

Docket No. 50-255

DEC 18 1975

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Consumers Power Company  
 ATTN: Mr. R. B. Sewell  
 Nuclear Licensing Administrator  
 212 West Michigan Avenue  
 Jackson, Michigan 49201

Gentlemen:

The Commission has issued the enclosed Amendment No. 17 to Provisional Operating License No. DPR-20 for the Palisades Plant. This amendment includes Change No. 21 to the Technical Specifications and is in response to your request dated December 11, 1975.

This amendment permits the containment to be ventilated (purged) on a one-time basis for an accumulated period of time not to exceed 24 hours after the reactor has been brought to hot shutdown in preparation for the December 1975 maintenance and inspection outage.

Copies of the related Safety Evaluation and the Federal Register Notice are also enclosed.

Sincerely,

Original signed by  
 R. A. Purple

Robert A. Purple, Chief  
 Operating Reactors Branch #1  
 Division of Reactor Licensing

Enclosures:

1. Amendment No. 17
2. Safety Evaluation
3. Federal Register Notice

cc w/enclosures:  
 See next page

BJones (4)  
 BScharf (15)  
 JSaltzman  
 NDube  
 SVarga  
 OPA (Clare Miles)  
 MSlater, EP (2)  
 JShapaker  
 GLainas

*see attached  
 TAR response dtd  
 12-17-75*

*afef comed*

OFFICE	RL:ORB#1 <i>CMTrammell</i>	TR:CSB	OELD <i>TR</i>	RL:ORB#1 <i>RAPurple</i>		
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DATE	12/16/75	12/ /75	12/18/75	12/18/75		

Consumers Power Company

- 2 -

DEC 11 1975

cc w/enclosures:

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J. L. Bacon, Esquire  
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Paul A. Perry, Secretary  
Consumers Power Company  
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Kalamazoo Public Library  
315 South Rose Street  
Kalamazoo, Michigan 49006

Mr. Jerry Sarno  
Township Supervisor  
Covert County  
Route 1, Box 10  
Van Buren County, Michigan 49043

Myron M. Cherry, Esquire  
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One IBM Plaza  
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cc w/enclosures and incoming:

Mr. John D. Beck (2 cys)  
Division of Intergovernmental  
Relations  
Executive Office of the Governor  
Lewis Cass Building, 2nd Floor  
Lansing, Michigan 48913

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

CONSUMERS POWER COMPANY

DOCKET NO. 50-255

PALISADES PLANT

AMENDMENT TO PROVISIONAL OPERATING LICENSE

Amendment No. 17  
License No. DPR-20

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Consumers Power Company (the licensee) dated December 11, 1975, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (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 application, 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. An environmental statement or negative declaration need not be prepared in connection with the issuance of this amendment.
2. Accordingly, the license is amended by a change to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 3.B of Provisional Operating License No. DPR-20 is hereby amended to read as follows:

"B. Technical Specifications

The Technical Specifications contained in Appendices A, B, and C, as revised, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications, as revised by issued changes thereto through Change No. "1."

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by  
R. A. Purple

Robert A. Purple, Chief  
Operating Reactors Branch #1  
Division of Reactor Licensing

Attachment;  
Change No. 1 to Technical  
Specifications

Date of Issuance: DEC 16 1975

ATTACHMENT TO LICENSE AMENDMENT NO. 17  
CHANGE NO. 21 TO THE TECHNICAL SPECIFICATIONS  
PROVISIONAL OPERATING LICENSE NO. DPR-20  
DOCKET NO. 50-255

Revise Appendix A as follows:

Add page 3-40a

- 3.6.4 The following specification shall apply to the containment exhaust purge isolation valves and take precedence, on a one-time basis, over Specification 3.6.1.a.
- a. Commencing with the reactor achieving the hot shutdown condition in preparation for the December 1975 outage, the containment exhaust purge isolation valves may be opened and containment purge conducted while the reactor coolant system is in the hot shutdown condition or being cooled down to the cold shutdown condition.
  - b. Such purging operation shall be limited to an accumulated period of 24 hours.
  - c. Prior to initiating the purge, all containment exhaust purge valves shall be tripped closed for test to demonstrate proper mechanical closing ability\*.
  - d. This specification is cancelled upon the plant achieving the cold shutdown condition in preparation for the December 1975 outage.

\*Except for slight valve operator/valve body rotation on the inner valve, as reported on A0-75-26.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
SUPPORTING AMENDMENT NO. 17 TO PROVISIONAL OPERATING LICENSE NO. DPR-20  
(CHANGE NO. 1 TO THE TECHNICAL SPECIFICATIONS)

CONSUMERS POWER COMPANY

PALISADES PLANT

DOCKET NO. 50-255

Introduction

By letter dated December 11, 1975, Consumers Power Company (the licensee) requested a change to the Technical Specifications appended to Provisional Operating License No. DPR-20 for operation of the Palisades Plant in Van Buren County, Michigan. The requested change would permit the containment to be ventilated (purged) on a one-time basis for an accumulated period of time not to exceed 24 hours after the reactor has been brought to hot shutdown in preparation for the December 1975 maintenance and inspection outage.

Discussion

The current Technical Specifications require that containment integrity be maintained anytime the reactor is in the operating or in the hot shutdown condition; containment integrity is not required if the reactor is in the cold shutdown condition (primary coolant at shutdown boron concentration and at a temperature of less than 210°F).

Containment integrity includes, among other things, the requirement that all automatic containment isolation valves be operable or locked closed.

By letter dated November 21, 1975, the licensee reported that the inner 48-inch butterfly valve in the containment purge exhaust line had leakage in excess of allowable acceptance limits when tested at a pressure above 46 psig. As corrective action, the licensee verified that the redundant 48-inch downstream (outer) butterfly valve and 12-inch bypass valve were leak-tight and thereafter closed all three valves, thereby maintaining containment integrity.

A plant maintenance and inspection outage is planned for December 1975. According to the licensee, planned testing of secondary system safety valves will require maintaining the primary system in the hot shutdown condition for a period of time estimated to be 8 to 20 hours. Following this testing, plant cooldown will commence which will take an additional 18 to 24 hours. According to present Technical Specifications, containment integrity with respect to the containment exhaust purge valves must be maintained during this period and, therefore, the containment purge valves cannot be opened since the inboard automatic valve has been shown to leak above acceptance limits when pressurized above 46 psig and therefore must be locked closed.

The licensee desires to open these purge exhaust valves prior to reaching the cold shutdown condition to allow the containment to be ventilated. This would reduce radiation exposure to maintenance personnel who will be performing maintenance activities in the containment during this period of time.

#### Evaluation

The containment exhaust purge valves are required to be tested<sup>(1)</sup> during each reactor shutdown for refueling but in no case at intervals greater than 2 years. During the recent test performed on November 13, 1975, the leakage characteristics of the inner valve were satisfactory up to a test pressure of 46 psig. Beyond this pressure (up to the final test pressure of 55 psig), the leakage was estimated to be approximately 100,000 cc/min. The leak-tight integrity of the two downstream valves was verified.

Based on our review of this request and the results of the testing performed November 13, 1975, we find that the licensee's proposal to purge the containment with the reactor in the hot shutdown condition for a maximum accumulated period of 24 hours following the reactor shutdown in December 1975 is acceptable based on the following:

1. The test results show that the inner valve is fully functional below 46 psig and would close automatically if signalled to do so. Above 46 psig (and only above 46 psig), leakage is outside acceptance limits but the valve would nevertheless serve to limit leakage when subjected to this pressure. The probability of the valve being subjected to pressure above 46 psig during the relatively short period of purging is extremely low.
2. The recent test results have demonstrated both outer valves to be leak-tight and fully functional. With these valves closed, containment leakage through the containment exhaust purge penetration would be essentially zero.

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<sup>(1)</sup>"Type C" test as defined in 10 CFR Part 50, Appendix J.

3. The proposed containment purging would be conducted with the reactor in the hot shutdown condition or while a plant cooldown is being conducted. This is a more conservative condition than that assumed in the safety analysis for the containment pressure transient following a loss-of-coolant accident. This analysis was conducted assuming the reactor at greater than full power (2650 MWt) and resulted in a peak containment pressure of 51 psig. The pressure remained above 46 psig for approximately 42 seconds. A loss-of-coolant accident initiated from the hot shutdown condition (or cooler) would result in a considerably reduced containment pressure.
4. The test conducted on November 13, 1975, was performed by pressurizing the space between the outer and inner purge exhaust valves. Since the inner valve is designed to function with pressure applied on the side opposite to that used in the test (containment side), it is likely that pressure on the containment side would serve to cause the valve to seat more tightly, thereby reducing leakage below that value obtained from the test.
5. The licensee has agreed to trip test all containment purge exhaust valves just prior to the purging operation. This will provide increased assurance that they will close if required for containment isolation.
6. The present Technical Specifications allow continued reactor operation at up to full power for 48 hours if total leakage rate from all penetrations and isolation valves is found to exceed acceptance limits. The basis for this allowance is that the period of time (to permit repair of a faulty isolation valve or penetration) is short enough that the risk of an accident during that period is negligibly small. The proposed action is more conservative since the reactor will be shut down, the period of time limited to 24 hours, and the penetration itself is leak-tight when the outer isolation valves are shut.

Based on the foregoing, we find that the risk to the health and safety of the public is negligible and that therefore, the proposed amendment does not involve a significant hazards 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 statement, negative declaration, or environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

#### Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the change 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 change 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: Dec 11 1975

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-255

CONSUMERS POWER COMPANY

NOTICE OF ISSUANCE OF AMENDMENT TO PROVISIONAL  
OPERATING LICENSE

Notice is hereby given that the U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 17 to Provisional Operating License No. DPR-20 issued to Consumers Power Company which revised Technical Specifications for operation of the Palisades Plant located in Covert Township, Van Buren County, Michigan. The amendment is effective as of its date of issuance.

This amendment permits the containment to be ventilated (purged) on a one-time basis for an accumulated period of time not to exceed 24 hours after the reactor has been brought to hot shutdown in preparation for the December 1975 maintenance and inspection outage.

The application for amendment complies 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 amendment is 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 statement, negative declaration or 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 application for amendment dated December 11, 1975, and related letter dated November 21, 1975, (2) Amendment No. [redacted] to License No. DPR-20 with Change No. [redacted], 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, NW., Washington, D.C., and at the Kalamazoo Public Library, 315 South Rose Street, Kalamazoo, Michigan.

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 Reactor Licensing.

Dated at Bethesda, Maryland, this

DEC 18 1975

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by  
R. A. Purple

Robert A. Purple, Chief  
Operating Reactors Branch #1  
Division of Reactor Licensing

*see attached  
TAR response dtd  
12-17-75*

OFFICE	RL:ORB#1	TR:CSB	OELD	RL:ORB#1	
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DATE	12/16/75	12/ /75	12/18/75	12/ /75	