



Entergy Nuclear Operations, Inc.
Palisades Nuclear Plant
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Covert, MI 49043
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September 22, 2008

10 CFR 50.90

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Palisades Nuclear Plant
Docket 50-255
License No. DPR-20

License Amendment Request Application for Licensee Name Changes

- References: 1) Letter from Michael R. Kansler to Nuclear Regulatory Commission (NRC), "Supplemental Information #6 Relating to Application for Order Approving Indirect Transfer of Control of Licenses," dated May 2, 2008. (ADAMS Accession number ML081420500)
- 2) Letter from Douglas V. Pickett to Michael R. Kansler, "Palisades Nuclear Plant – Order Approving Indirect Transfer of Facility Operating License (TAC NO. MD6183)," dated July 28, 2008. (ADAMS Accession number ML080940364)

Dear Sir or Madam:

In accordance with the provisions of 10 CFR 50.90, Entergy Nuclear Operations, Inc. (ENO) and Entergy Nuclear Palisades, LLC propose to amend the renewed facility operating license and Technical Specifications (TS) Design Features, section 4, by changing the names of the licensees to Equagen Nuclear LLC and Enexus Nuclear Palisades, LLC, respectively. The proposed changes result from restructuring transactions involving the ownership structure for various corporate entities as discussed in the referenced order (reference 2). Enclosure 1 provides the revised renewed facility operating license and TS pages reflecting the proposed change. Enclosure 2 provides the annotated renewed facility operating license and TS pages showing the changes proposed.

ENO has evaluated whether a significant hazards consideration is involved with the proposed administrative license amendment by focusing on the three standards set forth in 10 CFR 50.92. The proposed amendment would only change the names of the licensees and reflect associated order requirements. The proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed changes do not create the possibility of a new or

different kind of accident from any accident previously evaluated. The proposed changes do not involve a significant reduction in a margin of safety. Therefore, ENO concludes that the proposed administrative license amendment involves no significant hazards consideration under the standards set forth in 10 CFR 50.92 and a finding of "no significant hazards consideration" is justified.

ENO has determined that the proposed changes satisfy the criteria for a categorical exclusion in accordance with 10 CFR 51.22(c)(21) and do not require an environmental review. Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment needs to be prepared for these changes.

ENO requests approval of the proposed license amendment by April 2, 2009. Once approved, the amendment should be implemented within 180 days, provided that the proposed restructuring transactions have been completed.

By letter dated May 5, 2008, ENO requested NRC review and approval of a license amendment to eliminate license condition 2.F. By a second letter dated May 5, 2008, ENO requested NRC review and approval of a license amendment to DPR-20 to correct an error generated when the renewed facility operating license was created and to remove several outdated license conditions. ENO will work with the NRC project manager, as necessary, to coordinate the changes to the operating license.

A copy of this request has been provided to the designated representative of the State of Michigan.

Should you have any questions concerning this submittal, please contact Ms. Laurie Lahti at 269-764-2788.

Summary of Commitments

This letter contains no new commitments and no revision to existing commitments.

I declare under penalty of perjury that the foregoing is true and correct. Executed on September 22, 2008.



Christopher J. Schwarz
Site Vice President
Palisades Nuclear Plant

Enclosures (2)

CC Administrator, Region III, USNRC
Project Manager, Palisades, USNRC
Resident Inspector, Palisades, USNRC

ENCLOSURE 1

**LICENSE AMENDMENT REQUEST APPLICATION FOR LICENSEE NAME
CHANGES**

REVISED RENEWED FACILITY OPERATING LICENSE
PAGES 1, 2, 3, 4, 6, and 7
(showing proposed changes to facsimile license pages)

AND

REVISED of TECHNICAL SPECIFICATION PAGE 4.0-1

7 Pages Follow

ENEXUS NUCLEAR PALISADES, LLC

EQUAGEN NUCLEAR LLC

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 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. Enexus Nuclear Palisades, LLC (ENP) is financially qualified and Equagen Nuclear LLC (EN) 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 EN 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 EN 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) EN 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) EN, 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) EN, 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) EN, 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) EN, 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) EN 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. xxx, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. EN shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 - (3) EN 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. EN 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. EN 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. EN 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, EN 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.

- 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. EN 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), (c), and (e).
- G. ENP and EN 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, EN may make changes to the programs and activities described in the supplement without prior Commission approval, provided that EN 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. EN 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,

4.0 DESIGN FEATURES

4.1 Site Location

The Palisades Nuclear Plant is located on property owned by Enexus Nuclear Palisades, LLC on the eastern shore of Lake Michigan approximately four and one-half miles south of the southern city limits of South Haven, Michigan. The minimum distance to the boundary of the exclusion area as defined in 10 CFR 100.3 shall be 677 meters.

4.2 Reactor Core

4.2.1 Fuel Assemblies

The reactor core shall contain 204 fuel assemblies. Each assembly shall consist of a matrix of zircaloy-4 clad fuel rods with an initial composition of depleted, natural, or slightly enriched uranium dioxide (UO₂) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions. A core plug or plugs may be used to replace one or more fuel assemblies subject to the analysis of the resulting power distribution. Poison may be placed in the fuel bundles for long-term reactivity control.

4.2.2 Control Rod Assemblies

The reactor core shall contain 45 control rods. Four of these control rods may consist of part-length absorbers. The control material shall be silver-indium-cadmium, as approved by the NRC.

4.3 Fuel Storage

4.3.1 Criticality

4.3.1.1 The Region I fuel storage racks (See Figure B 3.7.16-1) are designed and shall be maintained with:

- a. Fuel assemblies having a maximum planar average U-235 enrichment of 4.95 weight percent;

ENCLOSURE 2

**LICENSE AMENDMENT REQUEST APPLICATION FOR LICENSEE NAME
CHANGES**

MARK-UP OF RENEWED FACILITY OPERATING LICENSE
PAGES 1, 2, 3, 4, 6, and 7
(showing proposed changes to facsimile license pages)

AND

MARK-UP of TECHNICAL SPECIFICATION PAGE 4.0-1

(additions are highlighted; deletions are strikethrough)

7 Pages Follow

ENERGY ENEXUS NUCLEAR PALISADES, LLC

EQUAGEN ENERGY NUCLEAR LLC 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. **Enexus Nuclear Palisades, LLC (ENP)** is financially qualified and **EquaGen Nuclear LLC (EN)Ø** 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 ENØ 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 ENØ 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) ENØ 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) ENØ, 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) ENØ, 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) ENØ, 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) ENØ, 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) ENØ 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. 232, and the Environmental Protection Plan contained in Appendix B are hereby incorporated in the license. ENØ shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.
 - (3) ENØ 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. ENØ 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. ENØ 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. ENØ 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, ENØ 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.

- 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. ENØ 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), (c), and (e).
- G. ENP and ENØ 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, ENØ may make changes to the programs and activities described in the supplement without prior Commission approval, provided that ENØ 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. ENØ 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

4.0 DESIGN FEATURES

4.1 Site Location

The Palisades Nuclear Plant is located on property owned by **Enexus** Entergy-Nuclear Palisades, LLC on the eastern shore of Lake Michigan approximately four and one-half miles south of the southern city limits of South Haven, Michigan. The minimum distance to the boundary of the exclusion area as defined in 10 CFR 100.3 shall be 677 meters.

4.2 Reactor Core

4.2.1 Fuel Assemblies

The reactor core shall contain 204 fuel assemblies. Each assembly shall consist of a matrix of zircaloy-4 clad fuel rods with an initial composition of depleted, natural, or slightly enriched uranium dioxide (UO₂) as fuel material. Limited substitutions of zirconium alloy or stainless steel filler rods for fuel rods, in accordance with approved applications of fuel rod configurations, may be used. Fuel assemblies shall be limited to those fuel designs that have been analyzed with applicable NRC staff approved codes and methods and shown by tests or analyses to comply with all fuel safety design bases. A limited number of lead test assemblies that have not completed representative testing may be placed in nonlimiting core regions. A core plug or plugs may be used to replace one or more fuel assemblies subject to the analysis of the resulting power distribution. Poison may be placed in the fuel bundles for long-term reactivity control.

4.2.2 Control Rod Assemblies

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4.3 Fuel Storage

4.3.1 Criticality

4.3.1.1 The Region I fuel storage racks (See Figure B 3.7.16-1) are designed and shall be maintained with:

- a. Fuel assemblies having a maximum planar average U-235 enrichment of 4.95 weight percent;