

April 11, 2007

Mr. C. Randy Hutchinson
Senior Vice President-Development
Entergy Nuclear Operations, Inc.
1340 Echelon Parkway
Jackson, MS 39213

Mr. Robert A. Fenech, Senior Vice President
Nuclear, Fossil, and Hydro Operations
Consumers Energy Company
1945 Parnall Rd.
Jackson, MI 49201

Mr. Terence A. Burke
Vice President and Secretary
Entergy Nuclear Palisades, LLC
27780 Blue Star Memorial Highway
Covert, MI 49043

Mr. Douglas E. Cooper
Chief Nuclear Officer
Nuclear Management Company, LLC
700 First Street
Hudson, WI 54016

SUBJECT: PALISADES NUCLEAR PLANT - ISSUANCE OF CONFORMING AMENDMENT
RE: DIRECT TRANSFER OF RENEWED FACILITY OPERATING LICENSE TO
ENTERGY NUCLEAR PALISADES AND ENTERGY NUCLEAR OPERATIONS
(TAC NO. MD2954)

Dear Messrs. Hutchison, Burke, Fenech, and Cooper:

By Order dated April 6, 2007, the Nuclear Regulatory Commission (NRC or Commission) approved the direct transfer of Renewed Facility Operating License No. DPR-20 for Palisades Nuclear Plant, held by Consumers Energy Company as owner, and Nuclear Management Company, LLC, (NMC) as operator, to Entergy Nuclear Palisades, LLC (ENP), as owner and Entergy Nuclear Operations, Inc. (ENO) as operator, and approved a conforming amendment, pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR), Sections 50.80 and 50.90 to reflect the change in owner and operator. The Order will be published in the *Federal Register* on April 16, 2007. By letter dated April 9, 2007, ENP notified the NRC of the April 11, 2007, closing date for the license transfer. Proof that the insurance required by 10 CFR Part 140 had been obtained, was received by letter dated April 10, 2007. The American Nuclear Insurers letter of March 26, 2007, and the ENO letter of April 10, 2006, satisfied the required conditions of the Order.

Accordingly, the Commission has issued the enclosed Amendment No. 224 to Renewed Facility Operating License No. DPR-20 for Palisades (Enclosure 1). This conforming amendment reflects the transfer of the license to ENP and ENO. The safety evaluation (SE) supporting the conforming amendment was enclosed with the Order issued on April 6, 2007. An administrative revision to Order and SE was issued by letter dated April 10, 2007.

Enclosure 2 contains 4 signed originals of Amendment No. 12 to Indemnity Agreement No. B-40, which is required in connection with the transfer of the license. Please sign all 4 and keep 3 of these originals for your records. Return 1 original to the NRC for proof of acceptance.

C. R. Hutchinson, et at.

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The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/RA/

Mahesh L. Chawla, Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosures:

1. Amendment No. 224 to Renewed Facility Operating License No. DPR-20
2. Amendment No. 12 to Indemnity Agreement No. B-40

cc w/encls: See next page

The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

/RA/

Mahesh L. Chawla, Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-255

Enclosures:

1. Amendment No. 224 to Renewed Facility Operating License No. DPR-20
2. Amendment No. 12 to Indemnity Agreement No. B-40

cc w/encls: See next page

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Amendment: ML071010308

Amendment No. 12 to Indemnity Agreement No. B-40: ML070990108

OFFICE	LPL3-1	LPL3-1/PM	LPL3-1/LA	OGC	LPL3-1/BC(A)
NAME	JPoole	MChawla	THarris	SUttal	PMilano
DATE	4/11/07	4/11/07	4/10/07	4/11/07	4/11/07

OFFICIAL RECORD COPY

Palisades Nuclear Plant

cc:

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CONSUMERS ENERGY COMPANY
NUCLEAR MANAGEMENT COMPANY, LLC
DOCKET NO. 50-255
PALISADES NUCLEAR PLANT
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 224
Renewed License No. DPR-20

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Consumers Energy Company and Nuclear Management Company, LLC (the licensees), dated August 31, 2006, as supplemented on December 15, 2006, and March 1 and April 4, 2007, 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. 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 renewed license is amended as indicated in the attachment to this license amendment.

3. The license amendment is effective as of its date of issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Grobe /RA/ for

J. E. Dyer, Director
Office of Nuclear Reactor Regulation

Attachment: Changes to Facility Operating
License and Facility Technical
Specifications

Date of Issuance: April 11, 2007

ATTACHMENT TO LICENSE AMENDMENT NO. 224

RENEWED FACILITY OPERATING LICENSE NO. DPR-20

DOCKET NO. 50-255

Replace the following pages of the Renewed Facility Operating License No. DPR-20 with the attached revised pages. The changed areas are identified by a marginal line.

Remove

License Page 1
License Page 2
License Page 3
License Page 4
License Page 5
License Page 6
License Page 7

Insert

License Page 1
License Page 2
License Page 3
License Page 4
License Page 5
License Page 6
License Page 7

Replace the following pages of the Appendix A, Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

Remove

4.0-1

Insert

4.0-1

ENTERGY NUCLEAR PALISADES, LLC

ENTERGY NUCLEAR OPERATIONS, INC.

DOCKET NO. 50-255

PALISADES NUCLEAR PLANT

RENEWED FACILITY OPERATING LICENSE

Renewed License No. DPR-20

1. The Nuclear Regulatory Commission (NRC or the Commission) having previously made the findings set forth in Operating License No. DPR-20, dated February 21, 1991, has now found that:
 - A. The application for Renewed Operating License No. DRP-20 filed by Entergy Nuclear Palisades, LLC (ENP) and Entergy Nuclear Operations, Inc. (ENO) 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, 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 facility operating license since February 21, 1991;
 - C. Actions have been identified and have been or will be taken with respect to:
 - (1) managing the effects of aging on the functionality of structures and components that have been identified to require review under 10 CFR 54.21(a)(1) during the period of extended operation, and
 - (2) time-limited aging analyses that have been identified to require review under 10 CFR 54.21(c), such that there is reasonable assurance that the activities authorized by this renewed operating license will continue to be conducted in accordance with the current licensing basis, as defined in 10 CFR 54.3 for the facility, and that any changes made to the facility's current licensing basis in order to comply with 10 CFR 54.29(a) are in accordance with the Act and the Commission's regulations;

- D. The facility will operate in conformity with the application, the provisions of the Act, and the regulations of the Commission;
 - E. There is reasonable assurance: (i) that the activities authorized by this renewed operating license 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 set forth in 10 CFR Chapter I;
 - F. ENP is financially qualified and ENO is financially and technically qualified to engage in the activities authorized by this renewed operating license in accordance with the Commission's regulations set forth in 10 CFR Chapter I;
 - G. ENP and ENO have satisfied the applicable provisions of 10 CFR Part 140, "Financial Protection Requirements and Indemnity Agreements" of the Commission's regulations;
 - H. The issuance of this renewed operating license will not be inimical to the common defense and security or to the health and safety of the public;
 - I. After weighing the environmental, economic, technical, and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of this renewed Facility Operating License No. DPR-20, subject to the conditions for protection of the environment set forth herein, is in accordance with 10 CFR Part 51 (formerly Appendix D to Part 50), of the Commission's regulations and all applicable requirements have been satisfied; and
 - J. The receipt, possession, and use of source, byproduct, and special nuclear material as authorized by this renewed operating license will be in accordance with 10 CFR Parts 30, 40, and 70.
2. Operating License No. DPR-20, dated February 21, 1991, as amended, was superseded in its entirety by Renewed Facility Operating License No. DPR-20 (previously issued to Consumers Energy Company), is hereby issued to ENP and ENO as follows:
- A. This renewed 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) Pursuant to Section 104b of the Act, as amended, and 10 CFR Part 50, "Licensing of Production and Utilization Facilities," (a) ENP to possess and use, and (b) ENO to possess, use and operate, the facility as a utilization facility at the designated location in Van Buren County, Michigan, in accordance with the procedures and limitation set forth in this license;
 - (2) ENO, 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) ENO, 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) ENO, 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) ENO, 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 renewed operating license shall be deemed to contain and is subject to the conditions specified in the Commission's regulations in 10 CFR Chapter I 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) ENO is authorized to operate the facility at steady-state reactor core power levels not in excess of 2565.4 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. 224, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. ENO shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 - (3) ENO 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. ENO 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. ENO 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. ENO 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 along with the FSAR revision as required by 10 CFR 50.71(e); 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.
- (5) In lieu of the specified frequencies, ENO may complete the surveillance requirements (SRs) noted in Table 2.C.(5) on Page 5 during the next refueling outage, but no later than April 30, 2003.

TABLE 2.C.(5)	
Surveillance Requirement	Description
SR 3.3.3.3 (for Table 3.3.3-1, Item 3.a)	Channel Calibration of Safety Injection and Refueling Water Tank Low Level.
SR 3.3.4.3 (for Table 3.3.4-1, Item 1)	Channel Functional Test of Safety Injection Signal (SIS) function.
SR 3.3.4.3 (for Table 3.3.4-1, Item 3)	Channel Functional Test of Recirculation Actuation Signal function.
SR 3.3.5.1	Channel Functional Test of Diesel Generator Undervoltage Start logic.
SR 3.5.2.8 (High Pressure Safety Injection to Hot Leg 1 Valves MO-3082 and MO-3083 only)	Throttle valve position stop is in correct position.
SR 3.7.8.2 (Non-Critical Service Water Header Isolation Valve CV-1359 only)	Automatic valve actuates to the correct position on actual or simulated actuation signal.
SR 3.8.1.7	Emergency AC power performs as required on actual or simulated loss-of-offsite power (LOOP) signal.
SR 3.8.1.9	Emergency AC power performs as required on actual or simulated restoration of offsite power.
SR 3.8.1.10	Load sequencing for each automatic load sequencer.
SR 3.8.1.11	Emergency AC power performs as required on actual or simulated LOOP signal in conjunction with actual or simulated SIS.

- 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 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 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.

- E. ENO shall fully implement and maintain in effect all provisions of the Commission-approved physical security, training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Nuclear Management Company Palisades Nuclear Plant Physical Security Plan, Revision 2," submitted by letter dated May 10, 2006.
- F. The licensee shall report any violations of Section 2.C(1) of this license within 24 hours to the NRC Operations Center via the Emergency Notification System with written follow-up within 60 days in accordance with 10 CFR 50.73(b), ©, and (e).
- G. ENP and ENO 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. The Updated Safety Analysis Report supplement, as revised, submitted pursuant to 10 CFR 54.21(d), shall be included in the next scheduled update to the Updated Safety Analysis Report required by 10 CFR 50.71(e)(4) following the issuance of this renewed operating license. Until that update is complete, ENO may make changes to the programs and activities described in the supplement without prior Commission approval, provided that ENO evaluates such changes pursuant to the criteria set forth in 10 CFR 50.59 and otherwise complies with the requirements in that section.
- I. The Updated Safety Analysis Report supplement, as revised, describes certain future activities to be completed prior to the period of extended operation. ENO shall complete these activities no later than March 24, 2011, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.
- J. All capsules in the reactor vessel that are removed and tested must meet the test procedures and reporting requirements of American Society for Testing and Materials (ASTM) E 185-82 to the extent practicable for the configuration of the specimens in the capsule. Any changes to the capsule withdrawal schedule, including spare capsules, must be approved by the NRC prior to implementation. All capsules placed in storage must be maintained for future insertion. Any changes to storage requirements must be approved by the NRC, as required by 10 CFR Part 50, Appendix H.
- K. This license is effective as of the date of issuance and shall expire at midnight on March 24, 2031.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

J. E. Dyer, Director
Office of Nuclear Reactor Regulation

Attachments:

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

Date of Issuance: January 17, 2007

Renewed License No. DPR-20
Amendment No. 224