regarding the proposed reactor coolant pump oil collection system. An oil collection system will be installed at each reactor coolant pump to collect and contain any leakage or spills from the lift pump, drain and fill plugs, oil level sight glasses, external oil coolers, flanged connections in oil lines, and upper and lower oil reservoirs.

Based on our evaluation, we find that the RCP oil collection system meets Section D.2(a)(3) of Appendix A to BTP 9.5-1 and, therefore, is acceptable.

3.2.2 ADMINISTRATIVE CONTROLS

The administrative controls for nuclear plant fire protection consist of the fire protection organization and its qualifications, fire brigade training, the controls over combustibles and ignition sources, methods for assuring the availability of the fire protection systems and equipment; procedures for fighting fires, fire watch, and quality assurance provisions for the fire protection program. The licensee has provided a description of proposed administrative controls for fire protection, as detailed in his submittals of June 19, 1978, September 29, 1978, March 1, 1979, and March 15, 1979. We reviewed this information and compared it with the specific guidance found in "Nuclear Plant Fire Protection Functional Responsibilities, Administrative Controls, and Quality Assurance" dated June 14, 1977.

We find that the Licensee's Administrative Controls conform to the above referenced guidance, meets the criteria of Appendix A to BTP 9.5.1 and is, therefore, acceptable.

3.0 SUMMARY

Status of the Other Open Items in the FPSE

- 3.1.1 Sprinklers Approved by letter dated March 11, 1980
- 3.1.10 Cable Fire Stops Approved by letter dated March 11, 1980
- 3.2.1 Cable Penetration Fire Stop Qualification Approved by Supplement No. 1 to FPSE issued March 19, 1980
- 3.2.3 Technical Specifications Approved and issued by Amendment No. 60 to the license dated August 21, 1980
- 3.2.4 Fire Brigade Approved and issued by Amendment No. 60 to the license dated August 21, 1980
- 3.2.5 Non-approved Components Approved by Supplement No. 1 to FPSE issued March 19, 1980

Revised Table 3.1

Table 3.1 of the FPSE is incorporated into the operating license for this facility by the license condition 3.E. Table 3.1 specifies the completion dates for the modifications required by Paragraphs 3.1.1 through 3.1.23 of the FPSE. All of the modifications but one (3.1.11) have been completed and Table 3.1 has been revised to reflect this. The date for Item 3.1.11, Independent Shutdown Path, has been changed in Table 3.1 to show conformance with the requirements of 10 CFR 50.48 as discussed in a previous section of this supplement.

4.0 ENVIRONMENTAL CONSIDERATION

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR \$51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

5.0 CONCLUSION

We have concluded, based on the considerations discussed above, that:
(1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: February 10, 1981

Attached: Table 3.1

TABLE 3.1

Implementation Dates for Proposed Modifications

3.1.9 3.1.10 3.1.11	Conduit Penetrations Fire Barriers Rerouting of Power and Control Circuits Fire Door and Sill Fire Enclosure Fire and Backdraft Dampers Cable Fire Stops Independent Shutdown Path	Completed
3.1.12	Emergency Lighting Battery Room Loss of Ventilation	Completed
3.1.14	Equipment Removal	Completed Completed
3.1.15		Completed
3.1.16 3.1.17	Portable Smoke Removal Charging Pump Curb	Completed
3.1.17	Fir. Brigade Equipment	Completed
	Yard Area Hydrant Equipment	Completed
3.1.19		Completed
	Hose Stations in the Reactor Containment Building Supervision of Fire Door	Completed
	·	Completed
	Fire Hose	Completed
3.1.23	Breathing Air Supply	Completed

^{*}To be in conformance with the provisions of 10 CFR 50.48 $\,$

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-255

CONSUMERS POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO PROVISIONAL OPERATING LICENSE

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 64 to Provisional Operating License No. DPR-20, issued to Consumers Power Company (the licensee), which amended the license for operation of the Palisades Plant (the facility) located in Covert Township, Van Buren County, Michigan. The amendment is effective as of its date of issuance.

The amendment revises Paragraph 3.E of the license to incorporate Supplement Nos. 1 and 2 to the Fire Protection Safety Evaluation

The filings comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendment. Prior public notice of this action was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

For further details with respect to this action, see (1) the licensee's filings dated June 19, 1978, September 15, 1978, September 29, 1978, March 1, 1979, September 28, 1979, April 24, 1980, May 2, 1980, September 9, 1980, and October 13, 1980, (2) Amendment No. 64 to License No. DPR-20, including the Commission's letter of transmittal. and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C. 20555 and at the Kalamazoo Public Library, 315 South Rose Street, Kalamazoo, Michigan 49006. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this tenth day of February, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

Operating Reactors Branch #5

Division of Licensing