

January 22, 2007

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

DIRECT TRANSFER OF LICENSE

FROM CONSUMERS ENERGY COMPANY & NUCLEAR MANAGEMENT COMPANY, LLC

TO ENTERGY NUCLEAR PALISADES, LLC & ENTERGY NUCLEAR OPERATIONS, INC.

PALISADES NUCLEAR PLANT: DOCKET 50-255

1.0 **INTRODUCTION**

By application dated August 31, 2006, Consumers Energy Company (Consumers), Nuclear Management Company, LLC (NMC), Entergy Nuclear Palisades, LLC (ENP), and Entergy Nuclear Operations, Inc. (ENO), requested consent by the United States Nuclear Regulatory Commission (NRC), pursuant to 10 CFR 50.80, to the proposed direct transfer of the operating license for the Palisades Nuclear Plant (Palisades). The proposed direct transfer will be the result of the execution of the Asset Sales Agreement signed by Consumers and ENP on July 11, 2006. Upon closing of the sale, ownership, control and operation of Palisades would change from Consumers and NMC, to ENP and ENO. Closing of the sale cannot occur until all regulatory approvals are received.

This Safety Evaluation is to be conjoined with the Safety Evaluation dealing with the direct transfer of the licenses Big Rock Point Facility and Big Rock Point ISFSI, from Consumers Energy Company & Nuclear Management Company, LLC, to Entergy Nuclear Palisades, LLC & Entergy Nuclear Operations, Inc., based on an application dated October 31, 2006.

2.0 **BACKGROUND**

Palisades is a 2,565 megawatt thermal pressurized water reactor located near South Haven, Michigan. Palisades was issued an operating license on March 24, 1971, and therefore, the operating license will expire on March 31, 2011. An Application for License Renewal was filed on March 22, 2005. If the Application for License Renewal is approved under a separate application with the NRC, then the operating license will expire on March 31, 2031.

Upon successful sale, ENP would own Palisades, and ENO would operate and maintain Palisades as agent for ENP, pursuant to the Operating Agreement For Palisades Nuclear Power Station, between ENP and ENO. ENO, a Delaware Limited Liability Company, is an indirect wholly-owned subsidiary of Entergy Corporation (Entergy), and a direct wholly-owned subsidiary

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of Entergy Nuclear Midwest Investment Company, LLC. ENP's principal place of business will be Covert, Michigan. ENO, a Delaware Corporation, is an indirect wholly owned subsidiary of Entergy, and a direct wholly-owned subsidiary of Entergy Nuclear Holding #2. ENO's principal place of business is located in Jackson, Mississippi.

According to the application, the principal officers of ENP and the principal officers and directors of ENO, are all American citizens.

3.0 REGULATORY EVALUATION

The applicants' request for the approval of the direct transfer of the license for Palisades discussed in this Safety Evaluation, is made pursuant to 10 CFR 50.80. Section 50.80(a) of 10 CFR states "No license for a production utilization facility, or any right thereunder, shall be transferred, assigned, or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of the license to any person, unless the Commission shall give its consent in writing."

In addition, the requirements of 10 CFR 50.80(b) & (c) apply. Section 50.80(b) states that an applicant for a license transfer shall include as much information described in 10 CFR 50.33 and 10 CFR 50.34 of this part "with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the applicant were for an initial license. . . ." Section 50.80(c) states that "the Commission will approve the application for the transfer of a license, if the Commission determines: (1) That the proposed transferee is qualified to be the holder of the license; and (2) That transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto."

4.0 EVALUATIONS

Section 50.33(f) of 10 CFR states "Except for an electric utility applicant for a license to operate a utilization facility of the type described in 10 CFR 50.21(b) or 10 CFR 50.22, information sufficient to demonstrate to the Commission the financial qualifications of the applicant to carry out, in accordance with the regulations of this chapter, the activities for which the permit or license is sought."

Section 50.2 of 10 CFR states that an electric utility is "any entity that generates or distributes electricity and which recovers the cost of this electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority."

The NRC staff finds that neither ENP or ENO qualify as an "electric utility" as defined in 10 CFR 50.2 because most of its electric revenue, used to recover costs, will not be set by a separate regulatory authority or by the entity itself. Thus the staff has determined that ENP must meet the financial qualifications requirements for a non-electric utility pursuant to 10 CFR 50.33(f). ENP, a non-electric utility, contingent to a transfer due to a proposed sale, described earlier, is subject to a full financial qualification review by the NRC than an established electric utility. Because

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ENP is not an electric utility and subject to a full review, ENP must provide the following information:

- 1.) Information that demonstrates that ENP possesses or has reasonable assurance of obtaining the necessary funds to cover estimated operating costs for the first five years of facility operations and indicate the source(s) of funds to cover these costs.
- 2.) Information that shows: a) the legal and financial relationship ENP has or proposes to have with its stockholders or owners. b) its financial ability to meet any contractual obligations to any entity which they have incurred or propose to incur. c) any other information considered necessary by the NRC staff to enable it to determine the applicant's financial qualification.

This information will demonstrate how ENP meets the requirements of 10 CFR 50.33(f). Also, 10 CFR 50.33(k)(1) requires that ENP provide information described in 10 CFR 50.75 indicating reasonable assurance that funds will be available to decommission the facility.

In accordance with 10 CFR 50.33(f), ENP provided in their August 2006 application the projected income statements for the full five year period from 2007 to 2011, and included year 2012. Most of Palisades' revenue will be generated through contract power sales. However, starting in FY2011, approximately 4% of revenue is expected to come from market power sales. The staff notes that in addition to the revenue from power sales and market power sales included below, ENP will have access to an established line of credit of \$25 million from Entergy or another affiliate company.

Entergy Nuclear Palisades LLC
Summary of
PROJECTED INCOME STATEMENT
(In \$ millions)

	<u>FY2007*</u>	<u>FY2008</u>	<u>FY2009</u>	<u>FY2010</u>	<u>FY2011</u>	<u>FY2012</u>
TOTAL REVENUE:	\$	\$	\$	\$	\$	\$
Total Operating Expense:	\$	\$	\$	\$	\$	\$
Operating Income:	\$	\$	\$	\$	\$	\$
Other Income/Expense Tax	\$	\$	\$	\$	\$	\$
NET INCOME AFTER TAX	\$	\$	\$	\$	\$	\$

* FY2007 assumes a March 2007 closing date.

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The staff has chosen to test the sensitivity of the financial information in the above Projected Income Statement by analyzing two scenarios that change the assumptions for revenue. The staff notes that if prices per megawatt hour were to drop by an (arbitrarily chosen) average of 10.0%, the average net effect on the six years of Net Income is a drop from the projected average of \$XX.X million to a possible \$XX.X million. Similarly, if an average historical capacity factor of 88.0% is assumed instead of the projected average capacity factor of XX.X%, then the average net effect on the six years of Net Income is a drop to a possible \$XX.X million. The NRC staff considers that the impact on Net Income under each of the two scenarios is sufficiently reasonable as to provide assurance of adequate funding to recover costs of operations.

ENP is a newly formed entity, and either through a parent or affiliate company, will provide the funds to purchase Palisades. Entergy has unconditionally guaranteed payment of the purchase price under the Asset Sales Agreement. ENO was formed in February 2000, and employs approximately 3300 people. At the closing of the purchase, Palisades and the Big Rock Independent Spent Fuel Storage Installation (ISFSI) will be the only assets on ENP's balance sheet. Total Operating Expense, listed above, also contains an average annual expense of approximately \$X.X million towards maintaining the Big Rock ISFSI. Big Rock ISFSI Safety Evaluation will be conducted under a separate analysis.

As required by 10 CFR 50.33(f)(3), the application states that ENP and ENO are indirect, wholly-owned subsidiaries of Entergy, which is headquartered in New Orleans, Louisiana. Entergy is a U. S. based global energy company comprised of power production facilities, distribution operations and related diversified services. Entergy owns, manages or invests in power plants that generate nearly 30,000 megawatts of electricity. Through its various subsidiaries (both regulated and non-regulated), Entergy owns and operates ten nuclear power plants at eight sites. These are:

- Arkansas Nuclear One, Units 1 & 2
- Grand Gulf Nuclear Station
- River Bend Station
- Waterford 3 Nuclear Power Station
- Pilgrim Nuclear Power Station
- Indian Point Energy Center Generating Units 2 & 3
- James A. FitzPatrick Nuclear Power Station
- Vermont Yankee

The staff notes that ENO also provides management support to the Cooper Nuclear Station. As of June 30, 2006, Entergy had total assets of \$30.6Billion.

The staff finds that ENP's Projected Income Statement shows that the anticipated revenues from sales of energy and capacity from Palisades provides reasonable assurance of an adequate source of funds to meet Palisades' anticipated expenses during the six year period covered by the projections. The NRC staff finds that no further financial qualifications analysis or review is necessary.

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Thus the NRC staff has determined that ENP has met the financial qualifications requirements for a non-electric utility pursuant to 10 CFR 50.33(f).

5.0 DECOMMISSIONING

The NRC has determined that the requirements to provide reasonable assurance of decommissioning funding are necessary to ensure the adequate protection of public health and safety. The regulation at 10 CFR 50.33(k) requires that an applicant for an operating license for a utilization facility contain information to demonstrate how reasonable assurance will be provided and that funds will be available to decommission the facility.

Consumers maintains Qualified and Non-qualified Decommissioning Trust Funds for the decommissioning of Palisades. At the closing of sale, Consumers will transfer assets of the Qualified Funds to a trust established by ENP. As of the date of this application, Consumers states that the value of the Qualified Decommissioning Trust is approximately \$366 million. At the closing Consumers will either transfer the entire balance of the Qualified Fund, or a lesser amount if certain Internal Revenue Service (IRS) private letter rulings are obtained, prior to closing. Consumers estimates that this lesser amount will in no event be less than \$250 million.

Consumers further estimates that if license renewal (currently under NRC assessment) for Palisades is granted by the NRC prior to closing, Consumers believes that the amount needed to meet the NRC minimum funding requirement would be \$201 million. In that event the “no less than” \$250 million being contributed to the Decommissioning Trust to be held by ENP may exceed the NRC minimum funding requirements in 10 CFR 50.75. If license renewal is not achieved by closing, Consumers estimates that the NRC minimum funding amount would be \$299 million. Consumers has stated that should the credited value of the funds transferred at closing not meet the NRC minimum funding requirement, ENP will provide the additional amount through a parent company guarantee that will meet the requirements of 10 CFR 50.75.

Upon closing, the decommissioning trust funds will be held in a Decommissioning Trust established and maintained by ENP. The funds will be segregated from ENP’s other assets and will be outside of ENP administrative control. ENP has agreed that the trust will provide:

- 1.) No funds may be distributed from the trust funds, other than for ordinary administrative expenses, unless the Trustee first gives thirty business days prior written notice to the Director, Office of Nuclear Reactor Regulation, with no NRC objection.
- 2.) The funds will be invested in accordance with the “prudent investor” standard as specified in 18 CFR 35.32(a)(3) of the Federal Energy Regulatory Commission’s regulations.
- 3.) No material amendments will be made to the trust agreement without thirty business days prior written request to the Director, Office of Nuclear Reactor Regulation, with no NRC objection.

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4.) Investments in the securities or other obligations of Entergy, ENO, or ENP, or their affiliates, successors or assigns, shall be strictly prohibited.

5.) Except for investments tied to market indexes or other non-nuclear sector mutual funds, investments of the decommissioning funds in any entity owning one or more nuclear power plants is prohibited.

The NRC does not need to recognize the distinction between Qualified and Non-qualified decommissioning trust funds, because this distinction is regulated by the Internal Revenue Service. However, NRC regulations require that a minimum decommissioning funding amount be maintained as specified under 10 CFR 50.75.

10 CFR 50.75(f)(2) requires that a licensee "...shall at or about 5 years prior to the projected end of operations submit a preliminary decommissioning cost estimate [herein referred to as the preliminary cost estimate] which includes an up-to-date assessment of the major factors that could affect the cost to decommission." Section 50.75(f)(4) of 10 CFR requires a licensee to include plans to adjust funding levels to demonstrate a reasonable level of financial assurance, if necessary, in the preliminary cost estimate.

Without NRC granting a license renewal for Palisades prior to the completion of sale, ENP shall be held to the requirements of 10 CFR 50.75(f)(2) and 10 CFR 50.75(f)(4). The license to operate Palisades expires on March 24, 2011. Consumers has submitted a preliminary cost estimate to decommission Palisades on April 21, 2006. In the April 21, 2006 submittal, Consumers estimates that the cost to decommission Palisades to NRC standards is \$584 million. Discounted at 2.00% for the remaining 4 years on the current license, yields a minimum decommissioning funding amount of \$540 million that ENP must have in its Decommission Trust Fund, in order to be considered fully funded.

However, if the NRC grants a license renewal for Palisades prior to the completion of sale, then the minimum decommissioning funding amount required in 10 CFR 50.75 shall be invoked and ENP shall be required to have a minimum of \$218 million in its decommissioning trust.

6.0 ANTITRUST REVIEW

The Atomic Energy Act of 1954 as amended (AEA) does not require or authorize antitrust reviews of post-operating license transfer applications. *Kansas Gas and Electric Co., et al.* (Wolf Creek Generating Station, Unit 1), CLI-99-19, 49 NRC 441 (1999). The application here postdates the issuance of the operating licenses for units under consideration, and therefore no antitrust review is required or authorized. The staff notes that there are no existing antitrust license conditions in the subject license. Accordingly, there are no antitrust-related issues to resolve with respect to proposed conforming license amendments.

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7.0 FOREIGN OWNERSHIP, CONTROL, or DOMINATION

Sections 103d and 104d of the AEA prohibit the NRC from issuing a license for a nuclear power plant to “any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.” The NRC’s regulation, 10 CFR 50.38, contains language to implement this prohibition. As stated in the application, ENP and ENO are not directly or indirectly owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. In seeking to become the licensed owner and operator of Palisades, ENP and ENO are not acting as agents or representatives of another entity.

All of the directors of Entergy, ENO, and ENP are United States citizens, and are expected to remain so after the proposed sale. The appointed officers of the Entergy, ENO, and ENP are expected to be limited to the current pool of officers and directors of the purchasing companies, all of whom are United States citizens.

In light of the above, the NRC staff does not know or have reason to believe that Entergy, ENO, and ENP will be owned, controlled or dominated by an alien, a foreign corporation, or a foreign government.

8.0 NUCLEAR INSURANCE and INDEMNITY

The provisions of the Price-Anderson Act (Section 170 of the AEA) and the Commission’s regulations at 10 CFR Part 140 require that the current indemnity agreement be modified to reflect Entergy as a new parent company licensee of Palisades.

In accordance with the Price-Anderson Act, Entergy will be required to provide primary insurance and participate in the secondary retrospective insurance pool. It will also be required to maintain property insurance as specified in 10 CFR 50.54(w). Information provided in the application demonstrates that Entergy will be able to satisfy applicable insurance requirements of the NRC and the Price-Anderson Act.

Consistent with NRC practice, the NRC staff will require Entergy to provide satisfactory documentary evidence that it has obtained the appropriate amount of insurance required of a licensee under 10 CFR Part 140 of the Commission’s regulations, prior to the issuance of the amended license. Because the issuance of the amended licenses are directly tied to completion of the proposed direct license transfer, the order approving the transfer will be conditioned as follows:

Prior to completion of the transfer of the license, Entergy shall provide the Director of the Office of Nuclear Reactor Regulation satisfactory documentary evidence that it has obtained the appropriate amount of insurance required of a licensee under 10 CFR Part 140 of the Commission’s regulations.

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9.0 INTERVENERS

During the preparation of this safety Evaluation, staff became aware of two petitions, requesting leave to intervene. The petitioners are Van Buren County et. al., and Michigan Environmental Council et. al. The staff has made a preliminary review of these petitions as they relate to the financial qualifications of ENP and ENO, and has found no additional information nor any contradictions to the information submitted by ENP and ENO in support of their request for direct transfer of license. If in the course of further actions on the part of the interveners should prove to provide information not included in the request for direct transfer of license, then staff reserves the right to review this Safety Evaluation again.

10.0 CONCLUSION

In view of the foregoing, the NRC staff finds that, subject to the conditions discussed herein, ENP and ENO are qualified to be the holder and operator Palisades to the extent proposed in the application, and that the direct transfer of the license is otherwise consistent with applicable provisions of law, regulations, and orders issued by the Commission pursuant thereto.

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