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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 142 TO FACILITY OPERATING LICENSE NO. DPR-20

CONSUMERS POWER COMPANY

PALISADES PLANT

DOCKET NO. 50-255

1.0 INTRODUCTION

By letter dated November 12, 1991, Consumers Power Company (the licensee) requested amendment to the Technical Specifications (TS) appended to Facility Operating License No. DPR-20 for the Palisades Plant. The proposed change would (1) move the withdrawal schedule of reactor vessel material surveillance capsules from the Palisades TS to its final safety analysis report (FSAR), (2) revise the withdrawal schedule to reflect changes in the accounting of the length of operating cycles, and (3) delay the withdrawal of capsule W-110 from the end of operating cycle (EOC) 9 to EOC 10. Guidance on the proposed TS change was provided by Generic Letter (GL) 91-01, of January 4, 1991, to all holders of operating licenses or construction permits for nuclear power reactors.

2.0 EVALUATION

The capsule withdrawal schedule is a part of the surveillance requirement of the Pressure/Temperature Limits for the reactor coolant system in the current standard TS. Appendix H to 10 CFR Part 50 requires the submittal to, and approval by, the NRC of any proposed withdrawal schedule before implementation. The staff has determined that regulatory requirements for the withdrawal schedule in both TS and Appendix H are redundant and unnecessary. As part of the TS improvement effort, the staff initiated Generic Letter 91-01, "Removal of the Schedule for the Withdrawal of Reactor Vessel Material Specimens from the Technical Specifications." Generic Letter 91-01 provides guidance for and basis on the removal of the withdrawal schedule from the TS. When the withdrawal schedule is removed from the TS, GL 91-01 requires that the NRC-approved schedule should be maintained in the Update Final Safety Analysis Report. The staff finds the removal of the withdrawal schedule from the Palisades TS acceptable because the licensee has proposed to incorporate the capsule withdrawal schedule in the Palisades FSAR.

Palisades operating Cycle 9 ended in February 1992. From Cycle 1 to Cycle 8, the licensee had used 0.8 EFPY per fuel cycle to calculate the approximate refueling outage when capsules should be removed. The licensee proposed to change the fuel cycle length from 0.8 EFPY per cycle to 1.0 EFPY per cycle because Palisades has been operated close to 1.0 EFPY per cycle. Also, starting Cycle 11, the licensee will change the fuel cycle length from

12 months to 18 months which will result in 1.15 EFPY per cycle. To reflect the changes in the cycle accounting method, the licensee has proposed to revise the withdrawal schedule. The staff finds the revision to the withdrawal schedule acceptable because the licensee follows ASTM Standards E 185-82, section 7.6.3.4, which specifies that the capsule withdrawals should be scheduled at the nearest vessel refueling date. The specifications in ASTM E 185 are a part of reactor materials surveillance requirements in Appendix H to 10 CFR Part 50.

The licensee estimated that at EOC 9 and EOC 10 Palisades will have been operated for about 8.99 EFPY and 9.95 EFPY, respectively. Based on the current TS withdrawal schedule and ASTM E 185-82, capsule W-110 should be removed at EOC 9. The licensee requested to delay the removal of capsule W-110 until EOC 10 because its removal will deprive the licensee of dosimetry data for Cycle 10. The staff finds the delayed withdrawal schedule for W-110 acceptable because the withdrawal schedule satisfies Table 1 of ASTM E 185-82.

Based on the above evaluation, the staff concludes that the licensee's requests are acceptable because the proposed changes to Palisades TS satisfy GL 91-01 and Appendix H to 10 CFR Part 50.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Michigan State official was notified of the proposed issuance of the amendment. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

This amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and a change in a surveillance requirement. The staff has 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 (57 FR 4486). 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.

5.0 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.

Principal Contributor: John Tsao, DET/EMCB

Date: March 27, 1992

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DOCKET NO. 50-255

PALISADES PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 142
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 November 12, 1991, 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;

   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.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to the license amendment and Paragraph 2.C.2 of Facility Operating License No. DPR-20 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 142 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

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

FOR THE NUCLEAR REGULATORY COMMISSION

L. B. Marsh, Director
Project Directorate III-1
Division of Reactor Projects III/IV/V
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 27, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 142

FACILITY 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 amendment number and contain marginal lines indicating the area of change.

REMOVE	INSERT
4-16	4-16
4-18	4-18
4-23	4-23

4.3 SYSTEMS SURVEILLANCE

APPLICABILITY

Applies to preoperational and inservice structural surveillance of the reactor vessel and other Class 1, Class 2 and Class 3 system components.

OBJECTIVE

To insure the integrity of the Class 1, Class 2 and Class 3 piping systems and components.

SPECIFICATIONS

a,b,c,d - Deleted

e. The Inservice Inspection program shall be reevaluated as required by 10 CFR 50, Section 50.55a(g)(5) to consider incorporation of new inspection techniques that have been proven practical, and the conclusions of the evaluation shall be used as appropriate to update the inspection program.

f. Surveillance of the regenerative heat exchanger and primary coolant pump flywheels shall be performed as indicated i Table 4.3.2.

g. A surveillance prograr to monitor radiation induced changes in the mechanical and impact properties of the reactor vessel materials shall be maintained as described in Section 4.5.3 of the FSAR.

4.3 SYSTEMS SURVEILLANCE (Cont'd)

Basis

The inspection program specified places major emphasis on the areas of highest stress concentration as determined by general design evaluation and experience with similar systems.(1) In addition, that portion of the reactor vessel shell welds which will be subjected to a fast neutron dose sufficient to change ductility properties will be inspected. The inspections will rely primarily on ultrasonic methods utilizing up-to-date analyzing equipment and trained personnel. Preoperational inspections will establish base conditions by determining indications that might occur from geometrical or metallurgical sources and from discontinuities in weldments or plates which might cause undue concern on a postservice inspection. To the extent applicable, based upon the existing design and construction of the plant, the requirements of Section XI of the Code shall be complied with. Significant exceptions are detailed in the requests for relief which have received NRC approval and are contained in the Class 1, Class 2 and Class 3 Long-Term Inspection Plans.

Valve Testing

To ensure the continued integrity of selected check valves which are relied upon to preclude a potential LOCA outside containment, special requirements for periodic leak tests are specified. In addition a valve disk position check for the LPSI check valves is specified following each use of the LPSI system for shutdown cooling. This position check ensures that the four LPSI check valves have reclosed upon cessation of shutdown cooling flow.

References

(1) FSAR, Section 4.5.6

(2) Deleted

(3) Systematic Evaluation Program Topic V-11.A, NRC letter to the licensee transmitting the final topic evaluation dated November 9, 1981.

TABLE 4.3.2
Miscellaneous Surveillance Items

Equipment	Method	Frequency
1. Regenerative Heat Exchanger		
a. Primary Side Shell to Tube Sheet Welds	Volumetric	5-Year Maximum Interval(100%)
b. Primary Head	Volumetric	5-Year Maximum Interval (100%)
2. Primary Coolant Pump Flywheels	Volumetric	100% Upper Flywheel Each Refueling

Amendment No. 34, 79, 142

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