October 2, 1997

Mr. Thomas C. Bordine
Manager, Licensing
Palisades Plant
27780 Blue Star Memorial Highway
Covert, MI 49043

SUBJECT: PALISADES PLANT - ISSUANCE OF AMENDMENT RE: CRANE OPERATION AND MOVEMENT OF HEAVY LOADS (TAC NO. M94286)

Dear Mr. Bordine:

The Commission has issued the enclosed Amendment No. 178 to Facility Operating License No. DPR-20 for the Palisades Plant. The amendment consists of changes to the Technical Specifications in response to the Consumers Power Company (now known as Consumers Energy Company) application dated December 6, 1995, and supplemented October 18, 1996, and January 10 and June 27, 1997.

The amendment deletes crane operation and movement of heavy loads requirements and their bases from the technical specifications. The requirements have been incorporated in the Palisades Operating Requirements Manual (ORM). The ORM has been incorporated by reference in the Palisades Final Safety Analysis Report, assuring that future changes to the crane and heavy loads requirements will be subject to the provisions of 10 CFR 50.59.

A copy of our Safety Evaluation is also enclosed. The notice of issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

ORIGINAL SIGNED BY

Robert G. Schaaf, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

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P PDR

Docket No. 50-255

Enclosures: 1. Amendment No178 to DPR-20
2. Safety Evaluation

cc w/encl: See next page

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AMENDMENT NO. 178 TO FACILITY OPERATING LICENSE NO. DPR-20-PALISADES

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

CONSUMERS ENERGY COMPANY

DOCKET NO. 50-255

PALISADES PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 178
License No. DPR-20

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Consumers Energy Company (the licensee) dated December 6, 1995, as supplemented October 18, 1996, and June 27, 1997, 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 this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-20 is hereby amended to read as follows:

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Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 178, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. Consumers Energy Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION

Robert G. Schaaf, Project Manager
Project Directorate III-1
Division of Reactor Projects - III/IV
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: October 2, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 178

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 amendment number and contain vertical lines indicating the areas of change.

REMOVE	INSERT
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3.20 SHOCK SUPPRESSORS (Snubbers)

Applicability

Applies to the operating status of the safety-related piping shock suppressors (snubbers). The only snubbers excluded from this requirement are those installed on non-safety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

Objective

To minimize the possibility of unrestrained pipe motion as might occur during an earthquake or severe transient.

Specification

3.20.1 When systems associated with snubbers in Specification 3.20 are required to be OPERABLE, the snubbers in those systems shall be OPERABLE except as noted below:

a. With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubbers to OPERABLE status and perform an engineering evaluation per Specification 4.16.1.c. on the supported component or declare the system inoperable.

Basis

Snubbers are required to be OPERABLE to ensure that the structural integrity of the reactor coolant system and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads.

3.21 Deleted

(Next Page is 3-84)

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 178 TO FACILITY OPERATING LICENSE NO. DPR-20

CONSUMERS ENERGY COMPANY

PALISADES PLANT

DOCKET NO. 50-255

1.0 INTRODUCTION

By letter dated December 6, 1995, Consumers Power Company (now known as Consumers Energy Company) requested an amendment to the Technical Specifications (TS) appended to Facility Operating License No. DPR-20 for the Palisades Plant. The proposed amendment would delete all sections of existing TS 3.21, "Crane Operations and Movement of Heavy Loads," and the associated bases. These requirements have been incorporated in licensee-controlled procedures. The licensee stated that the TS do not meet any of the criteria in 10 CFR 50.36 for retention in the TS and are not addressed in NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants."

The licensee supplemented its request by letters dated October 18, 1996, and January 10 and June 27, 1997. These supplements were within the scope of the original application and did not change the staff's initial no significant hazards considerations determination. In the October 18, 1996, letter the licensee specified that the requirements had been incorporated in Standing Order 54, "Palisades Plant - Operating Requirements Manual" (ORM). In response to staff concerns regarding future control of changes to these requirements in accordance with 10 CFR 50.59, the licensee stated in the January 10, 1997, letter that the requirements would be incorporated in the Palisades Final Safety Analysis Report (FSAR).

In the June 27, 1997, letter the licensee stated that in lieu of incorporating the requirements in the FSAR, the requirements had been incorporated into the ORM as stated in its October 18, 1996, letter, and the ORM had been incorporated by reference in the FSAR. The licensee stated that these actions would assure that the crane operations and heavy loads requirements would continue to be controlled in accordance with the requirements of 10 CFR 50.59.

2.0 BACKGROUND

Section 182a of the Atomic Energy Act requires applicants for nuclear power plant operating licenses to state TS to be included as part of the license. The Commission's regulatory requirements related to the contents of TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for

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operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TS.

The Commission has provided guidance for the contents of TS in its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" ("Final Policy Statement"), 58 FR 39132 (July 22, 1993), in which the Commission indicated that compliance with the Final Policy statement satisfies Section 182a of the Act. In particular, the Commission indicated that certain items could be relocated from the TS to licensee-controlled documents consistent with the standard enunciated in Portland General Electric Co. (Trojan Nuclear Plant), ALAB-531, 9 NRC 263, 273 (1979). In that case, the Atomic Safety and Licensing Appeal Board indicated that "technical specifications are to be reserved for those matters as to which the imposition of rigid conditions or limitations upon reactor operation is deemed necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to public health and safety." The criteria set forth in the policy statement have been incorporated into 10 CFR 50.36 (60 FR 36953).

The regulations in 10 CFR 50.36, as amended, identify four criteria to be used in determining whether particular safety functions are required to be included in the TS, as follows:

(1) Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary;

(2) A process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier;

(3) A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design-basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; and

(4) A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.[1]

As a result, existing TS requirements that fall within or satisfy any of the criteria in this regulation must be retained in the TS, while those TS requirements that do not fall within or satisfy these criteria may be relocated to other licensee-controlled documents.

---

[1]In amending 10 CFR 50.36, the Commission indicated that reactor core isolation cooling, isolation condenser, residual heat removal, standby liquid control, and recirculation pump trip systems are included in the TS under Criterion 4, although it recognized that other structures, systems, and components could also meet this criterion. (60 *FR* 36956)

3.0 DISCUSSION AND SAFETY EVALUATION

3.1 Discussion

TS 3.21 restricts the movement of heavy loads inside containment (TS 3.21.1), and over the 649-foot elevation of the auxiliary building (TS 3.21.2) to minimize the probability and the consequences of a heavy load drop. Specifically, the TS specify restrictions for the movement of any load in excess of the weight of one fuel assembly (1300 lbs) over the pressurized primary coolant system and over fuel stored in the main spent fuel pool. Heavy loads can be moved over the main pool area when (1) the fuel has decayed a minimum of 30 days and the charcoal filters are operating, and (2) the fuel has decayed a minimum of 90 days and the charcoal filter is not operating. According to TS 3.21, heavy load handling is not allowed over fuel stored in the north tilt pit zone due to limited access in and out of containment; and, as an added precaution, the spent fuel crane interlocks are to be operable, or if bypassed, the interlocks are to be administratively controlled to avoid any inadvertent movement of heavy loads over fuel stored in the spent fuel pool. Finally, TS 3.21 prohibits any fuel handling operations while heavy loads are being moved over the 649-foot level of the auxiliary building.

3.2 Evaluation

The staff has evaluated the proposed deletion of the TS against the four criteria in 10 CFR 50.36 discussed in Section 2 above and determined that each of the four criteria is satisfied as follows:

(1) The requirements provided by TS 3.21, Crane Operation and Movement of Heavy Loads, do not contain requirements for instrumentation used to detect, and indicate in the control room, significant degradation of the reactor coolant pressure boundary. Therefore criterion 1 does not apply.

(2) Although a fuel handling (event) accident is considered a design-basis accident, criterion 2 does not apply to TS 3.21. Standard Review Plan (SRP) Section 15.7.4 defines the fuel handling accident as an accident that includes the dropping of a single fuel assembly and handling tool onto spent fuel. Accordingly, TS 3.21 applies to the crane and its interlocks which have both design features and operational restrictions that are in place to prevent exceeding the initial condition of dropping a load on to the primary coolant system or spent fuel. These design features are not, in themselves, initial conditions of a design-basis accident. Similarly, the load limit is an operational restriction that is intended to prevent exceeding the initial condition (the maximum load capacity of the crane) of the design-basis accident. Therefore, the crane, its interlocks, and the load limit are provided to prevent operation in a condition that could lead to an unanalyzed load drop accident.

(3) TS 3.21 does not address structures, systems, or components that are part of the primary success path and do not function or actuate to mitigate a design-basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

(4) Based on Palisades' operating experience and the results of the licensee's Individual Plant Examination (including a level 1 probabilistic risk assessment), the auxiliary building crane, the associated equipment, and the load limitations to which TS 3.21 applies have not been shown to be significant to public health and safety.

Where appropriate, the TS specifies requirements regarding the need to evaluate heavy load handling activities for compliance with NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants," and for the licensee to make a determination on whether the potential for a load drop is extremely small. The licensee will continue to control its heavy load handling and movement activities in accordance with these requirements, which have been incorporated in administratively controlled procedures, subject to the change provisions of 10 CFR 50.59.

Accordingly, the staff has concluded that the requirements for TS 3.21, Crane Operation and Movement of Heavy Loads, and its bases do not meet the 10 CFR 50.36 criteria. Therefore, the staff finds the proposed deletion of the TS 3.21 requirements to be acceptable. The requirements have been incorporated into the Palisades ORM, and the ORM has been incorporated by reference into the FSAR. Subsequent changes to the requirements will be subject to the provisions of 10 CFR 50.59.

In summary, the staff has determined that the requirements proposed to be deleted are not required to be in the TS under 10 CFR 50.36. In addition, with the incorporation of the requirements into the ORM and incorporation of the ORM by reference into the FSAR, the staff finds that sufficient regulatory controls exist under 10 CFR 50.59 to ensure that any future changes to the requirements that constitute an unreviewed safety question will be subject to NRC review and approval prior to implementation.

4.0 STATE CONSULTATION

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

5.0 ENVIRONMENTAL CONSIDERATION

The 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. 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 the amendment involves no significant hazards consideration and there has been no public comment on such finding (61 FR 37298). Accordingly, the 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 the amendment.

6.0 CONCLUSION

The staff has 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: Brian E. Thomas, NRR

Date: October 2, 1997