

50-255

Date Entered: Jun 01, 2001

TO: US NUCLEAR REGULATORY COMMISSION  
DSHOOD Copy Number: 12

TRANSMITTAL NUMBER: 191078

PROCEDURE NUMBER: TECH SPECS

TITLE: PALISADES PLANT TECHNICAL SPECIFICATIONS AND BASES

TRANSMITTAL: LISTED BELOW ARE NEW/REVISED PROCEDURES WHICH MUST BE IMMEDIATELY INSERTED INTO OR DISCARDED FROM YOUR PROCEDURE MANUAL.

Action Required	Section or Description
-----	
PLEASE MAKE CHANGES PER THE ATTACHED INSTRUCTIONS	TECHNICAL SPECIFICATIONS

SIGN, DATE, AND RETURN THE ACKNOWLEDGEMENT FORM WITHIN 10 DAYS TO THE PALISADES PLANT DOCUMENT CONTROL.

SIGNATURE OR INITIALS

DATE

\_\_\_\_\_

\_\_\_\_\_

A001

**TECHNICAL SPECIFICATIONS**  
**PALISADES PLANT**  
**Docket 50-255 - License DPR-20**  
**Page Change Instructions**

**Operating License Changes**

**June 1, 2001**

Revise your copy of the Palisades Operating License and Technical Specifications by **removing the pages identified below and inserting the attached pages**. The revised pages are identified by Amendment number at the bottom of the pages and contain vertical lines in the margin indicating the areas of change.

**OPERATING LICENSE AND TECHNICAL SPECIFICATIONS**

**REMOVE and REPLACE**

**REMOVE**

List of Effective Pages, Am. 195 (4 pgs)  
(Revised 05/04/01)

Operating License  
Page 1, Amendment 176  
Page 2, Amendment 176  
Page 3, Amendment 195  
Page 3a, Amendment 189  
Page 4, Amendment 192

**REPLACE WITH**

List of Effective Pages, Am. 201 (4 pgs)

Page 1, Amendment 201  
Page 2, Amendment 201  
Page 3, Amendment 201  
Page 4, Amendment 201  
Page 5, Amendment 201

**FACILITY OPERATING LICENSE and TECHNICAL SPECIFICATIONS  
LIST OF EFFECTIVE PAGES**

1

**DESCRIPTION                      PAGES                                      AMENDMENT NUMBER**

**FACILITY OPERATING LICENSE**

Page 1	201
Page 2	201
Page 3	201
Page 4	201
Page 5	201

**APPENDIX A - TECHNICAL SPECIFICATIONS**

**COVERSHEET**

Title Page	195
------------	-----

**TABLE OF CONTENTS**

Pages i - iii	189	
Section 1.0	Pages 1.1-1 - 1.1-7	189
	Pages 1.2-1 - 1.2-3	189
	Pages 1.3-1 - 1.3-12	189
	Pages 1.4-1 - 1.4-4	189
Section 2.0	Page 2.0-1	189
Section 3.0	Pages 3.0-1 - 3.0-4	189
Section 3.1	Page 3.1.1-1	189
	Pages 3.1.2-1 - 3.1.2-2	189
	Page 3.1.3-1	189
	Pages 3.1.4-1 - 3.1.4-3	189
	Page 3.1.5-1	189
	Pages 3.1.6-1 - 3.1.6-2	189
	Pages 3.1.7-1 - 3.1.7-2	189
Section 3.2	Pages 3.2.1-1 - 3.2.1-4	189
	Page 3.2.2-1	189
	Page 3.2.3-1	189
	Page 3.2.4-1	189

**FACILITY OPERATING LICENSE and TECHNICAL SPECIFICATIONS**  
**LIST OF EFFECTIVE PAGES**

2

**DESCRIPTION**                      **PAGES**                                      **AMENDMENT NUMBER**

**APPENDIX A - TECHNICAL SPECIFICATIONS** (continued)

Section 3.3	Pages	3.3.1-1 - 3.3.1-8	189
	Pages	3.3.2-1 - 3.3.2-2	189
	Pages	3.3.3-1 - 3.3.3-5	189
	Pages	3.3.4-1 - 3.3.4-3	189
	Pages	3.3.5-1 - 3.3.5-2	189
	Pages	3.3.6-1 - 3.3.6-2	189
	Pages	3.3.7-1 - 3.3.7-4	189
	Pages	3.3.8-1 - 3.3.8-3	189
	Pages	3.3.9-1 - 3.3.9-2	189
	Page	3.3.10-1	189
Section 3.4	Pages	3.4.1-1 - 3.4.1-2	189
	Page	3.4.2-1	189
	Pages	3.4.3-1 - 3.4.3-4	189
	Page	3.4.4-1	189
	Pages	3.4.5-1 - 3.4.5-2	189
	Pages	3.4.6-1 - 3.4.6-3	189
	Pages	3.4.7-1 - 3.4.7-3	189
	Pages	3.4.8-1 - 3.4.8-3	189
	Pages	3.4.9-1 - 3.4.9-3	189
	Pages	3.4.10-1 - 3.4.10-2	189
	Pages	3.4.11-1 - 3.4.11-3	189
	Pages	3.4.12-1 - 3.4.12-4	189
	Pages	3.4.13-1 - 3.4.13-2	189
	Pages	3.4.14-1 - 3.4.14-4	189
	Pages	3.4.15-1 - 3.4.15-3	189
	Pages	3.4.16-1 - 3.4.16-3	189
Section 3.5	Page	3.5.1-1	191
	Page	3.5.1-2	189
	Page	3.5.2-1	191
	Pages	3.5.1-2 - 3.5.1-3	189
	Page	3.5.3-1	189
	Pages	3.5.4-1 - 3.5.4-2	189
	Page	3.5.5-1	189
Section 3.6	Pages	3.6.1-1	194
	Pages	3.6.2-1 - 3.6.2-3	189
	Page	3.6.2-4	194
	Pages	3.6.3-1 - 3.6.3-5	189
	Page	3.6.4-1	189
	Page	3.6.5-1	189
	Pages	3.6.6-1 - 3.6.6-3	189
	Pages	3.6.7-1 - 3.6.7-2	189

**FACILITY OPERATING LICENSE and TECHNICAL SPECIFICATIONS**  
**LIST OF EFFECTIVE PAGES**

<u>DESCRIPTION</u>	<u>PAGES</u>	<u>AMENDMENT NUMBER</u>
--------------------	--------------	-------------------------

**APPENDIX A - TECHNICAL SPECIFICATIONS** (continued)

Section 3.7	Pages 3.7.1-1 - 3.7.1-2	189
	Pages 3.7.2-1 - 3.7.2-2	189
	Pages 3.7.3-1 - 3.7.3-2	189
	Pages 3.7.4-1 - 3.7.4-2	189
	Pages 3.7.5-1 - 3.7.5-3	190
	Pages 3.7.6-1 - 3.7.6-2	189
	Pages 3.7.7-1 - 3.7.7-2	189
	Pages 3.7.8-1 - 3.7.8-2	189
	Page 3.7.9-1	189
	Pages 3.7.10-1 - 3.7.10-3	189
	Pages 3.7.11-1 - 3.7.11-3	189
	Pages 3.7.12-1 - 3.7.12-2	189
	Page 3.7.13-1	189
	Page 3.7.14-1	189
	Page 3.7.15-1	189
	Pages 3.7.16-1 - 3.7.16-2	189
	Page 3.7.17-1	189
Section 3.8	Pages 3.8.1-1 - 3.8.1-8	189
	Pages 3.8.2-1 - 3.8.2-3	189
	Pages 3.8.3-1 - 3.8.3-3	189
	Pages 3.8.4-1 - 3.8.4-4	189
	Pages 3.8.5-1 - 3.8.5-2	189
	Pages 3.8.6-1 - 3.8.6-3	189
	Page 3.8.7-1	189
	Pages 3.8.8-1 - 3.8.8-2	189
	Pages 3.8.9-1 - 3.8.9-2	189
	Pages 3.8.10-1 - 3.8.10-2	189
Section 3.9	Page 3.9.1-1	189
	Pages 3.9.2-1 - 3.9.2-2	189
	Pages 3.9.3-1 - 3.9.3-2	189
	Pages 3.9.4-1 - 3.9.4-2	189
	Pages 3.9.5-1 - 3.9.5-2	189
	Page 3.9.6-1	189
Section 4.0	Pages 4.0-1 - 4.0-3	189
Section 5.0	Pages 5.0-1 - 5.0-7	189
	Page 5.0-8	193
	Pages 5.0-9 - 5.0-22	189
	Pages 5.0-21 - 5.0-23	194
	Pages 5.0-24 - 5.0-26	189 (02/10/00)
	Page 5.0-27	195
	Page 5.0-28	189(02/10/00)
	Page 5.0-29 - 5.0-30	189

FACILITY OPERATING LICENSE and TECHNICAL SPECIFICATIONS  
LIST OF EFFECTIVE PAGES

4

DESCRIPTION                      PAGES                                      AMENDMENT NUMBER

APPENDIX B - ENVIRONMENTAL PROTECTION PLAN

Title Page	176
Table of Contents	63
Page 1-1	63
Pages 2-1 - 2-2	63
Pages 3-1 - 3-3	63
Pages 4-1 - 4-5	63
Pages 5-1 - 5-4	63



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

CONSUMERS ENERGY COMPANY

NUCLEAR MANAGEMENT COMPANY, LLC

DOCKET NO. 50-255

PALISADES PLANT

FACILITY OPERATING LICENSE

License No. DPR-20

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for a license filed by Consumers Power Company (CPCo) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and 10 CFR Chapter I, and all required notifications to other agencies or bodies have been duly made;
  - B. Construction of the Palisades Plant (the facility) has been completed in conformity with Provisional Construction Permit No. CPPR-25 and the application, as amended, the provisions of the Act, and the regulations of the Commission, and has been operating under a provisional operating license since March 24, 1971;
  - C. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission (except as exempted from compliance in Section 2.D. below);
  - D. There is reasonable assurance that the activities authorized by this Facility Operating License can be conducted without endangering the health and safety of the public;
  - E. NMC is technically qualified to engage in the activities authorized by this license, as amended, in accordance with 10 CFR Chapter I;
  - F. Consumers Energy Company and NMC have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements";
  - G. The issuance of this license will not be inimical to the common defense and security or to the health and safety of the public;

---

On March 11, 1997, the name "Consumers Power Company" was changed to "Consumers Energy Company." Nuclear Management Company, LLC, hereinafter referred to as NMC, succeeds Consumers Energy Company as operator of the Palisades Plant. Consequently, NMC is authorized to act as agent for Consumers Energy Company and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

- H. The issuance of this license is in accordance with 10 CFR Part 51 and all applicable requirements have been satisfied; and
  - I. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this license will be in accordance with 10 CFR Parts 30, 40, and 70.
2. Provisional Operating License No. DPR-20, dated March 24, 1971 as amended, is superseded in its entirety by Facility Operating License No. DPR-20 hereby issued to Consumers Energy Company to read as follows:
- A. This license applies to the Palisades Plant, a pressurized light water moderated and cooled reactor and electrical generating equipment (the facility). The facility is located in Van Buren County, Michigan, and is described in the Palisades Plant Updated Final Safety Analysis Report, as supplemented and amended, and in the Palisades Plant Environmental Report, as supplemented and amended.
  - B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses:
    - (1) Consumers Energy Company, pursuant to Section 104b of the Atomic Energy Act of 1954, as amended, and 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess, and NMC to use, and operate the facility in accordance with the limitations set forth in this license;
    - (2) NMC, pursuant to the Act and 10 CFR Parts 40 and 70, to receive, possess, and use source and special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Updated Final Safety Analysis Report, as supplemented and amended;
    - (3) NMC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use byproduct, source, and special nuclear material as sealed sources for reactor startup, reactor instrumentation, radiation monitoring equipment calibration, and fission detectors in amounts as required;
    - (4) NMC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material for sample analysis or instrument calibration, or associated with radioactive apparatus or components; and
    - (5) NMC, pursuant to the Act and 10 CFR Parts 30, 40, and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operations of the facility.

C. This license shall be deemed to contain and is subject to all applicable provisions of the Act; to the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

- (1) NMC is authorized to operate the facility at steady-state reactor core power levels not in excess of 2530 Megawatts thermal (100 percent rated power) in accordance with the conditions specified herein.
- (2) The Technical Specifications contained in Appendix A, as revised through Amendment No. 200, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. NMC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
- (3) NMC shall implement and maintain in effect all provisions of the approved fire protection program as described in the Final Safety Analysis Report for the facility and as approved in the SERs dated 09/01/78; 03/19/80, 02/10/81, 05/26/83, 07/12/85, 01/29/86, 12/03/87, and 05/19/89 and subject to the following provisions:
  - a. NMC may make changes to the approved fire protection program without prior approval of the Commission only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire.
  - b. NMC may alter specific features of the approved fire protection program provided:
    - Such changes do not result in failure to complete the fire protection program as approved by the Commission. NMC shall maintain in auditable form, a current record of all such changes, including an analysis of the effects of the change on the fire protection program and shall make such records available to the Commission Inspectors upon request. All changes to the approved program shall be reported annually, along with the FSAR revision; and
    - Temporary changes to specific fire protection features which may be necessary to accomplish maintenance or modifications are acceptable provided interim compensatory measures are implemented.
- (4) Upon implementation of Amendment No. 189, the schedule for performance of new or revised surveillance requirements (SRs) shall be as follows:
  - For SRs that are new in this amendment, the first performance is due at the end of the first surveillance interval that begins on the date of implementation of this amendment.

- For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of this amendment.
- For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of this amendment.
- For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to the implementation of this amendment.

D. The facility has been granted certain exemptions from the requirements of Section III, G of Appendix R to 10 CFR Part 50, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979." This section relates to fire protection features for ensuring the systems and associated circuits used to achieve and maintain safe shutdown are free of fire damage. These exemptions were granted and sent to CPCo\* in letters dated February 8, 1983, July 12, 1985, and July 23, 1985.

In addition, the facility has been granted certain exemptions from Appendix J to 10 CFR Part 50, "Primary Reactor Containment Leakage Testing for Water Cooled Power Reactors." This section contains leakage test requirements, schedules and acceptance criteria for tests of the leak-tight integrity of the primary reactor containment and systems and components which penetrate the containment. These exemptions were granted and sent to CPCo\* in a letter dated December 6, 1989.

These exemptions granted pursuant to 10 CFR 50.12, are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. With these exemptions, the facility will operate, to the extent authorized herein, in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission.

---

\*On March 11, 1997, the name "Consumers Power Company" was changed to "Consumers Energy Company." Nuclear Management Company, LLC, hereinafter referred to as NMC, succeeds Consumers Energy Company as operator of the Palisades Plant. Consequently, NMC is authorized to act as agent for Consumers Energy Company and has exclusive responsibility and control over the physical construction, operation, and maintenance of the facility.

- E. NMC shall fully implement and maintain in effect all provisions of the Commission-approved "Palisades Plant Physical Security Plan," "Palisades Plant Suitability Training and Qualification Plan," and "Palisades Plant Safeguards Contingency Plan," and all approved amendments. NMC may make changes to these plans without prior Commission approval, if the changes do not decrease the safeguards effectiveness of the plans, in accordance with 10 CFR 50.54(p)(2).
- F. Except as otherwise provided in the Technical Specifications or Environmental Protection Plan, the licensee shall report any violations of the requirements contained in Section 2.C of this license in the following manner: initial notification shall be made within 24 hours to the NRC Operations Center via the Emergency Notification System with written follow-up within 30 days in accordance with the procedures described in 50.73(b), (c), and (e).
- G. Consumers Energy Company shall have and maintain financial protection of such type and in such amounts as the Commission shall require in accordance with Section 170 of the Atomic Energy Act of 1954, as amended, to cover public liability claims.
- H. This license is effective as of the date of issuance and shall expire at midnight on March 24, 2011.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed By: Thomas E. Murley

Thomas E. Murley, Director  
Office of Nuclear Reactor Regulation

Attachments:

1. Appendix A - Technical Specifications
2. Appendix B - Environmental Protection Plan

Date of Issuance: February 21, 1991