UNITED STATES OF AMERICA BEFORE THE NUCLEAR REGULATORY COMMISSION

DOCKETED USNRC

December 5, 2006 (11:59am)

OFFICE OF THE SECRETARY

RULEMAKINGS AND

ADJUDICATIONS STAFF

In the Matter of

CONSUMERS ENERGY COMPANY, NUCLEAR MANAGEMENT COMPANY, LLC and ENTERGY NUCLEAR PALISADES, LLC and ENTERGY NUCLEAR OPERATIONS.

Docket No. 50-255

(Palisades Nuclear Plant, License No. DPR-20)

PETITION BY VAN BUREN COUNTY, COVERT TOWNSHIP, COVERT PUBLIC SCHOOLS, VAN BUREN COUNTY INTERMEDIATE SCHOOL DISTRICT, VAN BUREN COUNTY DISTRICT LIBRARY, LAKE MICHIGAN COLLEGE AND SOUTH HAVEN HOSPITAL (COLLECTIVELY REFERRED TO AS "LOCAL UNITS") FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING, REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

I. INTRODUCTION AND BACKGROUND FACTS

By public notice published in the Federal Register on November 16, 2006, the Nuclear Regulatory Commission (the "Commission") gave notice of an application for the transfer of and proposed amendment to the operating license held by Consumers Energy Company ("Consumers") and Nuclear Management Company, LLC ("NMC"), for the Palisades Nuclear Power Plant ("Palisades"), Docket No. 50-255, License No. DPR-20 (the "License Transfer Proceeding"). The proposed transferees of the license are Entergy Nuclear Palisades, LLC ("ENP") and Entergy Nuclear Operations ("ENO"). (Hereinafter, Consumers, NMC, ENP and ENO are collectively referred to as "Applicants"). ENP seeks to possess and own; and ENO seeks to possess, use and operate Palisades, as agent of ENP. The request for transfer is made pursuant to 10

TEMPLATE: SECY-037

SECY-02

CFR 50.80. (Redacted Application to the Nuclear Regulatory Commission, "Application" hereinafter).

Consumers and ENP executed an Asset Sales Agreement ("ASA") (Enclosure 2 to the Application); and a Power Purchase Agreement ("PPA") (Enclosure 8 to the Application). The ASA provides for a purchase price of \$380,000,000 (three hundred eighty million dollars) paid to Consumers, (ASA, p 32), with that price to be adjusted for each day that the closing occurs after March 1, 2007, among other adjustments (ASA, p 33). The ASA also provides for, among other things, Consumers and ENP to divide the Decommissioning Trust Funds ("DTF") for Palisades (ASA, p 53, Section 5.7 "Transfer of Assets of Qualified Decommissioning Fund"), for ENP to acquire all responsibility for decommissioning the Palisades facility and site (ASA, pp 27-29, Section 2.3, "Assumed Liabilities and Obligations"), and for ENP to acquire the liability for maintaining and decommissioning the Big Rock Independent Spent Fuel Storage Installation (Id.) ("Big Rock ISFSI").

The Federal Register Notice stated that "[a]ny person whose interest may be affected by a proceeding and who desires to participate as a party must file a written request for hearing or petition for leave to intervene and a specification of the contentions which the person seeks to have litigated in the hearing." (Fed Reg 66805, 11/16/06; 10 CFR 2.309(a)). The Federal Register Notice established that petitions for leave to intervene and requests for hearings were to be filed "within twenty (20) days from the date of publication of this notice." (Fed Reg 66805, 11/16/06). The instant submissions by Petitioners, including *inter alia*, a Petition to Intervene, Request for

Hearing, Request for Extension of Time and Request for Discovery, are timely filed by Petitioners. 10 CFR 2.309(b)(1).

II. PETITION TO INTERVENE.

A. <u>Preliminary Matters Applicable to All of Petitioners' Contentions.</u>

Petitioners respectfully submit their Petition to Intervene, Request for Hearing, Request for Extension of Time, and Request for Discovery. These documents are submitted based upon the NRC Application and other publicly available information. Petitioners' pleadings are supported by the Affidavit and Report of George E. Sansoucy, P.E. of George E. Sansoucy, P.E., L.L.C. ("Sansoucy Report", Enclosure 1) attached hereto and incorporated herein by reference. Petitioners reserve the right to amend and/or supplement their Petition and/or Request for Hearing within a reasonable time after Petitioners are provided the redacted and omitted information and documents by Applicants.¹

Pursuant to 10 CFR 2.309(d)(1)(i) and 2.309(d)(2)(i), Petitioners provide the following designation of representative and contact information for each Petitioner:

Van Buren County	Richard D. Reed 136 East Michigan Avenue, Suite 800 Kalamazoo, Michigan 49007 (269) 388-7600 (voice) (269) 349-3831 (fax) E-mail: rreed@lewisreedallen.com
Covert Township	SAME

¹ The documents and information redacted from the NRC Application include at least portions of page 8; portions of Application Enclosure 1, "Proposed Changes to Facility Operating License," with Attachments A-C; Application Enclosure 3, "Operating Agreement between ENP and ENO"; and Application Enclosure 7, "Projected Financial Statement for Entergy Nuclear Palisades, LLC." Beyond this redacted information, however, Petitioners seek other information and documents as specified in Petitioners' Request for Discovery, incorporated herein by reference.

Covert Public Schools	SAME
Van Buren County Intermediate School District	SAME
Van Buren County District Library	SAME
Lake Michigan College	SAME
South Haven Community Hospital	SAME

B. Petitioners have Standing to Intervene As of Right in this Proceeding.

All of the Petitioners have interests that will be affected by this proceeding. 10 CFR 2.309(d). Petitioners are: (1) Van Buren County, (2) Van Buren County District Library, (3) South Haven Community Hospital, (4) Covert Public Schools, (5) Covert Township, (6) Lake Michigan College, and (7) Van Buren County Intermediate School District (collectively referred to as the "Local Units" or "Petitioners").

Petitioners satisfy the standing requirements for intervention as of right into this proceeding. 10 CFR 2.309(d)(1) and (2). Petitioners are Palisades' host communities and stakeholders in a range of issues incident to the proposed sale of Palisades, including, but not limited to, distribution of Palisades' decommissioning funds; the inadequacy of emergency preparedness relating to the site; the likely continued operation until 2031 of Palisades (if the license is renewed); and the ultimate decommissioning of Palisades by a private party purchaser.

Palisades is located within portions of Petitioners Van Buren County and Covert Township and is approximately 4.5 miles from the City of South Haven, Michigan. The Class 103 License, presently held by Consumers Energy and NMC ("Licensees"), was

set to expire in 2011, but Licensees applied on March 22, 2005, for renewal of the License through the year 2031 (Application, p 3).²

The Atomic Safety and Licensing Board expressed the Commission's direction with respect to standing determinations in Entergy Nuclear Operations, Inc. (Vermont Yankee Nuclear Power Station), 60 NRC 548, 553; ASLBP No. 04-832-02-OLA (2004), as follows: "In determining whether a petitioner has met the requirements for establishing standing, the Commission has directed us to 'construe the petition in favor of the petitioner.' Georgia Tech Research Reactor, Atlanta, Georgia), CLI-95-12, 42 NRC 111, 115 (1995)."

Petitioners respectfully suggest that they have standing to participate as parties to these proceedings, based upon (among other things) the same factors cited by the Commission in its <u>IP3-FitzPatrick</u> 11/27/00 Memorandum and Order, (2000 WL 1803178), at WL p 6:

[Petitioners] collectively seek standing in th[is] license transfer proceeding on the grounds that the . . . plant is located within the boundaries of both governmental entities and that the plant's safe operation and decommissioning is of great concern to the safety and long-term economic well-being of the [Petitioners'] communities. We find that, for these reasons, Cortlandt has demonstrated standing with respect to the Indian Point 3 license transfer application. See Vermont Yankee, CLI-00-20, 52 NRC at 164. Moreover, Cortlandt is the locus of the Indian Point 3 plant and therefore is in a position analogous to that of an individual living or working within a few miles of a plant whose license may be transferred.

² The License Renewal Review Schedule indicates that the Commission's decision will issue March 5, 2007, if approved and if no hearing is granted. See "License Renewal Application," at www.nrc.gov/reactors/operating/licensing/renewal/applications/palisades.html.

<u>Power Authority of the State of New York</u> (James A. Fitzpatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-00-22; 52 NRC 266 (2000); 2000 WL 803178.

Additionally, each of the Petitioners is party to agreements or contracts relating to Palisades emergency preparations.³ Van Buren County and Covert Township are parties to the Public Warning System Operation Agreement with Consumers. Lake Michigan College is party to a letter agreement with NMC and one of its buildings (Mendel Center) is designated as one of the "Emergency Operations Facilities" under the "Emergency Operations Facilities Lease" referenced in the ASA (p 6). Van Buren County Intermediate School District is a designated human services agency under the Van Buren County Emergency Operations Plan ("VBCEOP"). Covert Public Schools is responsible for transportation and safety of students under the VBCEOP. South Haven Hospital is a designated treatment center under the VBCEOP. South Haven, Michigan, is also home to one of the "Emergency Operations Facilities" referenced in the ASA (p

What is more, Petitioners have formed an Intergovernmental Agreement in a joint effort to ensure that the health, welfare and safety of their citizens is protected by the terms of the proposed sale and purchase, and thereafter, during the anticipated additional 20 years of Palisades' operation and eventual decommissioning.

Van Buren County is the County in which the Palisades Nuclear Plant is located.

As such, Van Buren County need not specify additional standing requirements. 10 CFR 2.309(d)(2)(i). Covert Township is the Township governmental unit within whose

³ As stated in 69 Fed Reg 2182, at p 2221, "... a State, local governmental body, or Federally-recognized Indian Tribe which is adjacent to a facility or, for example, has responsibilities as an offsite government for purposes of emergency preparedness, and presents such information in its request/petition, would ordinarily be accorded standing."

boundaries the nuclear plant is located. Pursuant to 10 CFR 2.309(d)(2)(i), Covert Township is likewise exempt from specifying additional standing factors. ("... a State, local governmental body or affected Federally-recognized Indian Tribe that wishes to be a party in a proceeding for a facility located within its boundaries need not address the standing requirements under this paragraph." 10 CFR 2.309(2)(i)). In ruling on the Request for Hearing and Petition to Intervene of the Petitioners, "the Commission, the presiding officer or the Atomic Safety and Licensing board designated to rule [on such requests] shall not require a further demonstration of standing." 10 CFR 2.309(d)(2)(ii).

For the above-stated reasons, and because Petitioners have articulated admissible contentions (below), Petitioners request intervention in the License Transfer Proceeding based upon their direct and organizational standing.⁴

C. <u>Petitioners' Contentions are Admissible.</u>

Petitioners' contentions, detailed below, satisfy the standards of 10 CFR 2.309(f), in that the issues raised are within the scope of the proceeding and are material to the findings the Commission must make to support the license transfer request. 10 CFR 2.309(f)(1). The issues raised by or contained in the contentions directly relate to the Commission's required findings of financial qualification (10 CFR 50.33(f)(2) and 50.40(b)) and financial assurances (10 CFR 50.33(k)(1) and 50.75) of an applicant, and to the Commission's statutory duty to ensure that any transfer will not jeopardize the public health and safety (Atomic Energy Act of 1954, as amended; 10

⁴ In <u>Lousiana Energy Services</u> (National Enrichment Facility), 59 NRC 256, 257 (2004 WL 2920523), the Commission agreed that two petitioners had established "organizational standing" based upon the fact that they had each "identified members who live in close proximity to the proposed . . . facility, at distances that might be affected by the construction, operation, or decommissioning of the facility."

CFR 50.40, 50.80, and proposed amended License submitted by Applicants, at Enclosure 1 - Attachment A to the Application). On each of these issues, Petitioners' contentions make clear that there exist genuine disputes on material issues of law or fact. 10 CFR 2.309(f)(1)(vi).

Petitioners' contentions are based upon documents or other information available at the time this Petition to Intervene is filed. 10 CFR 2.309(f)(2). The contentions are supported by the report of Petitioners' expert witness, George E. Sansoucy, P.E. ("Sansoucy Report") and by documents and information gleaned from Applicants' Redacted Application to the NRC, Applicants' Application to the Michigan Public Service Commission ("MPSC"), proceedings relating to Applicants before the Federal Energy Regulatory Commission ("FERC"), and other publicly available sources, such as NRC cases involving Applicants, *inter alia*. 10 CFR 2.309(f)(1)(i)-(vi).

Because Applicants have redacted critical financial information, Petitioners will need to amend or supplement their contentions and/or to file new contentions, once Petitioners are afforded access to the redacted information.⁵ 10 CFR 2.309(f)(2). (See Power Authority of the State of New York, supra, 2000 WL 1803178, pp 7, 8 and 12, where the Commission acknowledged the need of petitioners to obtain the redacted financial information and that petitioners should be allowed to articulate contentions or hearing issues after receipt of that information). However, Petitioners submit that their contentions as submitted herein meet regulatory requirements and satisfy NRC decisional precedent cited below, and that they should be admitted.

⁵ The redacted information forms the basis for Petitioners' Request for Extension of Time and Request for Discovery, at Sections IV and V, *infra*.

Petitioners' contentions are supported by "a concise statement of the alleged facts or expert opinions which support the requestor's/petitioner's position on the issue . . . together with references to the specific sources and documents on which [it] intends to rely to support its position." 10 CFR 2.309(f)(1)(v). The Commission's determination as to whether a contention

". . .is adequately supported by a concise allegation of the facts or expert opinion is, however, not a hearing on the merits. <u>Public Service Co. Of New Hampshire</u> (Seabrook Station, Units 1 and 2, LBP-82-106, 16 NRC 1649, 1654 (1982). The petitioner does not have to prove its contention at the admissibility stage. <u>Private Fuel Storage, LLC</u> (Independent Spent Fuel Storage installation), CLI-04-22, 60 NRC 125, 139 (2004). The contention admissibility threshold is less than is required at the summary disposition stage, where inferences that can be drawn from evidence are construed in favor of the party opposing the summary disposition. See 10 CFR 2.1710(c). However, as with a summary disposition motion, a 'Board may appropriately view Petitioners' support for its contention in a light that is favorable to the Petitioner."

Entergy Nuclear Vermont Yankee, supra, at 555-57, citing Arizona Public Service Co. (Palo Verde Nuclear Generating Station, Units 1, 2, and 3), CLI-91-12, 34 NRC 149, 155-56 (1991)).

D. Petitioners' Contentions Detailed.

Petitioners' contentions set forth below make clear that on the information which is currently available to Petitioners, the Commission will not be able to make the findings required by the express terms of the Palisades Plant Facility Operating

License, License No. DPR-20, submitted by Applicants as Redacted Enclosure 1
Attachment A. Specifically, based upon the deficient Application and insufficient information therein, the Commission will be unable to make the following findings:

1.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."

- 1.E. "ENP is financially qualified and ENO is financially and technically qualified to engage in the activities authorized by this license, as amended, in accordance with 10 CFR Chapter I."
- 1.F. "ENP and ENO have satisfied the applicable provisions of 10 CFR Part 140, 'Financial Protection Requirements and Indemnity Agreements."
- 1.G. "The issuance of the license will not be inimical to the common defense and security or to the health and safety of the public."
- 1.H. "The issuance of this license is in accordance with 10 CFR Part 51 and all applicable requirements have been satisfied."
- 1.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."

(Numbers as set forth in Redacted Enclosure 1 - Attachment A).

Petitioners' contentions are the following:

D-1. Whether the Application is deficient because it fails to contain the information specifically required by 10 CFR 50.33(f) which is necessary to demonstrate the financial qualification of the Applicants to safely maintain and operate a nuclear facility.

An application must contain "information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out . . . the activities for which the permit or license is sought." 10 CFR 50.33(f). This information must demonstrate that "the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license" and must include "estimates for total annual operating costs for each of the first five years of operation of the facility." 10 CFR 50.33(f)(2). The application "shall also indicate the source(s) of funds to cover these costs." Id.

The information submitted by the Applicants pertaining to financial qualifications is insufficient to meet the specific criteria of any of the 10 CFR sections cited above.

(See Redacted NRC Application, pp 6-9, Section F.) To begin with, Applicants have provided details about Entergy Corporation, but not about ENP and ENO. Id. Entergy Corporation is not an Applicant before the NRC, nor is it a party to the ASA or PPA between ENP and Consumers. Entergy Corporation's financial status, therefore, is not at issue in this License Transfer Proceeding and in the absence of specific contractual obligations by Entergy Corporation to share or assume ENP's or ENO's responsibilities with respect to Palisades, this Commission should dismiss the information provided as to Entergy Corporation for what it is: irrelevant and insufficient with respect to ENP/ ENO's required showings.

What remain in the Application, after dismissing the irrelevant information about Entergy Corporation, are bare assertions by Applicants that ENP and ENO "have assurance of obtaining the funds necessary to cover estimated costs to operate Palisades." (Application, p 7) What follow, then, are statements reflecting that ENP will look exclusively to power sales to Consumers for at least five years (and, pursuant to the PPA, up to fifteen years) at contractually-established energy prices, for operating and maintenance costs at Palisades. "The sale of power. . . is expected to cover the expected operating and maintenance costs of Palisades and provide a margin of additional income over and above those costs." Application, pp 7-8. (See also Enclosure 2, Direct Testimony of William E. Garrity, MPSC Application, p 11, in which he states: ". . . Entergy's only revenue stream is based on delivered energy. . . .")

ENP's projected revenues have been redacted and Petitioners have not had the opportunity to examine them or to have the benefit of review by their expert witness.

(Sansoucy Report, Sections I-III). Be that as it may, Petitioners suggest that ENP's

reliance upon revenue streams only (generated from Palisades) are facially insufficient to satisfy regulatory requirements of "financial qualification." (Sansoucy Report, Section IV and Table 1). Adding to this conclusion is the fact that it appears that ENP's calculations of financial revenues are based upon an inflated and unrealistic capacity factor, that there are no guarantees as to retained revenues, and that the offered \$25 million line of credit is insufficient (Sansoucy Report, Sections IV, A-C; and see Section D-1(b) and (c) below).

Perhaps to bolster its position in this regard, ENP represents to this Commission that ENP ". . . (and ENO through ENP), will have access to an established line of credit of \$25 million from Entergy Corporation or another affiliate company." (Application, p 8). The representations as to the line of credit continue: "This line of credit will provide working capital, if necessary, for the operation and maintenance of the plant." (Application, p 9) In light of the financial feasability concerns cited in the Sansoucy Report (Section IV, A-C and Table 1), any shortfall in revenue projections could quickly exceed the proffered credit enhancements (i.e., the \$25 million line of credit) and could jeopardize the ability of ENO to safely operate Palisades.⁶

The Application does not attach the agreement(s) relating to the purported line of credit, so one is left with myriad questions and concerns: what is the extent of the line

⁶ Petitioners are mindful of the Commission's statement about the appropriateness of assailing the use of credit lines as a hearing issue when they are in addition to a showing that the Applicants have met the minimum financial requirement. In response to these concerns, Petitioners note that at p 8 of the Application, it is stated that ENP (and ENO through ENP) ". . . will have access to an established line of credit of \$25 million from Entergy Corporation or another affiliate company." In other words, the credit line at issue here is not in addition to the minimum financial requirements, but rather, is part of the minimum. Any use of a line of credit to fund working capital puts directly at issue the financial feasability of Applicants to operate and/or maintain the plant safely under the negotiated PPA. Sansoucy Report, Section IV, A-B.

of credit? Who are all those entitled to draw off of the LOC? What entity exactly is providing the LOC and upon what terms and conditions? What is the term of the LOC? Upon what conditions or terms may the LOC be terminated by the offeror unilaterally? What conditions or terms would constitute a default under the LOC, such that the LOC could be terminated/withdrawn? What are the payment terms, interest rates, due dates, and are there provisions for acceleration or other potentially financially devastating events for ENP?

The Commission has previously noted that: "A concern for safety constitutes the foundation of our financial qualifications rule. (Citations omitted) 'The Atomic Energy Commission, in drafting the [original financial qualifications] rule, must have intuitively concluded that a licensee in financially straitened circumstances would be under more pressure to commit safety violations or to take safety "shortcuts" that[sic] one in good financial shape'." Power Authority of the State of New York LLC, (James A. FitzPatrick Nuclear Power Plant, Indian Point, Unit 3) CLI-01-14, 53 NRC 488 (2001), 2001 WL 871672, p 1. In this proceeding, the Commission should exercise its authority, pursuant to 10 CFR 50.33(f)(4), and require Applicants to submit additional and more detailed information respecting its financial arrangements and status of funds. Disputed factual questions on this issue go to the heart of whether Applicants are in compliance with the Commission's regulations, and are plainly admissible.

Issue D-1(a). Whether Applicants' actual costs to safely maintain and operate the plant (e.g., increased variable costs for refueling, repairs, maintenance, etc.), will be in excess of those projected.

⁷ In the alternative, Petitioners respectfully suggest that the deficiencies in the Application with regard to the financial qualifications issue constitute grounds for the Commission to reject the Application.

Information relating to estimates of operating costs for the first five years of operation of the facility, specifically required by 10 CFR 50.33(f)(2), has been redacted from the Application. Notwithstanding that, some information with respect to annual operating costs is available from the MPSC Application. Petitioners' expert was able to review the comparable information submitted by Consumers, to compare the contract price of power Consumers will pay ENP with Consumers' expected Costs of Continued Ownership ("CCO"). (Sansoucy Report, p 5). As detailed by Petitioners' expert:

A review of this information demonstrates that the projected CCO of Palisades (as forecasted by Consumers) **exceeds** the projected revenue, in eleven of the fifteen years of the PPA. This is demonstrated in Table 1, which was developed from the information in MPSC Case No. U-14992. The "Revenue Minus Cost" shown in Column 7 of Table 1 measures the amount by which the projected CCO exceeds the projected PPA revenue in a given year. Of particular note is the fact that a shortfall exists in the last <u>seven</u> consecutive years of the term, and in <u>nine of the last 10</u> years of the 15-year term of the PPA.

The review of this data shows (see Table 1) a 15-year overall shortfall in excess of \$195 million (in present value dollars) using the discount rate presented in the MPSC Case, with an overall -13.31% margin of shortfall, over the 15-year PPA term. This alone should be sufficient grounds to question ENP's and ENO's Financial Qualifications to operate the facility.

Sansoucy Report, Section IV, A, p 5, and Table 1, p 6 (emphasis in original).

This Commission has previously ruled that a contention based upon the question of whether an applicant's cost projections are reasonable, and whether costs can be expected to exceed those projected, was admissible in a license transfer proceeding such as this one. See <u>Consolidated Edison Company of New York</u> (Indian Point, Units 1 and 2), CLI-01-19, 54 NRC 109, 116 (2001). ("Cortlandt presents several interrelated subissues that amount to a claim that Entergy's costs will prove higher than anticipated . . . Cortlandt alleges that the projected cost figures are not only

unsupported but also 'plainly in contradiction with known historical operating data.' We accept this issue for adjudication.")

Issue D-1(b). Whether the fact that Applicants' asserted capacity factor of 88.6% is unrealistic causes Applicants' revenue projections to be called into question.

Applicants represent to this Commission that "over the past four years Palisades' capacity factor has averaged 88.6 percent. . . [ENP and ENO] have not identified any design, technical, or environmental deficiencies that would adversely impact the continued performance of Palisades at the same or higher capacity factor consistent with ENO's experience with other plants it operates." (Application, p 8).

The Commission should be aware that the four year "average" described by Applicants has been carefully selected but is not actually representative, as evidenced by testimony in the MPSC proceeding. Consumers' Director of Nuclear Assets, Stephen T. Wawro, testified:

I believe [the 86.42% capacity factor] is an optimistic view of what the Plant could achieve under Consumers Energy's continued ownership. The main driver of the projected capacity factor in the CCO model is the Plant's performance from 2003-2005. While I believe that an 86.42% projected capacity factor is reasonable, I do recognize that the Plant's performance prior to 2003 was significantly worse than during the 2003-2005 time frame. This most recent three year period was in fact the single best three year period of performance in the Plant's history. This would indicate that the 86.42% projected capacity factor is clearly towards the upper end of the range of reasonable projections.

(MPSC Application, Direct Testimony of Stephen T. Wawro ["Wawro Testimony"], p 8 [Enclosure 3]; See also, Sansoucy Report, Section IV, C).

The Commission should also take note that Consumers testified to an 86.42% capacity factor, while ENP is claiming a capacity factor of 88.6 percent. (Compare Wawro Testimony [Enclosure 3] with NRC Application, p 8, for example).8

According to Petitioners' expert, "[s]ince it is impossible to know the exact capacity factors assumed in the ENP and ENO financial statements, one has to assume that the capacity factors are at levels consistent with or higher than the 88.6% cited in the Application." (Sansoucy Report, Section IV, C.) Petitioners' expert goes on to note that "using a less optimistic capacity factor would result in a higher projected CCO, thus increasing the shortfalls noted in Table 1 and worsening the financial performance of the Palisades plant, especially without some restriction on retained earnings or a more substantial line of credit." Id.

Under established NRC precedent, beginning with Metropolitan Edison Co. (Three Mile Island Nuclear Station, Unit 1), ALAB-697, 16 NRC 1265, 1266 (1982), the applicant bears the ultimate burden of proof in supporting its application. (See also, 10 CFR 2.325.) Mere claims, without supporting information or explanation (and based upon generalized and unspecified assertions about ENO's experience operating other nuclear plants), are not sufficient record evidence to support the Application.

⁸A chart displaying "Capacity Factor Information" and related testimony by Mr. Wawro further emphasize the unrealistic nature of an 88.6 percent capacity factor. See Wawro Testimony, p 5 (Enclosure 4): "Over the 33 year period 1973 through 2005 where [US Energy Information Administration] data is available, which covers nearly all of Palisades operating life, Palisades has operated at <u>an average capacity factor of 56.4%</u>... Over the past 10 and 5 year periods, respectively, Palisades' performance has improved. For the most recent 10 year period, Palisades' capacity factor was 78.6% [and] for the most recent 5 year period, Palisades' capacity factor was 77.9%..." (Emphasis added)

The issues raised in Petitioners' contention about Applicants' optimistic capacity factor are squarely within the scope of this proceeding and material to the Commission's required findings as to Applicants' financial qualifications. The Commission has previously ruled that a contention based upon a speculative capacity factor was admissible in a license transfer proceeding. See Consolidated Edison Company of New York and Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Operations, Inc., 54 NRC 109, 115 (2001):

Petitioners assert that the Applicants[†] revenue projections are unreasonable because they rest on achieving an average annual capacity factor of 85% for IP2. We recently approved a Presiding Officers' admission of a similar capacity-factor issue in Indian Point 3. See Power Authority of the State of New York (James A. Fitzpatrick Nuclear Power Plant; Indian Point, Unit 3), CLI-01-14, 53 NRC 488, 518-19, approving LBP-01-4, 53 NRC 121, 128 (2001). We accept Cortlandt's and CAN's issue for adjudication.

Issue D-1(c). Whether Applicants will be unable, in the event of an extended outage, to pay projected fixed operating expenses from retained earnings and line of credit.

Petitioners' expert has demonstrated that Applicants' costs are likely to exceed projected costs and that their revenues are expected to fall short of projections. (See Sansoucy Report, Section IV, and Sections D-1(a)-(b), above). Applicants have made no representations to the Commission that they expect to retain any earnings they may achieve. If prior years' retained earnings are transferred to Entergy Corporation or to an affiliate, and are not reserved for ENP and ENO, it will be impossible for ENP/ENO to overcome the revenue shortfall predicted by Petitioners' expert. (Sansoucy Report, Section IV, B).

All of the above is in the nature of a "best case scenario." If any period of outage at Palisades is experienced, the financial condition of ENP/ENO will be even worse.

Periods of outages of a nuclear facility "can be very costly, since the fixed costs of the plant continue and replacement power costs can be significant." (MPSC Application, Direct Testimony of David W. Joos ["Joos Testimony"], p 8 [Enclosure 5]). In fact, among the risks that Consumers seeks to avoid with this transfer is the "replacement power risk associated with potentially lengthy nuclear plant outages." (MPSC Application, p 3 [Enclosure 6]). Periods of outage, both planned and unexpected, have historically occurred at Palisades and will certainly occur in the future. (MPSC Application, Palisades Nuclear Power Plant Confidential Offering Memorandum ["PNPP COM"], pp 3-7 through 3-11 [Enclosure 6]). In the event of an outage at Palisades, whether planned or unexpected, ENP will suffer an impact to its revenue generation and a likely increase in its required financial outlays.

Furthermore, ENP will incur additional significant expenses possibly within the next five years, as a result of the need to address (1) the problem of future off-site storage for low-level waste from Palisades once South Carolina is no longer an option (2008);⁹ (2) the problem of continued storage, maintenance and safety of SNF stored currently on-site at Palisades (Application, p 17), and at Big Rock ISFSI;¹⁰ and (3) the required "non-routine capital expenditures" that will be required over the next 10 years at Palisades (MPSC Application, Joos Testimony, pp 7-8 [Enclosure 10]).¹¹

⁹ Effective mid-2008, Palisades will no longer be able to ship this waste to Barnwell Waste Disposal Site in South Carolina. (MPSC Application, PNPP COM, pp 2-22 through 2-23 [Enclosure 8].

¹⁰See MPSC Application, PNPP COM, pp 2-18 through 2-21, Enclosure 9.

¹¹ Mr. Joos testified that "... [T]here are significant capital expenditures that will be required at Palisades over and above the normal approximately \$20 million annual amounts. These include the investments necessary for the reactor vessel head replacement, the Steam Generator replacement, for the Combined Pressurizer/Alloy 600 program, and for various life extension projects. The total of these non-routine capital expenditures could exceed \$589 million over the next 10 years."

This Commission has previously ruled that a contention raising the question of whether the Applicants will be unable to pay projected fixed operating expenses from retained earnings in the event of an extended outage is admissible. Consolidated Edison Company of New York, 54 NRC 109, 116 (2001).

Issue D-1(d). Whether the failure of the Application to comply with specific requirements of 10 CFR 50.33(f) renders it so patently deficient that it should be dismissed or supplemented, amended and renoticed.

Petitioners have attempted, in Contention D-1 and in Issues D-1(a)-(c), to define, without the benefit of critical redacted and omitted financial information, the ways in which Applicants' have not established the "financial qualification" required by 10 CFR 50.33(f).

The final word as to Applicants' financial qualifications is more bare assertion without support: "Adequate assurance that the funds to safely operate Palisades will be available has been demonstrated by the five-year projection of income and expenses shown above. The projected financial statement of ENP is attached as Enclosure 7." (Application, p 9.) First, no such assurance "has been demonstrated" as detailed by Petitioners above. Second, in the pages provided in the Redacted Application pertaining to Financial Qualifications, there is no detail or information provided about expenses at all (Application, Section F). Presumably, the redacted Table contains some information about projected expenses, but Petitioners cannot be sure. Petitioners would need to see the Table and other redacted and necessary documents and then be allowed to raise contentions/issues with respect to the reasonableness of ENP/ENO's assumptions or representations concerning expenses. Finally, Enclosure 7, the

projected financial statement of ENP, has been redacted. Review of this document is critical to determining whether or not Applicants have satisfied any of the requirements about financial qualification and financial assurances, pursuant to 10 CFR 50.33 and 50.75.

It appears that there is no unredacted information in the Application pertaining to Applicants' estimate for the total annual operating costs for the first five years of operations. Section F of the Application focuses almost exclusively on projected revenues and generating capacity. (Application pp 6-9.) The redaction of this information makes it difficult, if not impossible, for Petitioners to review whether the proposed transferees have adequate financial resources to safely own and operate Palisades. The line of credit agreement is not included among ENP or ENO's submissions to the Commission. The financial projections for ENP and financial statements for any/all of ENP's parents or affiliates are not included.¹²

The available information regarding the Applicants' financial qualifications poses questions and raises concerns that should properly be adjudicated in a public hearing, especially since crucial financial data has been redacted. (Sansoucy Report, Section I, p 2). The redacting of the financial information precludes the public from full participation in this proceeding, and raises a barrier to the Petitioners' ability to plead financial issues with specificity. Petitioners are entitled to an opportunity to review the financial information to formulate relevant issues with respect to the inadequacy of the

¹² On this note, it is respectfully submitted that if the limited liability company format is to be used by an applicant for a license transfer, then the financials of affiliates should not be submitted as part of the transfer application in the absence of a showing that the LLC has sufficient financial resources and can call upon the resources of the affiliates by binding contract. In such a circumstance, any limits upon this ability should be clearly set forth in the transfer application.

Applicants' financial resources and in particular, to demonstrate that the Applicants do not have "reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license." 10 CFR 50.33(f)(2).

The Atomic Energy Act protects public health and safety from radiologically-caused injury and requires that licensees demonstrate financial qualifications to afford this protection. 10 CFR 50.80(b). Thus, the issues raised in contention D-1 and subissues D-1(a)-(d) are within the scope of the Palisades License Transfer Proceeding, as required by 10 CFR 2.309(f). The issues relating to Applicants' financial qualifications are relevant and material to the findings necessary to grant license transfers. A genuine dispute exists with respect to the financial feasibility of ENP/ENO to operate the plant safely as the underlying contracts provided (eg, the ASA, the PPA and, possibly the redacted Operating Agreement), reveal the unreasonableness of ENP's cost and revenue projections, the lack of guarantee as to retained earnings, and an over-reliance upon an inadequate line of credit (Sansoucy Report, *passim*).

D-2. Whether the Application contains information sufficient to comply with the requirements of 10 CFR 50.33(k)(1) and 50.75 pertaining to the adequacy of funding for decommissioning the facility and site.

The information provided by Applicants about the decommissioning funds causes Petitioners great concern and reveals that Applicants have not satisfied the requirements of 10 CFR 50.33(k)(1) and 10 CFR 50.75. As noted above, Applicants plan to divide the funds between Consumers and ENP (Application, pp 2-3) based upon ENP's "conclusion" that the sum of \$250 million will meet the NRC's required minimum for decommissioning funds (MPSC Application, Joos Testimony, pp 13-14 [Enclosure 11]).

The proposed decommissioning funds that ENP will acquire at the time of closing with Consumers will not be adequate to fund the decommissioning of the Palisades site (Sansoucy Report, Section VI). Petitioners' expert reviewed site-specific decommissioning cost estimates prepared for Consumers and concluded that "the Funds transferred by Consumers to Entergy are insufficient to allow for decommissioning the plant in a safe and timely manner." (Sansoucy Report, p 10.)

Other issues and concerns raised by Petitioners' expert on the decommissioning funds issue are (1) that the proposed division of the decommissioning funds is outside of the market norm (Sansoucy Report, Section VI, A, p 10); (2) that there is conflicting information as to the NRC minimum funding requirement (Sansoucy Report, Section VI, B, p 11 and Table 2); and (3) that there are significant concerns with respect to ENP's ability to safely and timely decommission the Palisades site. (Sansoucy Report, Section VI, C, pp 12-13).

The MPSC Application materials specify that, at closing, all of the funds in the non-qualified decommissioning trusts will be retained for the benefit of customers, which . . . will be approximately \$200 million. . .")¹³ The Testimony of Michael A. Torrey, Consumers' Director of Revenue Requirements, Cost Analysis and Planning in the Rates and Business Support Department, reiterates these points. He indicates that

¹³ David W. Joos indicates that Entergy concluded that "it needed only \$250 million in the qualified trust now for the future decommissioning of the plant..." MPSC Application, Joos Testimony (Enclosure 11). But this assertion seems to contradict representations made in the NRC Application at p 3, which state "... any additional amount needed in order to satisfy the NRC's minimum funding requirements will be supplied by ENP through a parent or affiliate company guarantee." See also Application, pp 10-11. Mr. Joos' testimony also seems in conflict with the Confidential Offering Memorandum, prepared by Concentric Energy Advisors ("CEA"), which indicated as of January, 2006, that "the NRC minimum decommissioning fund estimate ... for Palisades as of March 31, 2005 was \$351.2 million. The estimated minimum decommissioning amount as of December 31, 2005 was approximately \$359.2 million." MPSC Application, PNPP COM, p 9-7 (Enclosure 12).

there is expected to be \$200 million in the Palisades Non-Qualified funds, and \$366 million in the Palisades Qualified fund. (MPSC Application, Direct Testimony of Michael A. Torrey ["Torrey Testimony"], p 15 [Enclosure 13]). The Non-Qualified funds consist of two separate funds - an MPSC jurisdictional fund (expected to have a balance of \$189 million) and a FERC jurisdictional fund (with an expected balance \$11 million). Id. Mr. Torrey explains that:

... the Non-Qualified Funds will be released and immediately be available to cover sale-related costs and to provide other customer benefits. The ASA requires that [Consumers] transfer the target decommissioning amount from the Palisades Qualified Fund to Entergy. Subject to the receipt of the necessary IRS tax ruling, Qualified Funds in excess of the decommissioning target specified by Entergy (or in excess of the IRS ruling), will be returned to [Consumers] and become available to benefit customers. Id.

Before the Commission approves a reduction of the decommissioning fund to \$250 million it should consider the specific findings of TLG, Inc., which prepared a site-specific study - at Consumers' request - in March, 2006 (the "TLG Study"). The TLG Study reveals that the decommissioning funds necessary under the less expensive DECON method would be approximately \$400 million, assuming a 2% real growth rate and approximately \$300 million, assuming a 3% real growth rate. (Sansoucy Report, Section VI, p 13). All that the ASA between Consumers and ENP seems to be ensuring is that the decommissioning funds will fall far short of what will be required to decommission the Palisades site at license expiration in 2031.

A related concern is that Applicants' adherence to the "NRC minimum" ignores the reality of known risks inherent in the decommissioning process. As Consumers' CEO and Director, David W. Joos, testified,

... ownership of a nuclear plant entails considerable risk... there are significant risks associated with the future capital needs of a nuclear unit. While many of those can be identified and planned for, the nature of the nuclear industry is that issues that arise at other operating nuclear units often have an impact on all units. Many of these are essentially impossible to predict, but can have a substantial impact on the owners of these units. In addition, there is considerable risk associated with the decommissioning of nuclear units. This risk includes the investment performance of the decommissioning trust funds, as well as the difficulty in accurately projecting the costs of decommissioning the plant, and the risk associated with carrying out the decommissioning.

MPSC Application, Joos Testimony, pp 8-9 (Enclosure 14); emphasis added.

Petitioners respectfully maintain that the Applicants have failed to provide the required financial assurance and have failed to demonstrate their ability to adequately fund the decommissioning of Palisades. The deficiencies of the Application with respect to required decommissioning funding and financial assurances constitute grounds for the Commission to reject the Application. In the alternative, the Commission should require the submission of further information from Applicants regarding decommissioning and decommissioning funding. Disputed factual questions with respect to this information go to the heart of whether the Applicants are in compliance with the Commission's regulations, and are plainly admissible.

D-3. Whether the Application is deficient because ENP/ENO's inadequate financial qualifications create doubt as to their ability to adequately revise and fund the radiological and emergency response plan, required by 10 CFR 50.33(g).

10 CFR 50.33(g) requires an applicant to submit radiological emergency response plans as part of its application. In Application Section G, "Emergency Preparedness," (Application, p 9), Applicants make clear they intend to rely exclusively on the existing plans: "No substantive changes will be made to the existing Palisades

Emergency Plan nor will there be any immediate changes to the existing Emergency Response Organizations as a result of proposed license transfer."

Petitioners reviewed a copy of the Site Emergency Plan ("SEP") produced by Consumers in the MPSC proceeding.

In light of the financial concerns raised by Petitioners' expert (Sections D-1 and D-2 above, and Sansoucy Report, *passim*), Petitioners reasonably believe that ENP/ENO will be unable to adequately revise and fund the SEP. Given the stepped up level of both ENP/ENO and governmental participation that is expected going forward, additional financial resources will be required to provide adequate nuclear emergency staffing, personnel, and materials. (Sansoucy Report, p 10)

As expressed by Petitioners' expert: "This stepped up involvement by Entergy, both financially and materially, is expected to place additional financial pressure on Entergy's annual operating costs required for emergency planning, and increase financial sensitivity of this transaction." (Sansoucy Report, p 10.) Petitioners' expert specifies two ways that a review and revision to the SEP would have financial consequences for ENP:

First, the review itself would incur a cost over and above those assumed in the proposed PPA. Second, we believe the review is likely to indicate a need for revision of the SEP, given the population diversity and increase in the affected region, the population diversity and potential language barriers, an increase in the complexity of recreational demographics in the three affected counties, and an across the board modernization of radiological plume monitoring, communication systems, transportation assets, and safety equipment. These potential costs will also likely include additional planning costs, equipment costs, training and administrative costs, legal costs, and costs associated with the public review process. (fn omitted; Sansoucy Report, p 10.)

The deficiencies of the Application with respect to required radiological emergency plan constitute grounds for the Commission to reject the Application. In the alternative, the Commission should require the submission of further information from Applicants regarding how ENP/ENO will adequately revise and fund the SEP. Disputed factual questions with respect to this information go to the heart of whether the Applicants are in compliance with the Commission's regulations, and are plainly admissible.

III. REQUEST FOR HEARING.

Petitioners incorporate by reference all of the foregoing as though set forth herein in its entirety. Fed R Civ P 10(c).

The burden of proof (the risk of non-persuasion) with regard to whether the license should transfer is on Applicants in these proceedings. 10 CFR 2.325.

A. <u>Type of Hearing - Subpart M.</u>

The hearing on the License Transfer Proceedings should be conducted pursuant to 10 CFR Subpart M: "Proceedings on an application for the direct or indirect transfer of control of an NRC license which transfer requires prior approval of the NRC under the Commission's regulations, governing statutes or pursuant to a license condition shall be conducted under the procedures of subpart M of this part, unless the Commission determines otherwise in a case-specific order." 10 CFR 2.310(g).

A fair hearing is required: the Presiding Officer is to "develop a record that will contribute to informed decisionmaking." 10 CFR 2.1320(a). The examination of Petitioners' contentions and Issues for Hearing are central to ensuring that the fair and

appropriate record is developed. There is no other party who can fully represent Petitioners' unique concerns and issues.

B. <u>Petitioners' Issues for Hearing</u>.

Petitioners hereby incorporate by reference for all purposes all assertions and contentions contained in the other sections of this filling, as though set forth herein in their entirety. Fed R Civ P 10(c).

The instant License Transfer Proceeding is unique because it includes the transfer of a facility (Big Rock ISFSI) that has been shut down and in "safe storage" mode since 1997. Big Rock ISFSI is not generating any electrical power and constitutes a liability, rather than an asset. What is more, the proposed buyer, ENP, will have the legal obligation of maintaining the site, protecting against radiation exposure, and planning for the ultimate decommissioning of this facility.¹⁴

Furthermore, the transfer of Palisades poses unique problems because the pool for spent nuclear fuel only has sufficient capacity to accommodate additional spent fuel assemblies until 2012 (Enclosure 9). The problem of capacity to dispose of spent fuel assemblies would arise regardless of whether the facility were owned by the present owner, Consumers, or transferred to Applicants. However, Petitioners respectfully maintain that if the facility is to be transferred, that the proposed new owner, ENP, must, as part of the transfer application, describe the measures that it intends to use to address the storage adequacy issue, and to demonstrate that it has the financial and

¹⁴ The governing purchase and sale documents for the Big Rock ISFSI transaction have not been provided as part of the materials in the Palisades transaction, though they probably should have been, given that Applicants are treating both transactions as combined and conditioned one upon the other. Petitioners base their contentions and concerns in this regard upon references made in the Palisades documents that have been produced with the NRC and MPSC Applications.

technical capability to do so. This is especially true since ENP (unlike the present owner, Consumers) is not a public utility and may not be subject to regulation, or may be subject to lightened regulation, by the Michigan Public Service Commission.

Petitioners seek to litigate issues pertaining to: (1) whether the application submitted contains the requisite information under 10 CFR 50.33, 50.34, 50.75, 50.80, and related sections; (2) whether the Applicants have the financial ability to operate Palisades; (3) whether the Applicants have provided adequate financial security for the ultimate decommissioning of Palisades, pursuant to the requirement of 50.75(e); (4) whether Applicants will be able to continue to operate at Palisades after 2012 when Palisades will run out of on-site storage for SNF; (5) whether ENP/ENO will be able to adequately fund and maintain the emergency radiological plans and required equipment, personnel, etc.; and (6) whether the proposed transfer is inimical to the public health and safety.

Petitioners respectfully request hearing of the issues detailed in Petitioners'

Contentions, Section II, above (incorporated herein by reference), and reserve their right to supplement or amend this request in a timely manner once Petitioners receive the critical redacted information and documents.

IV. REQUEST FOR EXTENSION OF TIME

Petitioners incorporate by reference all of the foregoing as though set forth herein in its entirety. Fed R Civ P 10(c).

In light of the deficiencies and the redacted information, Petitioners also request an extension of time within which to request, receive and review critical information and amend or supplement Petitioners' contentions and/or Request for Hearing. As detailed above, the Application is deficient both in terms of the information and materials provided, and in terms of information and materials which are redacted, withheld, or which lack adequate support.

Petitioners require additional time to amend, supplement or augment the petition to intervene and request for hearing submitted herein for several reasons. First and most important, the information that has been redacted by the Applicants "is not available in public sources and could not be gathered readily from other publicly available information." C. Randy Hutchinson Affidavit submitted with NRC Redacted Application. The redacted documents and information relate to the financial condition, financial status, financial projections, and business outlook and relationship of, and by and between, (1) Entergy Nuclear Palisades, LLC, (2) Entergy Nuclear Operations, Inc., (3) other Entergy Corporation entities; and (4) Palisades Nuclear Plant.

The insufficiently detailed information and withheld/redacted documents relate also to public health and safety concerns raised by the proposed sale and purchase of Palisades assets between Consumers and ENP, and to the disposition of Qualified and Non-Qualified Decommissioning Trust Funds currently held by or on behalf of Consumers. (See, for example, Enclosure 1 - Attachment B, [Proposed Change to Technical Specifications], Enclosure 3 [Operating Agreement between ENP and ENO], and Enclosure 7 [Projected Financial Statement for ENP], and portions of p 8 [pertaining to capacity factor and projected power sales], which are redacted).

This information bears directly upon the Applicants' ability to show its financial qualifications to safely operate and maintain a nuclear power facility. 10 CFR 50.33(f). It also bears directly upon the Applicants' ability to show financial assurances of having

the funds necessary to decommission the site. 10 CFR 50.33(k)(1); 50.75. Given that the only source of revenues for the maintenance and operation of Palisades (and, possibly, for the maintenance of the Big Rock ISFSI) will be those revenues generated by Palisades, the financial projections for Palisades warrant careful scrutiny.

This request for extension of time is necessary as it will allow Petitioners to modify or augment their proposed issues for hearing and/or contentions after consideration of information that this Commission is authorized to require of Applicants (10 CFR 50.33(f)(4)) and of information that is currently being gathered in separate proceedings. The separate proceedings relating to this proposed transfer are: (1) the proceeding before this Commission of Applicants' request to transfer the license of the Big Rock ISFSI; (2) the proceeding before the MPSC for permission for the sale and transfer of Palisades assets; and (3) the proceeding before the Federal Energy Regulatory Commission ("FERC"), Case No. EC06-155000 ("Multiple Proceedings"). What is more, the Applicants have sought a Private Letter Ruling from the IRS, which bears upon the amounts from the decommissioning trust funds that will be released to Consumers.

In the MPSC case, a procedural schedule has been established calling for (1) submission of direct testimony by 12/20/06; (2) rebuttal testimony by 1/8/07; (3) motions to strike by 1/9/07; (4) hearings during 1/16-1/26/07; (5) submission of briefs by 2/9/06; and (6) submission of reply briefs by 2/20/07. In the FERC proceeding, Applicants were issued a deficiency letter on November 21, 2006. In the Big Rock ISFSI termination proceeding, the Commission action is ongoing, however, it is anticipated that it will not be concluded until sometime in 2007.

All of the Multiple Proceedings must be resolved by action favorable to the Applicants for any closing to occur on the proposed sale and purchase of Palisades and the Big Rock ISFSI. Hence, the request by Applicants for Commission action by early February, 2007 (to permit a proposed closing of March 7, 2007) is optimistic at best and should not influence the Commission in granting Petitioners' request for additional time. ¹⁵

Petitioners further submit that the requested extension of time is necessary to avoid being forced to make mere "notice pleadings," which will not satisfy the Commission's requirements. See Power York, 52 NRC 266, 2000 WL 1803178, WL p 9; Niagara Mohawk Power Corp, (Nine Mile Point, Units 1 and 2), CLI-99-30, 50 NRC 333, 342 (1999). The requested extension of time is not a request to defer Commission action until the other Multiple Proceedings are concluded. Instead it will facilitate an effort by Petitioners to gather information not readily available to the public that is expected to shed some light on the adequacy of the License Transfer Application to support a claim that ENP/ENO can safely own, operate and maintain the plant.

On a related issue, Petitioners object to the Applicants' designation of the redacted information as confidential or proprietary, and request that the Commission

¹⁵ The "Model Milestones for a Hearing on a Transfer of a License Conducted Under 10 CFR Part 2" (10 CFR Appendix B to Part 2) make clear that it is optimistic at best (and unrealistic as most likely) that such a time frame will be met. For example, if any one of a number of assumptions built into these Milestones is not met, the proceeding could well extend beyond the Applicants' requested date.

¹⁶ Commission determination that the pendency of parallel proceedings before other forums is not adequate grounds to stay a license transfer adjudication. Citing <u>Niagara Mohawk Power Corp.</u>, supra, pp 343-44.

direct that the information be made available to Petitioners. If the Commission decides, however, that the redacted information is confidential or proprietary, Petitioners may still obtain copies of the information/documents (or view same *in camera*), subject to a protective order.¹⁷ 10 CFR 2.309(f)(2) clearly contemplates that there will be occasions when applicants do not provide adequate information or documents, and that additional or amended contentions will need to be filed. Likewise 10 CFR 9.17, 2.390(a)(4), and related sections, demonstrate that information or documents that might originally be withheld or redacted, shall later be provided. 10 CFR 2.332 (regarding the presiding officer's setting a scheduling order), also shows that modifications of times for discovery and other scheduling matters will need to be addressed given the particular circumstances of each application.¹⁸

The foregoing demonstrates the discretion the Commission has in setting schedules, ordering discovery, and ordering disclosure of documents and information withheld on grounds of confidentiality or privilege. This discretion is augmented by Commission policy of ensuring that a fair hearing is had and that a thorough record is made, upon which the Commission can make its determination. 10 CFR 2.1320(a).

¹⁷ Pursuant to 10 CFR 2.390(b)(2): "A person who submits commercial or financial information believed to be privileged or confidential or a trade secret shall be on notice that it is the policy of the Commission to achieve an effective balance between legitimate concerns for protection of competitive positions and the right of the public to be fully apprised as to the basis for and effects of licensing or rulemaking actions,..." The regulations make clear that it is within the discretion of the Commission to determine that the right of the public "outweighs the demonstrated concern for protection of a competitive position..." 10 CFR 2.390(b)(5). If the Commission agrees to protect information from public disclosure, that "does not affect the right... of persons properly and directly concerned to inspect the document." 10 CFR 2.390(b)(6).

¹⁸ Motions for extension of time are contemplated by the regulations governing Commission proceedings. (See 10 CFR 2.346(b), for example).

In light of the deficiencies with the Application and the redacted information

Petitioners request that as the Commission prepares to set deadlines in this matter, that such deadlines be set mindful of the fact that Petitioners must be allowed time to obtain unredacted copies of the transfer application and the other materials specified in Petitioners' Request for Discovery (incorporated herein by reference), as well as any materials that the Commission may require the Applicants to provide and/or that become known to Petitioners through discovery in this proceeding.

Petitioners' requests for hearing and for leave to intervene raise issues that implicate the public health and safety. Without the redacted/withheld information and documents, Petitioners' efforts to prepare testimony, supporting affidavits and other materials that may be required to supplement the Petitioners' Petition to Intervene and Request for Hearing, are hindered. As the Commission has noted:

Subpart M calls for "specificity" in pleadings. See Northeast Nuclear Energy Co. (Millstone Nuclear Power Station, Units 1, 2, and 3), CLI-00-18, 52 NRC 129, 131-32 (2000). However, in the unusual setting here, where critical information has been submitted to the NRC under a claim of confidentiality and was not available to petitioners when framing their issues, it is appropriate to defer ruling on the admissibility of an issue until the petitioner has had an opportunity to review this information and submit a properly documented issue.

Power Authority of the State of New York, CLI-00-22, 52 NRC 266, (11/27/00 Commission Order, fn 23).

The reasonableness of a request, such as Petitioners', for additional time to formulate *de novo* issues for hearing after receipt of redacted information, has previously been recognized. See the 2/5/01 ALJ Order in the IP3-FitzPatrick transfer proceeding, in which the ALJ determined, in a challenge by the applicant to the submission of issues after receipt of redacted information:

In determining the acceptability of this proposed issue or contention, I differ in certain respects from the premises that the Licensees read as incorporated into CLI-00-22. In particular, I believe that the Commission perceived access to proprietary data as necessary to formulate a contention challenging the cost and revenue projections of the Licensees. . the Intervenor could not have been able to formulate the entire issue or to have determined whether certain of its claims incorporated therein are meaningful without at least having had access to the proprietary data. In [the words of the Intervenor, CAN], "[t]he issues CAN raised which were not based directly on proprietary information were pertinent either (1) because their full significance could not be ascertained independently of the proprietary information that was only recently provided . . . ; or (2) because the non-proprietary information is necessary to understand whether the proprietary information provides reasonable financial assurance to warrant approval of the applications." (Emphasis added.)

Power Authority of the State of New York, CLI-00-22, 52 NRC 266.

For all the foregoing reasons, Petitioners respectfully request an extension of time within which to amend or supplement contentions (and/or to formulate new contentions) and/or to amend or supplement Petitioners' request for hearing.

V. REQUEST FOR DISCOVERY.

Petitioners incorporate by reference all of the foregoing as though set forth herein in its entirety. Fed R Civ P 10(c).

Petitioners are aware that they will be entitled to mandatory discovery pursuant to 10 CFR 2.324. Petitioners submit this request for discovery, however, to detail the information and documents that should specifically be requested of Applicants, based upon their filings with the Commission. Petitioners may seek to amend or supplement their discovery requests, depending upon any answer filed by Applicants to Petitioners' filings as well as upon documents and information that may be provided, or ordered to be disclosed by the Commission, as this matter proceeds.

- A. Specific items requested by Petitioners:
- 1. Enclosures 1, 3 and 7 to Applicants' NRC Application and a portion of page 8 of the NRC Application, with table.
- 2. The Decommissioning Trust Fund Trust documents and assets/liabilities documents referenced at Section 4.17(e) of the ASA. (See ASA, pp 48-49, 78 and 83.)
- 3. All detailed cost estimates and assessments, including actuarial growth estimates for the various options to decommission the Palisades Nuclear Plant site, the Palisades Nuclear Waste Storage, and the Big Rock ISFSI.
- 4. All documents relating to the offered Line of Credit for \$25 million referenced by ENP.
- 5. Palisades' operating cost projections for the next 20 year planning horizon.
- 6. All Palisades' capital cost projections for the next 20 year planning horizon.
- 7. All Palisades' nuclear fuel delivered fuel costs for the next 20 year planning horizon.
- 8. All Palisades' revenue projections, including electric revenue, PPA revenue, ancillary services revenue and anticipated uprate revenue.
 - 9. All financial statements for ENP/ENO.
 - 10. ENO's operating history at other nuclear power plants.
- 11. The following documents referenced in the Site Emergency Plan at page 1 of 2 and page 2 of 2:
 - (a) Palisades Emergency Implementing Procedures.

- (b) Palisades Safeguards Contingency Procedures.
- (c) Palisades Health Physics Procedures.
- (d) Palisades Emergency Operation Procedures.
- (e) Palisades Emergency Fire Protection Plan.
- (f) Palisades Administrative Procedure 4.00, "Operations,Organization, Responsibilities and Conduct."
- (g) NUREG-0654, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Procedures in Support of Nuclear Power Plants" (November 1980).
- (h) NUREG-0696, "Functional Criteria for Emergency Response Facilities" (February 1981).
- (i) EPA 400-R-92-001, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents".
- (j) Palisades Nuclear Plant Emergency Public Information Policies and Procedures.
- (k) Michigan Emergency Management Plan.
- (I) Palisades Meterological Monitoring Plan.
- (m) NRC Bulletin 2005-02: Emergency Preparedness and Response Actions for Security Based Events.
- (n) NEI White Paper dated November 18, 2005, "Enhancements to Emergency Preparedness Programs for Hostile Action." (Endorsed by NRC RIS 2006-12).

VI. CONCLUSION AND RELIEF SOUGHT

For the foregoing reasons, Petitioners request that the Commission admit the Contentions detailed herein (based upon available information and documents) and grant Petitioners' request for hearing. Petitioners also request that the Commission agree to permit Petitioners to file amended/supplemented or new contentions and request for hearing after Petitioners have had time to review the complete (unredacted) Application and Applicants' provision of redacted information and their submission of additional information required by the Commission. Without that information, Petitioners respectfully submit that they are hindered from detailing issues that are germane to the inquiry of whether Entergy Nuclear Palisades, LLC has the funds necessary to operate and maintain the Palisades plant safely, within the meaning of 10 CFR 50.33(f)(2), 50.33(f)(3) and 50.80(b), and whether it has provided financial assurance of adequate decommissioning funding, pursuant to 10 CFR 50.33(k)(1) and 50.75, among the other issues listed above.

However, Petitioners respectfully submit that there are significant issues set forth in Petitioners' contentions which should be deemed admissible given the limited information available to Petitioners. Further, Petitioners respectfully maintain that they should have an opportunity to review the redacted financial information pursuant to a negotiated protective order, and should be entitled to discovery with respect to the issues described above.¹⁹

¹⁹ This relief is consistent with the Commission's ruling in <u>Power Authority of the State of New York</u>, CLI-00-22, 52 NRC 266, which provided that "We also recognize that the lack of access to the applicants' full financial information could affect [Petitioners'] ability to present their substantive case at the hearing." (WL p 7).

Pursuant to 10 CFR 2.309, 2.307, 2.336, and 10 CFR Part 2, generally, the Local Units respectfully seek the Commission's approval of their joint Petition for Leave to Intervene, Request for Hearing, and Request for Discovery and Extension of Time.

Respectfully submitted,

EWIS, REED

Ву:

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ENCLOSURE 1

PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

Docket No. 50-255

UNITED STATES OF AMERICA BEFORE THE NUCLEAR REGULATORY COMMISSION

In the Matter of

CONSUMERS ENERGY COMPANY, NUCLEAR MANAGEMENT COMPANY, LLC and ENTERGY NUCLEAR PALISADES, LLC and ENTERGY NUCLEAR OPERATIONS.

Docket No. 50-255

(Palisades Nuclear Plant, License No. DPR-20)

AFFIDAVIT OF GEORGE E. SANSOUCY
IN SUPPORT OF PETITION BY VAN BUREN COUNTY, COVERT TOWNSHIP,
COVERT PUBLIC SCHOOLS, VAN BUREN COUNTY INTERMEDIATE SCHOOL
DISTRICT, VAN BUREN COUNTY DISTRICT LIBRARY, LAKE MICHIGAN COLLEGE
AND SOUTH HAVEN HOSPITAL (COLLECTIVELY REFERRED TO AS "LOCAL
UNITS") FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING,
REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

STATE OF	NEW HAMPSHIRE)
0	Coos) ss.
County of _		_)

GEORGE E. SANSOUCY, being first duly sworn, deposes and states:

- 1. That I am a professional engineer and the Owner/Member of George E. Sansoucy, P.E., L.L.C., 32 Nimble Hill Road, Newington, New Hampshire.
- 2. That I and my company have been retained by Van Buren County, Covert Township, Covert Public Schools, Van Buren County Intermediate School District, Van Buren County District Library, Lake Michigan College and South Haven Hospital (collectively referred to as "Local Units") to review the Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, filed under Docket No. 50-255, License No. DPR-70 ("Application").
- 3. That I have reviewed the Application, and other documents publicly available.
- 4. That attached to this Affidavit is a report of my findings, conclusions and opinions regarding the issues addressed by the Petition to Intervene and related pleadings.
- 5. That the attached report, and the statements made therein, are true and correct to the best of my knowledge, information and belief.

George E. Sansoucy

Subscribed and sworn to before me this 15t

_ day of <u>December</u>, 2006.

 $\frac{2005}{200}$ County, New Hampshire

My commission expires: 6/1/2010

SUSAN SPEARIN, Natury Public My Commission Expires 6412010



REVIEW AND ANALYSIS OF:

REDACTED COPY,
APPLICATION FOR ORDER
AND CONFORMING LICENSE AMENDMENT
FOR LICENSE TRANSFER
PALISADES NUCLEAR PLANT
DOCKET NO. 50-255
LICENSE NO. DPR-20

Prepared for: Richard D. Reed, Esq. Lewis Reed & Allen, P.C. 136 East Michigan Ave., Suite 800 Kalamazoo, MI 49007-3975

Prepared by: George E. Sansoucy, P.E., LLC 32 Nimble Hill Road Newington, New Hampshire 03801

December 1, 2006



George E. Sansoucy, PE, LLC

Engineers & Appraisers

December 1, 2006

Richard D. Reed, Esq. Lewis Reed & Allen, P.C. 136 East Michigan Ave., Suite 800 Kalamazoo, MI 49007-3975

RE: Review and Analysis of Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20

Dear Mr. Reed:

Per your request, please find enclosed our review and analysis of the "Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20."

If you have any questions, please do not hesitate to call.

Very truly yours,

GEORGE E. SANSOUCY, P.E., LLC

George E. Sansoucy

ges/dal attachment

I. Introduction and Scope	1
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List of Attachments

Attachment 1	Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pg. 6.
Attachment 2	Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pg. 7.
Attachment 3	Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pg. 9.
Attachment 4	John J. Reed Testimony, MPSC Case No. U-14992, Exhibit A-7.
Attachment 5	Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, Enclosure 8, Exhibit A, PPA.
Attachment 6	John J. Reed Testimony, MPSC Case No. U-14992, pg. 36.
Attachment 7	John J. Reed Testimony, MPSC Case No. U-14992, pg. 37.
Attachment 8	Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pg. 9.
Attachment 9	David W. Joos Testimony, MPSC Case No. U-14992, pg. 13.
Attachment 10	David W. Joos Testimony, MPSC Case No. U-14992, pg. 14.
Attachment 11	Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pg. 10.
Attachment 12	Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket

No. 50-255, License No. DPR-20, pg. 11.

- Attachment 13 Concentric Energy Advisors, Confidential-Draft, October 27, 2005, pg. 28.
- Attachment 14 John J. Reed Response to Local Units' Fourth Request from Discovery, Question 1 (14992-LU-C (Attachment 14).
- Attachment 15 TLG Services, Inc. *Palisades Nuclear Plant Decommissioning Alternatives*, Document N30-1557-002, Rev. 0, Page 2 of 53
- Attachment 16 John J. Reed Response to Local Units' Fourth Request from Discovery, Question 3 (14992-LU-CE-71), pg. LU-D-376, dated October 2, 2006
- Attachment 17 Asset Sales Agreement By and Among Consumers Energy Company, As Seller and Entergy Nuclear Palisades, LLC As Buyer dated as of July 11, 2006, pg. 5

At your request, GES Engineers & Appraisers (GES) has undertaken a review of the "Redacted Copy, Application for Order and Conforming License Amendment for License Transfer, Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20" (Application), and several other publicly available documents relative to this transaction and the entities to the transaction. The purpose of our review and analysis was to provide our opinion and recommendation with respect to the impact of the license transfer on public health and safety.

On July 11, 2006, Consumers Energy Company (Consumers), the sole owner of the Palisades Plant (Palisades), entered into an Asset Sale Agreement (ASA) under which it will sell its interest in Palisades and the Big Rock Point Independent Spent Fuel Storage Installation (the Big Rock ISFSI) to Entergy Nuclear Palisades (ENP).

Upon regulatory approval and closing, ENP will take title to Palisades and, among other things, all used and spent nuclear fuel and other licensed nuclear materials at Palisades, and Entergy Nuclear Operations (ENO), through its authorized agent, will assume all operating responsibility. The specific details surrounding this transaction are found in the ASA, which is Enclosure 2 to the Application.

The documents reviewed and considered in our analysis include only the publicly available information surrounding the sale and entities involved in the license transfer. A summary of those documents include:

- Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20
- Filings with the Michigan Public Service Commission (MPSC) in Case No. U-14992
- Code of Federal Regulations (CFR) relative to the license transfer
- Nuclear Regulatory Commission (NRC) order relating to other

Relevant portions of the specific documents utilized are referenced below as applicable and, if not included as part of the Application, are included in this report as Attachments.

The following is a summary of our opinions and recommendations relative to the impact the transfer of the Palisades license will have on the public health and safety. Our concerns fall into four categories, which include:

- 1. The redaction of material critical to a thorough review of the information contained within the application.
- 2. That ENP and ENO will not be able to satisfy their obligation with respect to the operation of Palisades due to potential revenue shortfalls, which are discussed below.
- 3. That the referenced line of credit available to ENP and ENO will not be sufficient to overcome revenue shortfalls.
- 4. That the decommissioning funds transferred to ENP by Consumers are below market norms and the NRC minimum amounts presented in the Application are below those estimated by Consumers in other public documents.

These concerns are all addressed in the following sections, which include a more thorough analysis of how they impact the license transfer.

The Application has been redacted of certain financial and other information that ENP and ENO are relying upon to demonstrate their collective qualifications to assume responsibility for operating and decommissioning the Palisades plant. A review of this information is impossible and therefore our ability to comment upon the reasonableness of ENP's and ENO's claims are equally as impossible. For a complete analysis of ENP's and ENO's financial qualifications and ability to meet their obligations with respect to Palisades and public health and safety, it is imperative to review and analyze the redacted material.

We recommend that the list of redacted materials should include, but not be limited to, the following:

NRC Application

"A portion of pages CE-P-23 of the Application, containing a Table of projected power sales"

NRC Application, Enclosure 1

"Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20"

NRC Application, Enclosure 1 – Attachment A

"Proposed Changes to Facility Operating License Regarding Palisades Nuclear Plant Application for License Transfer"

NRC Application, Enclosure 1 - Attachment B

"Proposed Change to Technical Specifications Regarding Palisades Nuclear Plant Application for License Transfer"

NRC Application, Enclosure 3

"Operating Agreement for Palisades Nuclear Power Station"

NRC Application, Enclosure 7

"Projected Financial Statement for Entergy Nuclear Palisades, LLC"

Other Documents

"All bid information submitted by bidders for the Palisades site, in response to CEA's Confidential Offering Memorandum"

- "The Decommissioning Trust Fund Trust documents and assets/liabilities documents referenced at Section 4.17(e) of the ASA. (See CE-P-104-105 and CE-P-134, 139)"
- "All cost assessments of decommissioning both Palisades and the Big Rock ISFSI"
- "Documents relating to the Line of Credit for \$25 million referenced by ENP"
- "Palisades' Costs Projections"
- "Palisades' Revenue Projections"
- "Financial Statements for ENP and ENO"
- "ENO's operating history at other nuclear power plants"

The following concerns in this report are based upon our review of publicly available information relative to the transaction. We recommend that you seek access to the redacted and confidential material. Access to the confidential material will make possible a complete review of the claim and assertions presented in the Application by ENP and ENO with respect to their ability to safely maintain, operate and decommission Palisades.

ENP must demonstrate its Financial Qualifications to obtain authority for the license to Palisades. According to the Application, "Entergy Nuclear Palisades is a newly formed entity, and either through a parent or affiliate company, will provide the funds necessary to purchase Palisades. Entergy Corporation has unconditionally guaranteed payment of the purchase price and performance under the ASA, at or prior to closing. At the closing of the purchase, Palisades and the Big Rock ISFSI will be the only assets on ENP's balance sheet." ENP and ENO seek to establish Financial Qualifications by demonstrating that ENP and ENO will have sufficient funds necessary to operate Palisades based upon the PPA they entered into with Consumers. In the PPA, ENP will sell 100% of the total energy of Palisades at a fixed price for 15 years after the closing of the sale of Palisades.²

In the Application, ENP and ENO make several representations as to their Financial Qualifications to safely operate Palisades. These assurances are based upon the following:

- 1. The projected financial forecast for ENP, for the period 2007-2012, relies upon the contract price ENP will receive for the sale of power being greater than its cost of ownership. The cost of ownership is assumed to reflect Palisades operating at an average capacity factor of 88.6% or higher, based on representations in the Application.
- 2. ENP and ENO claim to have access to a \$25 million line of credit from Entergy Corporation, or another affiliate company. According to the Application, "This line of credit will provide working capital, if necessary, for the operation and maintenance of the plant."³

It was impossible to review the financial forecasts for ENO's operation of Palisades and the corresponding revenue it would generate because this information was redacted in the Application. Notwithstanding our inability to review this information, we did review comparable information submitted by Consumers with respect to the transfer of Palisades to ENP presented in MPSC Case No. U-14992. We compared the contract price of power Consumers will pay ENP with Consumers' expected Cost of Continued Ownership (CCO). This information was presented to the MPSC to support Consumers' claim that the sale is in the best interest of Michigan ratepayers.

¹ Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pgs. 6-7 (Attachments 1 and 2).

² Ibid, pg. 7 (Attachment 2).

³ Ibid, pg. 9 (Attachment 3).

⁴ While ENP and ENO may anticipate different costs of operation, it is impossible to explore the difference as the information in the Application before the NRC is redacted. Therefore, one is left with Consumers' estimate of CCO which is considered a reasonable estimate of Palisades' future operation due to the fact that it is being transferred at approximately net book value.

A. Revenue Shortfall Under the PPA

A review of this information demonstrates that the projected CCO of Palisades (as forecasted by Consumers) exceeds the projected revenue, in eleven of the fifteen years of the PPA. This is demonstrated in Table 1, which was developed from information in MPSC Case No. U-14992. The "Revenue Minus Cost" shown in Column 7 of Table 1 measures the amount by which the projected CCO exceeds the projected PPA revenue in a given year. Of particular note is the fact that a shortfall exists in the last <u>seven</u> consecutive years of the term, and in nine of the last 10 years of the 15-year term of the PPA.

The review of this data shows (see Table 1) a 15-year overall shortfall in excess of \$195 million (in present value dollars) using the discount rate presented in the MPSC Case, with an overall -13.31% margin of shortfall, over the 15-year PPA term. This alone should be sufficient grounds to question ENP's and ENO's Financial Qualifications to safely own and operate the facility

Table 1 Comparison of Cost of Continued Ownership (CCO) vs. Revenue Under Power Purchase Agreement (PPA)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
				"Revenue"	"Cost"	"Margin"		
							"Margin"	Years
					Raw	"Revenue"	as % of	In Which
			Raw	PPA	cco	Minus	Raw CCO	"Costs"
	Production	PPA	cco	Total Cost	Total Cost	"Cost"	Total Cost	Exceed
Year	GWh	\$/MWh	\$/MWh	(x\$1,000)	(x\$1,000)	(x\$1,000)	(x\$1,000)	"Revenues
2007	5,876	\$43.50	\$39.01	\$255,588	\$229,234	\$26,354	11.50%	
8002	6,587	\$44.00	\$31.83	\$289,819	\$209,686	\$80,133	38.22%	
2009	5,324	\$44.50	\$49.84	\$236,910	\$265,348	(\$28,438)	-10.72%	x
2010	5,876	\$45.75	\$47.27	\$268,808	\$277,739	(\$8,931)	-3.22%	×
2011	6,567	\$47.00	\$40.05	\$308,664	\$263,018	\$45,646	17.35%	
2012	5,885	\$48.25	\$52.46	\$283,975	\$308,724	(\$24,749)	-8.02%	x
2013	5,876	\$49.00	\$54.81	\$287,904	\$322,022	(\$34,118)	-1 0.59%	x
2014	6,567	\$50.00	\$45.49	\$328,366	\$298,727	\$29,639	9.92%	
2015	5,866	\$51.00	\$57.69	\$299,167	\$338,407	(\$39,240)	-11.60%	x
2016	4,908	\$52.50	\$84.88	\$257,670	\$416,573	(\$158,903)	-38.15%	×
2017	6,567	\$54.00	\$64.42	\$354,635	\$423,093	(\$68,458)	-16.18%	x
2018	5,866	\$55.50	\$79.90	\$325,564	\$468,709	(\$143,145)	-30.54%	x
2019	5,876	\$57.00	\$81.27	\$334,908	\$477,484	(\$142,576)	-29.86%	x
2020	6,587	\$58.50	\$69.96	\$385,327	\$460,804	(\$75,477)	-16.38%	x
2021	5,866	\$60.00	\$87.18	\$351,961	<u>\$511,426</u>	(\$159,465)	-31.18%	<u>x</u>
				\$4,569,266	\$5,270,994	(\$701,728)		n = 11
						•		
т	otal 15-Year N	PV 1/1/07	@ 9.17%:	\$2,339,427	\$2,535,420	(\$195,993)		
	Diff	erential 1/	1/07 NPV I	Escalated to N	March 1 2007	(\$198.881)		

15-Year "Margin" as % of 15-Year Raw CCO Total Cost: -13.31%

Source/Notes:

- (1) Calendar years 15-year PPA term.
- (2) John J. Reed Testimony, MPSC Case No. U-14992, Exhibit A-7 (Attachment 4).
- (3) Review of Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, Enclosure 8, Exhibit A, PPA (Attachment 5).
- (4) John J. Reed Testimony, MPSC Case No. U-14992, Exhibt A-7 (Attachment 4).
- (5) Col (2) x Col (3).
- (6) Col (2) x Col (4).
- (7) Col (5) Col (6).
- (8) Col (7) / Col (6).
- (9) when Col (7) < 0.

B. Insufficient Line of Credit

Even though ENP and ENO will have access to a \$25 million line of credit, this amount is insufficient to cover the potential revenue shortfall, considering that the figures in Table 1 indicate a combined shortfall of \$37 million for the years 2009 and 2010. This shortfall alone exceeds the \$25 million line of credit from Entergy Corporation or its affiliate. In addition, should retained earnings from prior years be transferred to Entergy Corporation or an affiliate and not reserved for ENP and ENO to operate the facility, it will be impossible for ENP and ENO to overcome the overall shortfall of \$700 million.

C. Optimistic Capacity Factor

The financial performance of Palisades cited above will certainly only worsen if the capacity factors used in the financial models turn out to be less favorable than those used in the forecasts. Since it is impossible to know the exact capacity factors assumed in the ENP and ENO financial statements, one has to assume that the capacity factors are at levels consistent with or higher than the 88.6% cited in the Application.

Even according to Consumers' own witness in the proceeding before the MPSC, these capacity factors are at the high end of the range for Palisades. According to John J. Reed (Reed), Chairman and Chief Executive Officer of Concentric Energy Advisors (CEA), the firm conducting the auction on behalf of Consumers, Palisades has achieved this level of capacity factors only in the period 2003 to 2005. Reed also stated that the projected capacity factor of 86.42% he used in calculating the CCO for Consumers was based on the "best three consecutive years of performance in the plant's history." Reed further stated, "I do recognize that the Plant's performance prior to 2003 was significantly (emphasis added) worse than during the 2003-2005 time frame. This most recent three year period was in fact the single best three year period of performance in the Plant's history. This would indicate that projected capacity is clearly towards the upper end of the range of reasonable projections... Normally, I would not want to use the best three years of operating history to extrapolate performance out over the remaining 26 years of operating life. This is especially true here, where much of the Palisades performance improvement can be attributed to Consumers' decision to hire NMC to operate the plant....I should emphasize that the impact of this assumption was to decrease the CCO, and thereby pressure bidders to offer more attractive PPA pricing bids."6

⁵ John J. Reed Testimony, MPSC Case No. U-14992, pg. 36 (Attachment 6).

⁶ Ibid, pgs. 36-37 (Attachments 6 and 7).

As noted above, using a less optimistic capacity factor would result in a higher projected CCO, thus increasing the shortfalls noted in Table 1 and worsening the financial performance of the Palisades plant, especially without some restriction on retained earnings or a more substantial line of credit.

A detailed review of the existing Palisades Site Emergency Plan (SEP) indicates that if the license is to be transferred and extended, as expected by the inclusion of a 15-year power purchase agreement (PPA) in the ASA, then substantive changes will likely be required to the SEP and the Emergency Response Organization going forward. Governmental units affected by Palisades have reviewed Consumers' plan and find that, while the plan may be marginally adequate to complete the remainder of the existing license life and then properly updated for decommissioning and long-term waste storage, the plan is inadequate as a long-term ongoing document with license extension.

It is expected that ongoing ownership and operation of the Palisades nuclear plant will require a stepped up level of both company and governmental participation outside of the plant's control area. Additional resources will likely be required for governmental units to provide adequate nuclear emergency staffing, personnel, and materials required by local governments and assisting agencies and institutions. This stepped up involvement by Entergy, both financially and materially, is expected to place additional financial pressure on Entergy's annual operating costs required for emergency planning, and increase financial sensitivity of this transaction.

A review of the SEP would have financial consequences for ENP in at least two ways. First, the review itself would incur a cost over and above those assumed in the proposed PPA. Second, we believe the review is likely to indicate a need for revision of the SEP, given the population diversity and increase in the affected region, the population diversity and potential language barriers, an increase in the complexity of recreational demographics in the three affected counties, and an across the board modernization of radiological plume monitoring, communication systems, transportation assets, and safety equipment. These potential costs will also likely include additional planning costs, equipment costs, training and administrative costs, legal costs, and costs associated with the public review process.

The costs actually incurred through a SEP revision place more economic pressure on what appears to be an already stressed financial model for ENP under the terms of the ASA and the 15-year PPA. A brief reminder of these financial stresses includes the following: a 15-year revenue shortfall in excess of \$195 million (in present value dollars) including a -13.31% margin, a line of credit limited to \$25 million, and an optimistic capacity factor as described above.

⁷ The U.S. Census Bureau estimates Van Buren County, Michigan population grew by 40.3% between 1970 and 2005 (http://quickfacts.census.gov/qfd/states/26/26159.html; http://www.seta.iastate.edu/census/county/index.aspx?group id=16&state=MI&fips=26159).

In anticipation of decommissioning Palisades, Consumers had maintained qualified and non-qualified Decommissioning Trust Funds (Funds) for the decommissioning of Palisades, collected through the rates it charged its retail customers, in the amount of approximately \$566 million. According to the Application, Consumers will transfer assets of the qualified Funds to a trust established by ENP as of the closing date in an amount of no less than \$250 million, or approximately 44% of Consumers' funds. If license renewal for Palisades is obtained prior to closing, it is estimated that the amounts needed to meet the NRC minimum funding requirement would be \$201 million by March 1, 2007. If license renewal is not achieved by closing, it is estimated that the NRC minimum funding amount would be \$299 million as of March 1, 2007. Should the value of the Funds transferred at closing not meet the NRC minimum funding requirement, Entergy will provide the additional amount through a parent or affiliate guarantee that will meet the requirements of 10 CFR 50.75(e)(1)(iii).

A review of the site-specific decommissioning cost estimates prepared for Consumers with respect to Palisades and the obligations and/or assurances made by ENP and/or ENO with respect to decommissioning the Palisades plant in the ASA makes it evident that the Funds transferred by Consumers to Entergy are insufficient to allow for decommissioning the plant in a safe and timely manner.

A. Transfer is Outside of "Market Norm"

The transaction between ENP and Consumers represents one of the first transactions in which the purchaser of a nuclear facility has not retained all of the decommissioning funds, or where specific language has not been provided that the funds collected by the former owner will be used for decommissioning. This is confirmed by Reed's Testimony in MPSC Case No. U-14992 which states, "Transfer of decommissioning funds at or above the NRC minimum had been the "market norm" in nuclear divestitures until the most recent transaction, Duane Arnold. In the Duane Arnold transaction, the seller transferred significantly less (approximately \$60 million) than the NRC minimum, however the plant had not yet been relicensed. Based on recent transactions overall, approximately \$0.5 million/MW was required in transferred decommissioning funds. CEA projects that the market will require a transfer of

⁸ David W. Joos Testimony MPSC Case No. U-14992, pg. 13 (Attachment 9).

⁹ Ibid, pg. 14 (Attachment 10).

¹⁰ Ibid

¹¹ Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pgs. 10 and 11 (Attachments 11 and 12).

approximately \$400 million in decommissioning funds for Palisades, which is roughly equivalent to Consumers Energy's qualified decommissioning trust fund."¹²

In reviewing the transaction between Consumers and ENP, it is clear that the decommissioning funds are clearly below the "market norm" with just over \$0.3 million/MW being transferred to the newly formed ENP. This situation raises concerns since there is no parent or affiliate guarantee on the decommissioning. This is especially troubling in the case of ENP which, as an LLC, has no assets other than Palisades, but has been burdened with significant liability and no parent guarantee or other surety that the liabilities associated with decommissioning the plant will be met to ensure public health and safety.

B. Conflicting NRC Minimum Funding Requirement

In addition to the \$250 million being below the "market norm" for decommissioning fund transfer amounts, it also appears to be below Consumers' estimate for the amount needed to meet the NRC minimum and well below the ultimate cost of decommissioning Palisades based on the most recent site-specific studies performed by TLG Services, Inc. (TLG).¹³

According to the Application, "If license renewal for Palisades is obtained prior to closing, it is estimated that the amount needed to meet the NRC minimum funding requirement would be \$201 million by March 1, 2007. In that event, the (no less than) \$250 million being contributed to the Decommissioning Trust will exceed the NRC minimum funding requirement. If license renewal is not achieved by closing, it is estimated that the NRC minimum funding amount would be \$299 million as of March 1, 2007. Should the credited value of the funds transferred at closing not meet the NRC minimum funding requirement, Entergy Nuclear Palisades will provide the additional amount through a parent or affiliate guarantee that will meet the requirements of 10 CFR 50.75(e)(1)(iii)." ¹⁴

The estimates provided in the Application and cited above are substantially less than those estimated by Consumers for Palisades as of December 31, 2005 in the MPSC proceeding. In addition, if one escalates the figures used by Consumers to March 1,

¹² Concentric Energy Advisors Confidential-Draft, October 27, 2005, pg. 28 (Attachment 13).

¹³ TLG Services, Inc. Decommissioning Alternatives for the Palisades Nuclear Plant, Document N30-1557-002, Rev. 0, May 2006 and TLG Services, Inc. Decommissioning Cost Study for the Palisades Nuclear Plant, Document N30-1440-004, Rev. 0.

¹⁴ Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pgs. 10 and 11 (Attachments 11 and 12).

2007, the discrepancy widens as shown in Table 2. Since we have not seen the calculations supporting the figures in the Application, it is assumed that the difference is attributed to assumptions used to estimate the NRC minimum. Without access to the calculations used to estimate the amounts in the Application, it is impossible to truly understand the difference. However, based on our review, the estimates set forth by Consumers appear more reasonable.

Table 2
Comparison of NRC Minimum Funding Requirement
(\$ in millions)

Α	В	С	D
	Estimate in Application 3/1/07	Consumers Estimate 12/31/05	Consumers Estimate Adjusted to 3/1/07[1]
NRC Requirement With License Extension	201[2]	221.7[4]	\$226.9
NRC Requirement Without License Extension	299[3]	359.2[4]	\$367.6

Source:

- [1] Column D calculated by applying a 2% annual growth rate to the amounts in Column C, over the period 12/31/05 to 3/1/07.
- [2] Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pg. 10 (Attachment 11).
- [3] Redacted Copy, Application for Order and Conforming License Amendment for License Transfer Palisades Nuclear Plant, Docket No. 50-255, License No. DPR-20, pg. 11 (Attachment 12).
- [4] John J. Reed Response to Local Units' Fourth Request from Discovery, Question 1 (14992-LU-CE-69), pg. LU-D-371, dated October 2, 2006 (Attachment 14).

C. Obligation of ENP to Decommission

The ASA requires ENP to assume full liability for the decommissioning of the Palisades plant, site, and Big Rock ISFSI. The estimated cost of decommissioning the Palisades site alone is significantly more than the current decommissioning funds being transferred, and more than the NRC's minimum funding requirement, based on a site-specific study conducted by TLG in 2006 for Consumers. This study indicates that the "projected cost to decommission the Palisades nuclear unit, assuming operation until 2031, for the prompt dismantling alternative (DECON) is estimated at \$817.8 million,

in 2003 dollars. The associated cost for the deferred dismantling alternative (SAFSTOR), in year 2003 dollars, is estimated at approximately \$1,049.3 million." ¹⁵

Assuming a license extension until 2031, the decommissioning funds necessary under the less expensive DECON method would be approximately \$400 million, assuming a 2% real growth rate and approximately \$300 million assuming a 3% real growth rate.¹⁶

In either instance, the amounts necessary to decommission will exceed the \$250 million to which ENP has access in decommissioning funds, and will certainly exceed the projected revenue, given the PPA shortfalls noted above, without a parent or affiliate guarantee. This shortfall raises serious concerns about ENP's ability to decommission the Palisades site in a timely manner, pursuant to its obligations in the ASA to accomplish the "removal of structures, buried piping, rebar, below grade foundations, paved areas and rubble, and restoration of such Site to an appropriately graded, stabilized and vegetated condition." ¹⁷

If ENP has insufficient funds to decommission as required under the ASA, the potential exists that instead of returning the Palisades site to a restored condition by sometime prior to 2051, as was the proposed schedule for site restoration in the last four TLG studies, ¹⁸ ENP may need to delay site restoration efforts well beyond the point as contemplated by its indication that it may seek a SAFSTOR approach ¹⁹ that could delay final site restoration until 2092 which prohibits the reuse or development of the sale by more than 40 years.

¹⁵ TLG Services, Inc. *Palisades Nuclear Plant Decommissioning Alternatives*, Document N30-1557-002, Rev. 0, Page 2 of 53 (Attachment 15).

¹⁶ John J. Reed Response to Local Units' Fourth Request from Discovery, Question 3 (14992-LU-CE-71), pg. LU-D-376, dated October 2, 2006 (Attachment 16).

¹⁷ Asset Sales Agreement as of July 11, 2006, pg. 5 (Attachment 17).

¹⁸ TLG Services, Inc. *Palisades Nuclear Plant Decommissioning Alternatives*, Document N30-1557-002, Rev. 0, May 2006, TLG Services, Inc. Decommissioning Cost Study for the Palisades Nuclear Plant, Document N30-1440-004, Rev. 0, Decommissioning Cost Study for the Palisades Nuclear Plant, Document No. C07-1388-002, Rev. 0, March 2001, and Decommissioning Cost Study for the Palisades Nuclear Plant, Document No. C07-1267-003, March 1998.

¹⁹ Asset Sales Agreement as of July 11, 2006, pg. 5 (Attachment 17).

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Further contact information for both Consumers and NMC is contained in the attached transmittal letter.

E. Class of Licenses

The Palisades license is a class 103 license. The applicants are requesting a direct transfer of the existing license. A change in the class of the Facility Operating License is not being requested as part of the transfer. Period of time for the license is the same as the existing license DPR-20.

F. Financial Qualifications

Entergy Nuclear Palisades and ENO do not qualify as electric utilities under 10 CFR 50.2; therefore, the following information is provided to demonstrate financial qualifications in accordance with 10 CFR 50.33(f).

As requested by 10 CFR 50.33(f)(3), Entergy Nuclear Palisades 1. and ENO are indirect, wholly-owned subsidiaries of Entergy Corporation. Headquartered in New Orleans, LA, Entergy Corporation is a U.S.-based global energy company with power production, distribution operations and related diversified services. Entergy Corporation owns, manages or invests in power plants generating nearly 30,000 megawatts of electricity. Through its subsidiaries (both regulated and non-regulated). Corporation owns and operates ten nuclear power plants at eight sites - Arkansas Nuclear One Units 1 and 2, Grand Gulf Nuclear Station, River Bend Station, Waterford 3 Nuclear Power Station. Pilgrim Nuclear Power Station, Indian Point Energy Center Generating Units Nos. 1, 2, and 3, James A. FitzPatrick Nuclear Power Station, and Vermont Yankee. Entergy Nuclear also provides management support to the Cooper Nuclear Station. Entergy Corporation distributes energy to more than 2.7 million customers in the U.S. and is among the top ten power marketers in the U.S. As of June 30, 2006, Entergy Corporation had total assets of \$30.6 billion. Enclosed as Enclosure 5 are Moody's and Standard and Poor's bond rating for the past three years demonstrating Entergy Corporation's investment-grade bond ratings.

Entergy Nuclear Palisades is a newly formed entity, and either through a parent or affiliate company, will provide the funds necessary to purchase Palisades. Entergy Corporation has Consumers Energy Company Entergy Nuclear Palisades, LLC Entergy Nuclear Operations, Inc. Nuclear Management Company, LLC Docket No. 50-255 License No. DPR-20

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unconditionally guaranteed payment of the purchase price and performance under the ASA, at or prior to closing. At the closing of the purchase, Palisades and the Big Rock ISFSI will be the only assets on Entergy Nuclear Palisades' balance sheet. As of the date of this application, Entergy Nuclear Palisades has no liabilities. ENO was formed in February 2000 and currently employs approximately 3300 persons at Jackson, Mississippi; Indian Point Units 1, 2 and 3; FitzPatrick Nuclear Power Station; Pilgrim Nuclear Power Station; Vermont Yankee; and White Plains, NY office.

2. information is submitted pursuant The following 10 CFR 50.33(f)(2). Entergy Nuclear Palisades and ENO have assurance of obtaining the funds necessary to cover estimated costs to operate Palisades. Entergy Nuclear Palisades has signed a Power Purchase Agreement with Consumers under which Entergy Nuclear Palisades will sell 100% of the total energy of Palisades at fixed prices for fifteen years after the closing of the sale of Palisades.² After fifteen years, Entergy Nuclear Palisades and ENO may pursue other firm contracts or sell any uncommitted power into the market in Michigan and the surrounding area. The following table provides a summary of the average annual prices and terms of the Power Purchase Agreement through 2012. Since closing is assumed to occur on February 7, 2007, this application provides data through 2012 in order to cover five full years of projections.

Year	Output to Contract%	Contract Price (\$/Mwh)
2007	100	\$43.50
2008	100	\$44.00
2009	100	\$44.50
2010	100	\$45.75
2011	100	\$47.00
2012	100	\$48.25

² Consumers' entitlement under the Power Purchase Agreement does not include capacity that would be available if an uprate is successfully completed at Palisades. Entergy Nuclear retains the right to sell any portion of the output not included in the Consumers entitlement.

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Consumers Energy Company Entergy Nuclear Palisades, LLC Entergy Nuclear Operations, Inc. Nuclear Management Company, LLC

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This line of credit will provide working capital, if necessary, for the operation and maintenance of the plant.

Adequate assurance that the funds to safely operate Palisades will be available has been demonstrated by the five-year projection of income and expenses shown above. The projected financial statement of Entergy Nuclear Palisades is attached as Enclosure 7.

G. Emergency Preparedness

Upon approval of the transfers, Entergy Nuclear Palisades and ENO, as its authorized agent, will assume authority and responsibility for functions necessary to fulfill the emergency planning requirements specified in 10 CFR 50.47(b) and 10 CFR 50, Appendix E. No substantive changes will be made to the existing Palisades Emergency Plan nor will there be any immediate changes to the existing Emergency Response Organizations as a result of proposed license transfer.

Actions necessary to assure continued compliance with emergency planning requirements will be completed on or before the closing. As identified in Section 2.1(q) of the ASA (Enclosure 2), all property and assets used or usable in providing emergency warning or associated with emergency preparedness, and contracts and agreements associated with emergency preparedness, including the Emergency Operations Facility are to be transferred to Entergy Nuclear Palisades at the closing. With respect to existing agreements for support from organizations and agencies not affiliated with Consumers, the appropriate notifications to the parties to assure continued support will be made.

Specific emergency plan and procedure changes to reflect the change in ownership and operation will be handled in accordance with 10 CFR 50.54(q) as required.

H. Facility Alterations

No physical alterations to Palisades are being proposed as a part of the license transfer process. Any future modifications will be performed in accordance with applicable regulatory requirements (e.g., 10 CFR 50.59).

I. Regulatory Agencies Having Jurisdiction

Certain aspects of the sale will require approval, notifications, or filing by either or all parties with, among other agencies, the Federal Energy

Case No. U-14992 Exhibit: A-7 (JJR-5) Witness: JJReed
Date: August, 2006
Page: 1 of 1

n i i Ni i ni		Consumers Energy Projected CCO 5/31/2006													
Palisades Nuclear Plant	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
"Smoothed" CCO (\$/MWh)	\$ 46.06	\$ 47.21	\$ 48.39	\$ 49.60	\$ 50.84	\$ 52.12	\$ 53.42	\$ 54.75	\$ 56.12	\$ 57.53	\$ 58.96	\$ 60.44	\$ 61.95	\$ 63.50	\$ 65.09
"Raw" Current Cost of Operations (\$/MW)	\$ 39.01	\$ 31.83	\$ 49.84	\$ 47.27	\$ 40.05	\$ 52.46	\$ 54.81	\$ 45.49	\$ 57.69	\$ 84.88	\$ 64.42	\$ 79.90	\$ 81.27	\$ 69.96	\$ 87.18
Breakdown of Costs/MWH															
fuel	\$4.08	\$4.74	\$6.39	\$6.24	\$6.66	\$7.16	\$7.32	\$7.35	\$7.35	\$7.57	\$7.79	\$8.03	\$8.27	\$8.52	\$8.77
O&M & Other Costs	\$27.11	\$19.77	\$31.86	\$28.78	\$21.84	\$31.70	\$32.88	\$24.48	\$34.38	\$45.45	\$28.91	\$40.51	\$41.01	\$32.55	\$45.50
Depreciation	\$1.84	\$2.08	\$3.37	\$ 3.70	\$3.62	\$4.42	\$4.92	\$4.81	\$5.88	\$14.84	\$11.67	\$13.75	\$14.65	\$13.83	\$16.51
ROI and Income Taxes	\$ 4.97	\$ 5.25	\$8.22	\$8.55	\$7.93	\$9.18	\$9.68	\$8.85	\$10.08	\$17.02	\$16.05	\$ 17.61	\$17.35	\$15.06	\$16.40
Decommissioning	\$1.02	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Planned MWH Production (000s)	5,876	6,587	5,324	5,876	6,567	5,885	5,876	6,567	5,866	4,908	6,567	5,866	5,876	6,587	5,866
Capital Expenditures (millions of 5)	\$57.4	\$ 75.1	\$111.9	\$48.4	\$ 33.0	\$60.8	\$110.3	\$117.9	\$266.5	\$223.2	\$ 40.5	\$63.7	\$65.9	\$ 44.9	\$70.6
Sapran Experience (minorio or 3)	¥51.4	<i>\$15.</i> 1	\$111.7	¥1014	y ./5.0	400.0	¥110.J	Ψ117.7	\$200. 3	V 22.2	¥10.3	403.7	400.7	4 1112	* 10

EXHIBIT A

Capacity and Energy Charges¹

<u>Year</u>	<u>Capacity</u> <u>Charge (in \$/MWh)</u>	Energy Charge (in \$/MWh)	Total (in \$/MWh)
2007	38.15	5.35	43.50
2008	38.59	5.41	44.00
2009	39.03	5.47	44.50
2010	40.12	5.63	45.75
2011	41.22	5.78	47.00
2012	42.32	5.93	48.25
2013	42.97	6.03	49.00
2014	43.85	6.15	50.00
2015	44.73	6.27	51.00
2016	46.04	6.46	52.50
2017	47.36	6.64	54.00
2018	48.67	6.83	55.50
2019	49.99	7.01	57.00
2020	51.30	7.20	58.50
2021	52.62	7.38	60.00
2022	53.94	7.56	61.50
2023	55.25	7.75	63.00

For each month during the Term, the Capacity Charge and the Energy Charge set forth above shall be adjusted by multiplying the amount of such charge by the applicable Shaping Factor for such month as set forth on <u>Exhibit C</u> hereto.

Within three weeks of the execution of this Agreement, Buyer shall provide a notice to Seller that shall allocate the Total value for each year in the above table as between the Capacity Charge and the Energy Charge, and this Exhibit A shall be modified accordingly.

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outage every 18 months, and a 6.12% monthly forced outage rate for non-refueling outage months (1.84 days/month). We used this capacity factor as the base projected capacity factor for each refueling cycle from 2007 through 2030.

The second step we used to calculate future capacity factor was to add two additional periods of outage time. In 2009, the installation of a new reactor vessel head is assumed to take an incremental 30 days over a normal refueling outage (40 days is assumed for normal refueling outages), for a total of 70 days. The resulting capacity factor for the 2007-2009 three-year period is 84.74%. In 2016, steam generator replacement is assumed. An additional 55 days over a normal planned refueling outage is assumed, for a total of 95 days. The capacity factor for that three-year period is 82.64%. The overall capacity factor for the plant's remaining life, including these outages, is 86.42%.

- Q. Do you believe that an 86.42% capacity factor is a reasonable assumption?
- A. I believe that this is an optimistic, but reasonable, assumption. The main driver of the projected capacity factor in the CCO model is the Plant's performance from 2003-2005. While I believe that an 86.42% projected capacity factor is reasonable, I do recognize that the Plant's performance prior to 2003 was significantly worse than during the 2003-2005 time frame. This most recent three year period was in fact the single best three year period of performance in the Plant's history. This would indicate that the 86.42% projected capacity is clearly towards the upper end of the range of reasonable projections.

From the beginning of 1990 to the end of the most recent RFO #18 (ended May 10, 2006), Palisades achieved a 75.08% capacity factor. The average length of the 11 RFOs since 1990 was 76 days (this includes a 181 day refueling outage in 1990/1991

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during which the steam generator was replaced). The equivalent forced outage rate over the same time period was 10.9%.

From the end of RFO #11 (ended August 21, 1995) to the end of RFO #18, Palisades achieved an 81.82% capacity factor. The average duration of the seven RFOs during this time period was 47.7 days, and the equivalent forced outage rate was 9.7%.

The Plant's capacity factor has improved considerably over the last 16 years and the Plant has performed better over the last three years than in any three year time period in its history. Normally, I would not want to use the three best years of operating history to extrapolate performance out over the remaining 26 years of operating life. This is especially true here, where much of the Palisades performance improvement can be attributed to Consumers' decision to hire NMC to operate the plant. As discussed by Mr. Joos, the NMC would probably not have remained a viable option for Consumers if it had continued to own the plant. However, Palisades recent operating performance has been consistent with the performance improvement achieved at other non-fleet nuclear plants, even though most of these other plants are newer than Palisades. In total, it is my judgment that the capacity factor assumptions we used in the CCO are optimistic, but still within a reasonable range for Palisades' remaining life. I should emphasize that the impact of this assumption was to decrease the CCO, and thereby pressure bidders to offer more attractive PPA pricing bids.

- Q. Please describe the rate base inputs and assumptions used in the CCO.
- A. Assumptions regarding Palisades' rate base are required in order to calculate return on rate base and depreciation expense. Rate base inputs are the sum of four separate rate base elements:

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This line of credit will provide working capital, if necessary, for the operation and maintenance of the plant.

Adequate assurance that the funds to safely operate Palisades will be available has been demonstrated by the five-year projection of income and expenses shown above. The projected financial statement of Entergy Nuclear Palisades is attached as Enclosure 7.

G. Emergency Preparedness

Upon approval of the transfers, Entergy Nuclear Palisades and ENO, as its authorized agent, will assume authority and responsibility for functions necessary to fulfill the emergency planning requirements specified in 10 CFR 50.47(b) and 10 CFR 50, Appendix E. No substantive changes will be made to the existing Palisades Emergency Plan nor will there be any Immediate changes to the existing Emergency Response Organizations as a result of proposed license transfer.

Actions necessary to assure continued compliance with emergency planning requirements will be completed on or before the closing. As identified in Section 2.1(q) of the ASA (Enclosure 2), all property and assets used or usable in providing emergency warning or associated with emergency preparedness, and contracts and agreements associated with emergency preparedness, including the Emergency Operations Facility are to be transferred to Entergy Nuclear Palisades at the closing. With respect to existing agreements for support from organizations and agencies not affiliated with Consumers, the appropriate notifications to the parties to assure continued support will be made.

Specific emergency plan and procedure changes to reflect the change in ownership and operation will be handled in accordance with 10 CFR 50.54(q) as required.

H. Facility Alterations

No physical alterations to Palisades are being proposed as a part of the license transfer process. Any future modifications will be performed in accordance with applicable regulatory requirements (e.g., 10 CFR 50.59).

I. Regulatory Agencies Having Jurisdiction

Certain aspects of the sale will require approval, notifications, or filing by either or all parties with, among other agencies, the Federal Energy

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no such ruling is issued, upon the decommissioning of Palisades. I should note that these decommissioning amounts I am referencing in this answer are estimates that are based upon an assumed March 1, 2007 closing date.

• Workforce: Entergy agrees to assume the CBA covering the union workers at Palisades. The term of the CBA extends through May 2010. With respect to non-union employees, Entergy will offer continued employment to the existing Palisades and Big Rock ISFSI workforce at comparable wages for 18 months, and has committed to provide similar health care and other benefits to this workforce for a period extending 36 months after closing.

There are other features of the transaction which are also beneficial for Consumers Energy and its customers. For example, Entergy accepted pension and post-retirement benefits obligations for the Palisades employees. The estimated pension liability associated with the transferred employees is between \$39 million to \$55.1 million (depending upon the methodology used to calculate those liabilities), and the transferred other post-employment benefits ("OPEB") responsibility is \$10.1 million. Consumers Energy will transfer pension assets equal to \$18.2 million and other post employment benefits assets equal to \$6.1 million. These avoided costs represent savings to Consumers Energy's customers of approximately \$25-\$40 million.

- Q. Please summarize the transaction terms as they relate to decommissioning.
- A. As of March 1, 2007, there is estimated to be approximately \$566 million in Consumers Energy's qualified and non-qualified decommissioning trust funds. At closing, all of the funds in the <u>non-qualified</u> decommissioning trusts will be retained for the benefit of customers, which, assuming a March 1, 2007 closing date, will be approximately

DAVID W. JOOS DIRECT TESTIMONY

\$200 million. If the required federal tax ruling is not obtained prior to closing, all of the funds in the qualified trust will transfer to Entergy, but Consumers Energy will retain the right to recover \$116 million (less income taxes). If the Company has obtained the necessary tax rulings, only the \$250 million decommissioning target amount will be transferred to Entergy at closing. These terms recognize (i) Entergy's conclusion that it needed only \$250 million in the qualified trust now for the future decommissioning of the plant, and (ii) that, under current tax regulations, there could be a significant tax penalty associated with the withdrawal of the excess amount from the qualified trust. Consumers Energy will seek a ruling of the Internal Revenue Service that allows the withdrawal of the excess amount from the qualified trust without incurring the punitive tax. If the IRS cannot provide such a ruling, the Company will seek relief through legislative means. If the Company is able to avoid the tax penalty, the ASA allows Consumers Energy to recover up to \$116 million (plus associated earnings and less income taxes) from the qualified trust. Finally, if tax considerations prevent Consumers Energy from recovering these funds earlier, the ASA provides that the \$116 million (plus earnings and less taxes) will be returned after the plant has been decommissioned by Entergy.

- Q. Please summarize the transaction terms as they relate to spent nuclear fuel.
- A. The ASA provides that Entergy will assume title to and responsibility for management, storage, removal, transportation and disposal of all spent nuclear fuel ("SNF") associated with Palisades and the Big Rock ISFSI. Consumers Energy will also assign to Entergy its rights, title and interest in the Standard Spent Nuclear Fuel contract with the Department of Energy ("DOE"), with certain exceptions. Those exceptions are that Consumers Energy retains its right to pursue its damages claim against the DOE for DOE's failure to

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Regulatory Commission, the Federal Communications Commission, and the Michigan Public Service Commission.

The following is a list of newspapers that circulate in the area affected by the application:

Herald – Palladium Kalamazoo Gazette South Haven Tribune Holland Sentinal

J. Restricted Data

This application does not involve any restricted data or other classified defense information, and it is not expected that any such information will be required by the licensed activities at Palisades. In the event that licensed activities involve restricted data in the future, Entergy Nuclear Palisades and ENO agree that they will appropriately safeguard such information and will not permit any individual to have access to restricted data until the Office of Personnel Management investigates and reports to the NRC on the character, associations, and loyalty of such individual, and the NRC determines that permitting such person to have access to restricted data will not endanger the common defense and security of the United States.

K. <u>Decommissioning Funding</u>

Consumers maintains Qualified and Non-qualified Decommissioning Trust Funds (the Funds) for the decommissioning of Palisades. At the closing Consumers will transfer assets of the Qualified Funds to a trust established by Entergy Nuclear Palisades. The current value of Consumers' 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 private letter rulings are obtained, prior to the closing. This lesser amount will in no event be less than \$250 million. The amount in excess of \$250 million will be paid to Consumers upon the occurrence of the earlier of (i) certain favorable tax rulings, or (ii) when Palisades has been fully decommissioned.

If license renewal for Palisades is obtained prior to closing, it is estimated that the amount needed to meet the NRC minimum funding requirement would be \$201 million by March 1, 2007. In that event, the (no less than)

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\$250 million being contributed to the Decommissioning Trust will exceed the NRC minimum funding requirement. If license renewal is not achieved by closing, it is estimated that the NRC minimum funding amount would be \$299 million as of March 1, 2007. Should the credited value of the funds transferred at closing not meet the NRC minimum funding requirement, Entergy Nuclear Palisades will provide the additional amount through a parent or affiliate guarantee that will meet the requirements of 10 CFR 50.75(e)(1)(iii).

After the closing, the funds will be held in a Decommissioning Trust established and maintained by Entergy Nuclear Palisades. The funds will be segregated from Entergy Nuclear Palisades' other assets and will be outside of Entergy Nuclear Palisades administrative controls. The trust will provide that: (1) no funds may be disbursed from the trust funds, other than for ordinary administrative expenses, unless the Trustee first gives thirty days prior written notice to the Director, Office of Nuclear Reactor Regulation (NRR), of the NRC and receives no written notice of objection from the NRC; (2) the funds will be invested in accordance with the "prudent investor" standard as specified in 18 CFR 35.32(a)(3) of the FERC's regulations; (3) no material amendments will be made to the trust agreement without thirty days prior written consent to the Director, NRR; (4) investments in the securities or other obligations of Entergy Nuclear Palisades or ENO, or their affiliates, successors or assigns, shall be prohibited; and (5) except for investments tied to market indexes or other non-nuclear sector mutual funds, investments of the funds in any entity owning one or more nuclear power plants is prohibited.

The funding mechanism proposed by Entergy Nuclear Palisades and ENO satisfies the requirements of 10 CFR 50.75. The amount to be held in trust for the decommissioning of Palisades will either meet the minimum amount which would be required under the "prepayment" method of 10 CFR 50.75(e)(1)(i) or will be coupled with a parent or affiliate guarantee that will meet the requirements of 10 CFR 50.75(e)(1)(iii). The funds will be held in a Trust with appropriate safeguards on the investment and use of the funds, as described above. This mechanism meets the requirements of 10 CFR 50.75(e)(1)(vi) that a licensee submit "assurance of decommissioning funding equivalent to that provided by the mechanisms specified in paragraphs (e) (1) (i) through (v) of [10 CFR 50.75]."

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approximately \$0.5 million/MW was required in transferred decommissioning funds. CEA projects that the market will require a transfer of approximately \$400 million in decommissioning funds for Palisades, which is roughly equivalent to Consumers Energy's qualified decommissioning trust fund. The excess \$200 million in after-tax non-qualified funds could then be available for off-setting power costs under the PPA, or for use in some other customer benefit mechanism.

Big Rock

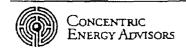
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Issues associated with decommissioning Big Rock may also be able to be resolved through this transaction by either (1) transferring the on-going responsibilities to maintain Big Rock as a spent fuel storage site to a buyer as part of a transaction for Palisades, or (2) using decommissioning funds "freed-up" from the Palisades account to offset the Big Rock decommissioning shortfall (which are estimated to be deficient by approximately \$57 million, with an estimated additional \$74 million in costs related to DOE's failure to take the SNF).

With regard to transferring Big Rock decommissioning responsibilities, CEA believes that some buyers may be willing to acquire these responsibilities as part of a transaction for Palisades. The advantages to a buyer of also acquiring Big Rock include the ability to distinguish/enhance their total bid for both Palisades and Big Rock, their belief that they could maintain Big Rock cheaper than Consumers Energy, or its agent, can, and the potential ability to utilize excess decommissioning funds from one site to offset costs of the other.

With regard to using Palisades' funds to off-set Big Rock underfunding, as noted above CEA anticipates that significant funds will be freed-up through a sale of Palisades. Funds held for Big Rock are not sufficient to decommission the site. When the Big Rock decommissioning is completed it is expected that customers will owe approximately \$110 million in unfunded decommissioning and SNF costs. A Palisades transaction could potentially use "free-up" decommissioning funds from the Palisades account to off-set of the Big Rock costs.

If a bidder accepted Big Rock as part of the transaction, Consumers Energy would be free from its on-going responsibilities at that site making the company entirely nuclear-ownership/liability free. CEA recommends this be an option not a mandated term of sale. As such, the potential elimination of on-going obligations at Big Rock should not be a foundation for sale of Palisades.



14992-LU-CE-69

Question:

69. At page 9-7 of the Palisades Nuclear Power Plant Confidential Offering Memorandum, it is stated:

The NRC minimum decommissioning fund estimate (pursuant to 10 CFR 50.75(b) and (c)) for Palisades as of March 31, 2005 was \$351.2 million. The estimated minimum decommissioning amount as of December 31, 2005 was approximately \$359.2 million. Based on a license expiration date of 2031 and a real investment growth rate of 2 percent, the current funding (as of 12/31/05) associated with the NRC minimum is approximately \$221.7 million; the same calculation assuming a real growth rate of 3 percent would produce a current funding estimate of approximately \$173.4 million.

Please provide:

(a) The calculations leading to the conclusion that the minimum decommissioning fund estimate as of March 31, 2005 was \$351.2 million.

Response:

Please see page 1 of the attached document for the requested calculation. The \$351.2 Million can be seen on line 44 in the column labeled 3/31/2005. This calculation is based on the generic methodology contained in 10 CFR 50.75(c) rather than on a site-specific study.

(b) The calculations leading to the conclusion that the minimum decommissioning fund estimate as of December 31, 2005 was \$359.2 million.

Response:

Please see page 1 of the attached document for the requested calculation. The \$359.2 million can be seen on line 44 in the column labeled 12/31/2005.

(c) Please provide, in as much detail as possible, the calculations leading to the conclusion that for decommissioning at license expiration in 2031 with a real investment growth rate of 2%, the current funding associated with the NRC minimum decommissioning as of December 31, 2005, is \$221.7 million.

Response:

Please see page 2 of the attached document for the requested calculation. Please note that the escalation rates in this long-term estimate differ from those used for the shorter-term, year-end 2005 estimate. The \$221.7 million can be seen on line 56 in the column labeled 3/31/2006, and the 2% real growth rate can be seen on line 53.

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• Shutdown in 2031, transfer of the spent fuel to dry storage, an extended period of safe-storage followed by deferred dismantling (Alternative 2 or SAFSTOR)

Methodology and Approach

The decommissioning costs were estimated for the alternative scenarios using the economic and other site-specific cost information contained in the 2004 reference report, adjusted to reflect a 20-year extension of the plant's operation. This limited the differences in cost to those elements associated with the revised shutdown date and the decommissioning scenario.

The areas of the cost model most affected by the additional 20 years of operation were associated with spent fuel management and reactor vessel activation. The evaluations for both the DECON and SAFSTOR alternatives considered a 10-year cooling period for the fuel discharged from the reactor upon the cessation of plant operations, as compared to an 8 year period for the Base Case. Decommissioning was deferred in the SAFSTOR model such that license termination occurred within the 60-year timeframe specified by the Nuclear Regulatory Commission (NRC), as compared to the limitation associated with availability of a low-level radioactive waste disposal site in the Base Case.

Findings

The projected cost to decommission the Palisades nuclear unit, assuming operation until 2031, for the prompt dismantling alternative (DECON) is estimated at \$817.8 million, in 2003 dollars. The associated cost for the deferred dismantling alternative (SAFSTOR), in year 2003 dollars, is estimated at approximately \$1,049.3 million.

The major differences in the costs attributed to extended plant operation are described in the following narrative. To facilitate comparison, this assessment includes summary tables and schedules comparable to those available in the 2004 report for the Base Case.

14992-LU-CE-71

Ouestion:

71. Please provide the calculations for the minimum amount needed in the decommissioning fund as of December 31, 2005 to decommission the Palisades Plant at its license expiration date of 2031, assuming that the Palisades Plant will be decommissioned utilizing the DECON alternative.

Response:

Based on the May, 2006 decommissioning update performed for Consumers by TLG Services, Inc, we have calculated that the 12/31/05 minimum funding amount for the DECON alternative is \$407.1 million assuming a 2% real growth rate, and \$289.8 million assuming a 3% real growth rate. The spreadsheet showing these calculations is attached. Please note that this estimate is not based on the NRC's generic formula, in contrast to the answers to 14992-LU-CE-69.

(NOTE: Attached is numbered document: 99200875A)

Chairman and Chief Executive Officer 09/27/2006

- (47) "Consumers" has the meaning set forth in the preamble.
- (48) "Consumers Guaranty" has the meaning set forth in Section 6.14(2).
- (49) "Credited Service" has the meaning set forth in Section 6.10(e).
- "Decommission" means, with respect to each Site, to completely retire and (50)remove the Facilities on that Site from service and to restore the Site, as well as any planning and administrative activities incidental thereto, including: (i) the dismantlement and removal of the Facilities on such Site and any reduction or removal of radioactivity at such Site to a level that permits termination of the applicable NRC License and unrestricted use of the Site; (ii) all other activities necessary for the retirement, dismantlement, decontamination and/or storage of the Facilities at such Site to comply with all applicable Nuclear Laws and Environmental Laws, including the applicable requirements of the Atomic Energy Act and the NRC's rules, regulations, orders and pronouncements thereunder, and (iii) once the applicable Site is no longer utilized (A) in the case of Palisades, either for power generation of any kind or for any storage of Spent Nuclear Fuel or other Nuclear Material, and (B) in the case of the Big Rock ISFSI, for storage of Spent Nuclear Fuel or other Greater Than Class C Waste, the removal of structures, buried piping, rebar, below grade foundations, paved areas and rubble, and restoration of such Site to an appropriately graded, stabilized and vegetated condition. The Parties understand and agree that SAFSTOR is a permissible interim status for Palisades, provided that Decommissioning is completed in accordance with the applicable NRC regulations.
- (51) "Decommissioning Target" means an amount equal to Two Hundred Fifty Million Dollars (\$250,000,000), which amount shall be increased by five and one-half percent (5.5%) per annum, compounded daily, from and after March 1, 2007 through and including the Closing Date.
- (52) "<u>Deeds</u>" means the Palisades Deed and the Big Rock ISFSI Deed, collectively.
- (53) "Department of Energy" means the United States Department of Energy and any successor agency thereto.
- (54) "Department of Energy Claim" means the action commenced by Seller on December 16, 2002, as amended from time to time, or any other action commenced by Seller for (i) pre-Closing damages resulting from the Department of Energy's failure to commence the removal, transportation, acceptance or any delay in accepting Spent Nuclear Fuel from Palisades and from the Big Rock Point Plant Operating Facility (now located at the Big Rock ISFSI) for disposal pursuant to the Standard Spent Fuel Disposal Contract and (ii) the recovery of any damages of the kind described in clause (i) and arising post-Closing in respect of the Big Rock ISFSI, up to an amount equal to the Big Rock Amount. The Department of Energy Claim shall not include, and Buyer shall have the right to pursue, damages against the Department of Energy arising after the Closing in respect of Palisades and, to the extent Buyer has not been compensated for such damages pursuant to Section 6.25, the Big Rock ISFSI.
- (55) "Department of Energy Decommissioning and Decontamination Fees" means all fees related to the Department of Energy's Special Assessment of utilities for the

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WILLIAM E. GARRITY DIRECT TESTIMONY

- Q. How will the sale of the Palisades plant to Entergy and the purchase of capacity and energy under the PPA (i.e., "Sale and Buyback") affect Consumers' capacity and energy rights relative to such rights prior to the sale?
- A. Consumers retains all of the current capacity and energy associated with Palisades.

 Except for Uprates as discussed above, Consumers will be able to continue to claim all the capacity available from the plant and receive all the energy generated by the plant in the same manner and to the same extent as it did prior to the Sale and Buyback.

To the extent an Uprate is implemented by the new owner, it is likely that Entergy would offer this additional power to Consumers, at least initially, simply as a matter of expediency. Consumers is a likely buyer since the facility is located inside Consumers' sub-control area, and if a mutually agreeable arrangement can be negotiated, there is nothing precluding Consumers from purchasing the potential additional capacity and energy if it is prudent and economic to do so.

- Q. If "normal fluctuations" in capacity level are permissible under the PPA, is Consumers at risk of Entergy not maintaining plant capacity?
- A. Since Entergy's only revenue stream is based on delivered energy, it has every reason to maximize capacity and capacity factor under the PPA.
- Q. Please explain the components of "delivered energy."
- A. Delivered Energy is defined as the sum of Buyer's Entitlement of Net Energy Output of the Palisades facility plus Replacement Energy, and is the basis for the payment of capacity and energy charges at PPA rates. Net Energy Output is defined as the total energy output of the facility, less station service load, measured at the Delivery Point.

 The Delivery Point under the PPA is the MISO commercial pricing node ("CPNode") for

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PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

STEPHEN T. WAWRO DIRECT TESTIMONY

"normal" planned refueling outage, for a total of 70 days, resulting in a threeyear projected capacity factor of 84.74% for the period 2007-2009

- The impact of a 2016 steam generator replacement, which is expected to take an incremental 55 days over "normal" planned refueling outages for a total of 95 days, resulting in a three-year capacity factor of 82.64% for the period 2014-2016
- Q. Do you believe that an 86.42% capacity factor is a reasonable assumption?
 - Yes. I believe that it is an optimistic view of what the Plant could achieve under Consumers Energy's continued ownership. The main driver of the projected capacity factor in the CCO model is the Plant's performance from 2003-2005. While I believe that an 86.42% projected capacity factor is reasonable, I do recognize that the Plant's performance prior to 2003 was significantly worse than during the 2003-2005 time frame. This most recent three year period was in fact the single best three year period of performance in the Plant's history. This would indicate that the 86.42% projected capacity factor is clearly towards the upper end of the range of reasonable projections. The following summarizes Palisades' RFO performance:
 - From the beginning of 1990 to the end of the most recent refueling outage (RFO #18; ended May 10, 2006), Palisades achieved a 75.08% capacity factor. The average length of the 11 RFOs since 1990 was 76 days (this includes a 181 day refueling outage in 1990/1991 during which the steam generator was replaced). The equivalent forced outage rate over the same time period was 10.9%.

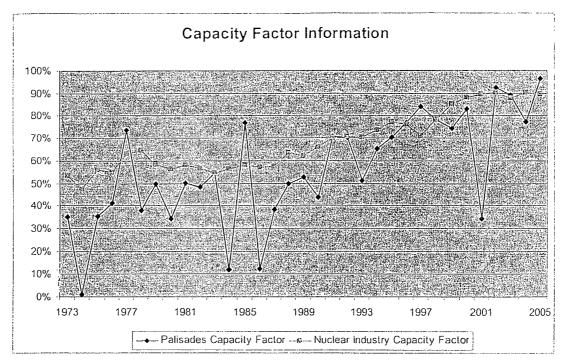
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Α.

PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

STEPHEN T. WAWRO DIRECT TESTIMONY

rising to average capacity factors between 87.9% and 90.3% over the last five years. This is highl: ghted in the chart below.



Over the 33 year period 1973 through 2005 where EIA data is available, which covers nearly all of Palisades operating life, Palisades has operated at an average capacity factor of 56.4%, which is approximately 82.7% of the industry average of 68.3% over that period of time. Over the past 10 and 5 year periods, respectively, Palisades' performance has improved. For the most recent 10 year period, Palisades' capacity factor was 78.5%, which is approximately 93% of the industry average over that time. For the most recent 5 year period, Palisades' capacity factor was 77.9%, which is 87.1% of the industry average for the same period. As described by Mr. Reed, one reason why industry performance has outpaced that of Palisades is the superior performance of fleetowned generating units.

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PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

DAVID W. JOOS DIRECT TESTIMONY

capital expenditures would increase even further. The increasing capital requirements at Palisades, combined with other already substantial financing requirements, were an important factor that we concluded supported a decision to sell Palisades.

Third, the timing to sell Palisades seemed to be right. As is discussed in more detail by Mr. Reed, the market for nuclear generating assets is strong and competitive. Seven different buyers have won recent auction transactions. The total transaction value (i.e., purchase price, PPA terms, decommissioning fund treatment) of these transactions has trended upward. We believed that it was possible to obtain transaction terms that retained access to the power produced at Palisades on terms comparable to or more favorable than the cost of continued ownership by Consumers Energy, while also freeing up funds from the decommissioning trusts that could be utilized for other purposes beneficial to customers. These considerations further supported a decision to explore the sale of Palisades.

Fourth, continued ownership of a nuclear plant entails considerable risk. Some of these risks are highlighted above; namely, the risk that NMC would no longer be a viable option for continued management of Palisades and the impracticality of resuming direct operation of Palisades. In addition, there are significant risks associated with the future capital needs of a nuclear unit. While many of those can be identified and planned for, the nature of the nuclear industry is that issues that arise at other operating nuclear units often have an impact on all units. Many of these are essentially impossible to predict, but can have a substantial impact on the owners of these units. Further, an extended outage of a nuclear unit can be very costly, since the fixed costs of the plant continue and replacement power costs can be significant. A performance-based PPA structure can

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PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

- 5. There are also other factors that supported Consumers Energy's decision to explore the sale of Palisades. For example, there are known significant capital expenditures that are required for the plant over the next several years, such as those necessary for the reactor vessel head replacement, steam generator replacement, to address reactor vessel embrittlement issues, and various other life extension projects. The Company concluded that the capital requirements associated with continued ownership of Palisades, when combined with other substantial capital expenditures that Consumers Energy must make over the next several years, supported a decision to sell Palisades. In addition, the ownership of a nuclear power plant entails considerable risks, including (i) risks associated with the continued viability of NMC, (ii) unpredictable but potentially substantial and expensive new regulatory requirements, (iii) decommissioning risks (including the investment performance risk of decommissioning trust funds, the difficulty in accurately projecting the cost of decommissioning, and the uncertainties associated with the execution of the decommissioning process), (iv) replacement power risk associated with potentially lengthy nuclear plant outages, and (v) re-licensing risk. Finally, there is a growing record of successful nuclear plant sales that have produced benefits for utility customers. The total transaction value of recent transactions, as measured by purchase price, power purchase agreement terms, decommissioning fund treatment, and other commercial terms, has trended upward. These are additional factors that Consumers Energy concluded supported a decision to sell Palisades.
- 6. In light of the above-described factors, in December 2005 Consumers Energy elected to offer Palisades for sale in a competitive auction process. Based upon its considerable experience in conducting such auctions, the Company retained Concentric Energy Advisors, Inc. ("CEA") as the auction manager. The basic objectives established for the auction process were

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over the past 18 months have caused a reduction from the 100 percent weighting of the performance indicator value in those areas. As Figure 3-1 demonstrates, the indicators have been negatively affected by the following events in 2004 and 2005: the power reductions and an outage in July and August 2004, the last refueling and reactor head repair outage in the fall of 2004, the loss of vacuum shutdown in January 2005, the manual reactor trip in September 2005 due to main generator hydrogen leakage, the power reduction in October 2005 for turbine vibration indication, and the November 2005 power reduction due to accumulation of debris in the cooling tower screens. Projected increases in years 2006 and 2007 are primarily the result of rolling off of low performance from the 18 month rolling average index computation. NMC currently projects that Palisades' INPO index will reach 100 percent by year end 2009, primarily attributable to the expected benefits to be realized from the Reactor Head replacement.

3.4 Operational Statistics

Planned Outage Rate (%)

Table 3-1 below highlights Palisades' historical operational statistics.

1999 2000 2001 2002 2003 2004 2005 Max. Dependable Net 785.4 780.9 794.0 ⁽²⁾ 782.2 788.4 788.4 788.5 Capacity (MW) (1) Net MWh 5,115,234 5,748,023 2,355,631 6,369,371 6,158,154 5,345,760 6,645,839 Capacity Factor (%) (3) 74.4% 83.8% 34.4% (4) 92.2% 89.2% 77.2% ⁽⁵⁾ 95.6% Forced Outage Rate (%) 3.2% 15.8% 0.4% 8.4% 0.9% 6.7% 4.6%

Table 3-1: Palisades Operational Highlights

65.2%

0.1%

10.4%

16.5%

1.3%

21.9%



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0.4%

⁽¹⁾ Max. Dependable Net Capacity based upon annualized monthly ECAR ratings in effect during applicable year. Capacity factor, forced outage rate, and planned outage rate may not total 100 percent due to the variance of actual conditions from those projected in the ECAR rating.

⁽²⁾ Reflects mid year uprate of 1.4 percent effective June 2005. The current annualized ECAR rating is 798 MW.

⁽³⁾ Capacity factor is calculated by dividing net generation by the product of annualized MW ECAR rating and hours in the applicable year (8760 hours or 8784 hours for a leap year).

⁽⁹⁾ Extended outage to replace all control rod seal housings in 2001.

⁽⁵⁾ Extended refueling outage for reactor vessel head repair in 2004.

3.5 Refueling Outage Overview

Palisades currently operates on an approximately 18-month refueling cycle. Recent and planned refueling outage durations and costs are shown on Table 3-2 below:

Table 3-2: Palisades Recent and Planned Refueling Outages

Year	Refueling Outage (RFO)	Scheduled Days	Actual Days	O&M Cost (\$ millions)	Capital Cost (\$ millions)
2001	15	42	41	22.6	19.4 ⁽¹⁾
2002					
2003	16	25	35	19.7	3.2
2004	17	28	59	35.5	3.0
2005					
2006	18	30		32.6	50.2 (2)
2007	19	60		39.1	54.9 ⁽²⁾

⁽¹⁾ Major refueling outage capital projects are: replacement of high pressure turbine \$8.7 million and replacement and assembly of a primary coolant pump and motor \$4.8 million in 2001.

3.5.1 2004 Refueling Outage (RFO-17)

Palisades' most recently completed refueling outage (RFO-17) ran from September 19 through November 17, 2004. Table 3-3 below summarizes some of the key initiatives and accomplishments during that outage:



⁽²⁾ Includes capital costs associated with reactor vessel head replacement project in 2006 and 2007.

Table 3-3: 2004 Refueling Outage (RFO-17) - Significant Initiatives and Accomplishments

Key Outage Initiatives	Significant Accomplishments
 One-third of the core was refueled Reactor Vessel Head CRD Thermal Sleeve Removal Reactor Vessel Head Bare Metal and Volumetric Inspections Reactor Vessel Head Repairs (Two RVH Penetrations were repaired) Incore Detector Replacements (22) Reactor Vessel Debris Inspection Steam Generator Eddy Current Testing, Tube Plugging and Sludge Lancing Replacement of Primary Coolant Pump P-50C Motor and Seal Control Rod Drive Seal Housing Rebuilds (4) NE-05 Power Range Nuclear Detector Replacement Pressurizer Heater Nozzle Inspection Main Condensor Eddy Current Testing and Tube Plugging Flow Accelerated Corrosion Inspections In-service Inspections Eddy Current Testing of Multiple Heat Exchangers Turbine Generator Maintenance Feedwater Pump P-1A Rebuild 	 Cooldown to Mode 5 (<200F) took 13 hours, a new Palisades best time. The previous Palisades best time was 25 hours. Fuel Shuffle / verification was performed in 70 hours, a new Palisades and CE best time. The previous CE best time was 80 hours. There were zero lost time accidents. Crane and Rigging received an NEI Top Industry Practice Award for Containment mobilization and Demobilization.

3.5.2 2006 Refueling Outage (RFO-18)

The next outage (RFO-18) is scheduled to commence on April 2, 2006 and finish on May 2, 2006. NMC anticipates 2006 expenditures for the outage to be \$82.8 million. A list of projects planned for the outage, along with projected costs, is provided in Table 3-4 below.

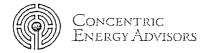


Table 3-4: 2006 Refueling Outage (RFO-18) - Outage Projects and Projected Costs

Outage Project	2006 Projected Cost (\$ millions)
Refueling Outage Services	8.1
Reactor Vessel Head Inspection	4.7
Turbine Generator Maintenance	2.0
Crane Repairs and Services	1.3
Contract Health Physics Tech Support	1.1
Other Minor O&M Projects	5.8
Total O&M Projects	\$ 23.0
Reactor Head Replacement	28.4
Cost of Removal Reactor Head Replacement	6.6
Cost of Removal PCP Motor	4.1
Polar Crane Upgrades	2.6
Containment Sump Modifications	2.4
Main Generator Stator Rewind	2.0
Other Minor Capital Projects	4.1
Total Capital Projects	\$ 50.2
Departmental Incremental Maintenance Costs	9.6
Total Refueling Outage Costs	\$ 82.8

3.5.3 2007 Refueling Outage (RFO-19)

RFO-19 is presently scheduled to commence September 9, 2007 and finish on November 8, 2007. NMC estimates RFO-19 to last 60 days, during which it expects to disassemble and replace the Reactor Head. Once the Reactor Head is in place, NMC expects to realize ongoing O&M savings through the elimination of costly vessel head inspections, which currently are required to be performed every refueling outage, compared to every 3 refueling outages, or every 5 years, once the new Reactor Head is in place.



In addition to the Reactor Head replacement, NMC plans the following projects for RFO-19:

- Full Core Offload with one-third of the fuel being replaced,
- Core Barrel ISI (UT/VT) Inspection,
- Steam Generator Eddy Current Testing, Tube Plugging and Sludge Lancing,
- Replacement of Primary Coolant Pump P-50D Impeller,
- Control Rod Drive Seal Housing Rebuilds,
- Alternate Spent Fuel Pool Cooling for Service Water and Component Cooling Water Valve Repairs,
- Shutdown cooling, engineered Safeguards System and Safety Injection Refueling Water Tank Valve Repairs and Replacements,
- Replace Power Operated Relief Valves (PORV's),
- Main Feedwater Pump P-1B Rebuild,
- Low Pressure "B" Turbine Inspection,
- Main Generator Stator Rewind or Replacement,
- Main Condenser Eddy Current Testing,
- Flow Accelerated Corrosion Inspections,
- In-Service Inspections, and
- Eddy Current Testing of Multiple Heat Exchangers.

3.6 Financial Performance Overview

A summary of certain financial aspects of Palisades' operations from 2001 through 2005 and budget for 2006 is provided in Table 3-5 below.



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Table 2-7: Palisades Core Offload Contingency Plans

Cycle/ Refout	Number of Casks	Туре	Start Date	End Date	Number Added/ Removed	Open SFP Spaces	With 11x11 Rack	Normal FCOL	Emerg. FCOL*
Cycle 18			10/19/2004	4/2/2006					
	7	NUHOMS-32	10/3/2005	12/10/2005	-224	329	449	TRUE	TRUE
·		Fuel Receipt	3/6/2006	4/2/2006	56	273	393	TRUE	TRUE
Refout 06			4/2/2006	5/1/2006					
Cycle 19			5/1/2006	9/14/2007					
		NUHOMS-32	4/1/2007	4/1/2007	0	273	393	TRUE	TRUE
		Fuel Receipt	8/24/2007	9/14/2007	60	213	333	FALSE	TRUE
Refout 07			9/14/2007	10/12/2007					
Cycle 20			10/12/2007	3/13/2009					
	7	NUHOMS-24	7/1/2008	10/7/2008	-168	381	501	TRUE	TRUE
		Fuel Receipt	2/20/2009	3/13/2009	60	321	441	TRUE	· TRUE
Refout 09			3/13/2009	4/10/2009					
Cycle 21			4/10/2009	9/17/2010					
		NUHOMS-24	4/1/2010	4/1/2010	0	321	441	TRUE	TRUE
		Fuel Receipt	8/27/2010	9/17/2010	60	261	381	TRUE	TRUE
Refout 10			9/17/2010	4/10/2009					
Cycle 22			10/15/2010	3/18/2012					
	5	NUHOMS-24	10/15/2011	12/24/2011	-120	381	501	TRUE	TRUE
		Fuel Receipt	2/26/2012	3/18/2012	60	321	441	TRUE	TRUE

^{*}EMERG FCOL means the 11 x 11 rack is required to be installed to do the full core off load.

2.9 Low Level Radwaste

During normal operations, Palisades generates approximately 4,400 cubic feet of low level radwaste per year and approximately 2,200 cubic feet of low-level radioactive waste during a typical refueling outage. The overall historical and current operating conditions/performance of low-level waste programmatic compliance has been sufficient. There have not been any significant issues related to mixed low level waste or radioactive waste with respect to regulatory compliance.



Palisades currently has only one option for disposal of Class "B" and Class "C" waste which is the Barnwell Waste Disposal Site. In July of 2008, Barnwell will no longer accept waste from Palisades and therefore Palisades will have to store this higher level waste on-site until another option is formulated. Currently this waste is stored in the East Radwaste Storage Building. This building has vaults to store high level waste. The vault which provides the best shielding for material is currently full of highly radioactive waste. Most of this waste will be shipped to Barnwell prior to the Barnwell closing in 2008. There is a small quantity (< 200 cubic feet) of Greater than Class C waste that cannot be shipped to Barnwell under current regulations.

There are three smaller vaults that provide less shielding, that have been or will store highly radioactive Dry Active Waste ("DAW"), or high dose rate liners with clean waste filters, or trinuc filters used to clean up the reactor cavity during refueling outages. In 2006, Palisades is expected to generate at least one additional Purification Filter which will likely be class "C" waste based on prior filter classifications. The Plant will continue to produce one purification filter every two to three years with limited space for storage. Additional Class "B" waste could be generated from highly radioactive spent resins. Highly radioactive spent resins are shipped to Studsvik, Inc. for volume reduction prior to shipping to burial. Any creation of Class "B" waste from resins after the closure of Barnwell would also result in additional on-site storage.

Not all waste is stored on site when produced. DAW is typically packaged and sent to GTS Duratek for volume reduction. Most recently High Integrity Containers containing solidified evaporator concentrates have been shipped to burial at Barnwell or shipped to GTS Duratek for processing prior to burial. The Plant Evaporator system has been retired and Duratek's Advanced Liquid Processing System was installed to clean up clean and dirty liquid waste. This process will generate radioactive resirs and charcoal. NMC plans to continue to ship waste off-site for processing and eventual burial as it is produced and to reduce the back-log of stored waste. The radwaste budget for 2006 is \$981,500.



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Table 2-5: Fuel Contracts

Supplier	Commodity	Description	Joint NMC Contract or Consumers Contract	Delivery Years/Reload Cycle(s)	
А	Fabrication Services	Contract for fuel fabrication services for Palisades	Consumers	Through 2007 Reload	
В	Enrichment Services	Purchase of enrichment services	Consumers	Through 2007	
С	Enrichment Services	Purchase of enrichment services	NMC	Through 2010	
D	Conversion Services	NMC contract for all NMC Owners	NMC	Through 2010	
E	Conversion Services (Distribution between NMC Owners)	NMC contract for all NMC Owners	NMC/Owners	Through 2007 (Currently being amended)	
F	U ₃ O ₈ to UF ₆ Swap 239,739 lbs to 78,814.8 kgU	NMC Fuel Contract	NMC/Consumers	10/26/2006	
G	Uranium Concentrates	NMC fuel contract for all NMC Owners	NMC	Through 2008	
Н	Uranium Concentrates (Distribution between NMC Owners)	NMC fuel contract for all NMC Owners	NMC/Owners	Under development pending new contract	

The contracts shown above will be available for review in the Physical Document Rooms.

2.8 Spent Nuclear Fuel ("SNF") Storage

The SNF pool is licensed for 892 units of capacity for the storage of SNF assemblies. During RFO-18, scheduled for April 2006, 56 new fuel bundles consisting of 52 fuel assemblies and four shield assemblies will be loaded into the core. Post RFO-18, there will be 488 (432 + 56) SNF assemblies stored in the pool, leaving 273 units available for storage in the pool. New fuel bundles also may be stored dry in the new fuel storage area which will accommodate up to 24 new fuel bundles. Table 2-6 below summarizes the Palisades SNF pool capacity.



Table 2-6: Spent Fuel Pool Fuel Assembly Capacity as of 12/31/05

Status	Capacity / Term
Licensed fuel storage capacity ³	892
Installed storage capacity ⁴	771
Fuel Pool Capacity (minus unusable space and space occupied by items other than fuel) ⁵	761, 881 with 11x11 rack
Spent fuel currently in the fuel pool ⁶	432
New Fuel expected to be loaded in the pool (in RFO-18)	56 assemblies
Open space (after loading new fuel in the pool during RFO-18)	273
Currently in reactor ⁷	204 assemblies, 45 control blades
Installed Capacity sufficient through (year)	2012

2.8.1 Dry Cask Storage

Storage of additional SNF is accomplished via dry cask storage systems. At present, 18 vertical casks contain 24 assemblies each, for a total of 432 assemblies stored. In addition, 11 Horizontal casks contain 32 assemblies each, for a total of 352 assemblies. Thus, there are 784 fuel assemblies in dry cask storage.



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Licensed capacity does not include 4 cells blocked by the pool cooling system piping return line. 896 cells are potentially present, but 892 are licensed. Of the 4 cells blocked by the cooling return line, one cell contains a spare fuel cage, and one cell contains irradiated guide tube plugging clusters.

⁴ Current installed capacity is reduced because an 11x 11 rack is not installed. If installed, the rack would fill the dry cask load area. The NRC must be notified before installing this tack. Leaving the rack out improves pool circulation in the event of a loss of pool cooling event. This rack would add 121 cell positions, although, 1 position is not accessible for storage.

Fuel pool capacity is reduced by: 2 cells blocked due to storage cell swelling (Region I rack), 2 cells contain surveillance capsule transfer carriers (these carriers could potentially be removed), 4 cells contain spare irradiated control blades, 2 cells contain 'dummy' fuel bundles to test fuel handling equipment and train fuel machine operators. This is a total of 10 unusable cells. One additional cell contains an underwater light, but it is anticipated that this cell could be recovered if needed and is not listed in the above 10 unusable cells. The two pool capacity numbers shown in Table 2-5 above are with (and without) the 120 spaces added by the 11 x 11 rack.

Of the spent fuel in the pool, 8 fuel assemblies in the Region I racks cannot be moved due to rack swelling surrounding the assembly. These are not scheduled for reuse in the core. Also counted in fuel pool capacity include: I cell occupied by a permanent failed fuel rod storage can that contains failed fuel rods from reconstituted fuel; I cell occupied by a storage can that contains fuel rod fragments; and I cell occupied by a storage cage that is partially filled with fuel rods.

Control blade storage in the pool requires one cell per blade. Thus a full core off load requires 249 spaces in the fuel racks.

In 1987, Consumers began investigating SNF storage options and selected dry storage as the most economical option. In 1989, Consumers contracted with Sierra Nuclear Corporation to supply the storage only VSC-24 (holds 24 PWR assemblies) cask system for Palisades. In 1992, construction of the initial ISFSI was completed. The ISFSI pad is 30 feet wide by 195 feet long and has the capacity to hold 25 casks. Palisades became the first user of an ISFSI general license. Between 1992 and 1999 a total of 18 VSC-24 casks were loaded and placed in service at the original ISFSI. The general license for VSC-24 will expire in 2013. The vendor must then request a license extension. Two extensions have been granted to date for other cask systems, and the NRC has extended these licenses for an additional 40 years from the original 20.

In 2001, Palisades selected the NUHOMS canisters supplied by Transnuclear for additional cask systems. In 2004, construction of a second ISFSI at Palisades was completed. The new ISFSI site is 180 feet by 523 feet and designed to store approximately 78 casks. The ISFSI has space for 44 present style NUHOMS horizontal casks and 18 VSC-24 casks, should the site choose to move the VSCs from the original ISFSI. Additional concrete pads may be poured within the existing ISFSI fence to support 8 additional NUHOMS casks and 8 Fuel Solutions Casks from the Big Rock ISFSI. The first four 32PT NUHOMS casks were loaded and placed in service at the second ISFSI in July and August of 2004. In 2005, seven additional NUHOMS casks were loaded. This ISFSI will support Palisades' license renewal period with no shipments of SNF to the DOE.

Palisades does not have a site requirement to maintain Full Core Off-Load ("FCOL") capability. Several times during the history of Palisades fewer than 60 open spaces were available in the Spent Fuel Pool. The most recent dry fuel storage strategy for Palisades has been to regain and then maintain FCOL capability.



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In 1994, Consumers identified crack-like indications in the VSC-24 Cask 4 longitudinal weld nondestructive examination records. These indications were evaluated and documented in engineering analysis. These evaluations demonstrated that Cask 4's pressure and containment functions are maintained and that the crack-like indications have a non-significant impact on the safe performance of the cask. Cask 4 poses no threat to employees or the community; however, Consumers' senior management has decided to unload Cask 4 to promote public confidence in Consumers' commitment to public safety. Consumers subsequently stated that the unload of Cask 4 would not occur until transportable casks were available.

Consumers has contracted with BNG Fuel Solutions, the current cask license holder for the VSC-24 system, to develop and submit a license change request for the storage only VSC-24 casks to become transportable. This application will be submitted to the NRC for review during the first quarter of 2006. Should the effort to license these storage casks as transportable be completed, this cask may not need to be unloaded.

Palisades anticipates that continuing dry cask loadings will be completed periodically, as shown in Table 2-7 below, to maintain pool open space to support a full core off load capability. As can be seen below, Palisades anticipates that NUHOMS-24 casks will be loaded in 2008 (7 casks) and 2011 (5 casks). These casks will store 24 fuel assemblies each. Beyond 2011 five 24 assembly casks will need to be loaded every three years in order to maintain FCOL.



PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

DAVID W. JOOS DIRECT TESTIMONY

We Energies, announced that it was continuing its strategic assessment, and conducting an auction of its Point Beach Nuclear Plant.) Because of these changes, the likelihood of continuing to realize the benefits associated with continued NMC management of Palisades as part of a fleet of units is in considerable doubt. Consumers Energy did not believe it was prudent to simply wait and see what happened to NMC, since we did not believe that resuming direct management and operation of Palisades was a practical or realistic choice. There is considerable industry evidence supporting the conclusion that fleet-owned and operated nuclear units have better overall performance than do single site units. Mr. Wawro discusses this in more detail in his testimony. Further, retaining a qualified workforce at a single site plant such as Palisades is extremely difficult, and potentially extremely expensive. We felt that the risks associated with the current situation with NMC supported a decision to seek to sell Palisades.

Second, there are significant capital expenditures that will be required at Palisades

over and above the normal approximately \$20 million annual amounts. These include the investments necessary for the reactor vessel head replacement, the Steam Generator replacement, for the Combined Pressurizer/Alloy 600 program, and for various life extension projects. The total of these non-routine capital expenditures could exceed \$589 million over the next 10 years. Consumers Energy has already made, and expects to continue making substantial investments in its coal-fired generating plants to ensure compliance with Clean Air Act requirements, in addition to other major capital investment requirements. We expect Consumers Energy's total capital expenditures over the next five years, excluding any Palisades-related investments, to exceed \$3.5 billion. Of course, if Consumers Energy undertakes any new generating plant projects, its total

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DAVID W. JOOS DIRECT TESTIMONY

capital expenditures would increase even further. The increasing capital requirements at Palisades, combined with other already substantial financing requirements, were an important factor that we concluded supported a decision to sell Palisades.

Third, the timing to sell Palisades seemed to be right. As is discussed in more detail by Mr. Reed, the market for nuclear generating assets is strong and competitive. Seven different buyers have won recent auction transactions. The total transaction value (i.e., purchase price, PPA terms, decommissioning fund treatment) of these transactions has trended upward. We believed that it was possible to obtain transaction terms that retained access to the power produced at Palisades on terms comparable to or more favorable than the cost of continued ownership by Consumers Energy, while also freeing up funds from the decommissioning trusts that could be utilized for other purposes beneficial to customers. These considerations further supported a decision to explore the sale of Palisades.

Fourth, continued ownership of a nuclear plant entails considerable risk. Some of these risks are highlighted above; namely, the risk that NMC would no longer be a viable option for continued management of Palisades and the impracticality of resuming direct operation of Palisades. In addition, there are significant risks associated with the future capital needs of a nuclear unit. While many of those can be identified and planned for, the nature of the nuclear industry is that issues that arise at other operating nuclear units often have an impact on all units. Many of these are essentially impossible to predict, but can have a substantial impact on the owners of these units. Further, an extended outage of a nuclear unit can be very costly, since the fixed costs of the plant continue and replacement power costs can be significant. A performance-based PPA structure can

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PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

DAVID W. JOOS DIRECT TESTIMONY

no such ruling is issued, upon the decommissioning of Palisades. I should note that these decommissioning amounts I am referencing in this answer are estimates that are based upon an assumed March 1, 2007 closing date.

Workforce: Entergy agrees to assume the CBA covering the union workers at Palisades. The term of the CBA extends through May 2010. With respect to non-union employees, Entergy will offer continued employment to the existing Palisades and Big Rock ISFSI workforce at comparable wages for 18 months, and has committed to provide similar health care and other benefits to this workforce for a period extending 36 months after closing.

There are other features of the transaction which are also beneficial for Consumers Energy and its customers. For example, Entergy accepted pension and post-retirement benefits obligations for the Palisades employees. The estimated pension liability associated with the transferred employees is between \$39 million to \$55.1 million (depending upon the methodology used to calculate those liabilities), and the transferred other post-employment benefits ("OPEB") responsibility is \$10.1 million. Consumers Energy will transfer pension assets equal to \$18.2 million and other post employment benefits assets equal to \$6.1 million. These avoided costs represent savings to Consumers Energy's customers of approximately \$25-\$40 million.

- Q. Please summarize the transaction terms as they relate to decommissioning.
- A. As of March 1, 2007, there is estimated to be approximately \$566 million in Consumers Energy's qualified and non-qualified decommissioning trust funds. At closing, all of the funds in the <u>non-qualified</u> decommissioning trusts will be retained for the benefit of customers, which, assuming a March 1, 2007 closing date, will be approximately

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DAVID W. JOOS DIRECT TESTIMONY

\$200 million. If the required federal tax ruling is not obtained prior to closing, all of the 1 funds in the qualified trust will transfer to Entergy, but Consumers Energy will retain the 2 right to recover \$116 million (less income taxes). If the Company has obtained the 3 necessary tax rulings, only the \$250 million decommissioning target amount will be 4 5 transferred to Entergy at closing. These terms recognize (i) Entergy's conclusion that it needed only \$250 million in the qualified trust now for the future decommissioning of the 6 plant, and (ii) that, under current tax regulations, there could be a significant tax penalty 7 associated with the withdrawal of the excess amount from the qualified trust. Consumers 8 Energy will seek a ruling of the Internal Revenue Service that allows the withdrawal of 9 the excess amount from the qualified trust without incurring the punitive tax. If the IRS 10 cannot provide such a ruling, the Company will seek relief through legislative means. If 11 the Company is able to avoid the tax penalty, the ASA allows Consumers Energy to 12 recover up to \$116 million (plus associated earnings and less income taxes) from the 13 qualified trust. Finally, if tax considerations prevent Consumers Energy from recovering 14 15 these funds earlier, the ASA provides that the \$116 million (plus earnings and less taxes) will be returned after the plant has been decommissioned by Entergy. 16

- Q. Please summarize the transaction terms as they relate to spent nuclear fuel.
- A. The ASA provides that Entergy will assume title to and responsibility for management, storage, removal, transportation and disposal of all spent nuclear fuel ("SNF") associated with Palisades and the Big Rock ISFSI. Consumers Energy will also assign to Entergy its rights, title and interest in the Standard Spent Nuclear Fuel contract with the Department of Energy ("DOE"), with certain exceptions. Those exceptions are that Consumers Energy retains its right to pursue its damages claim against the DOE for DOE's failure to

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PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

9.2.2.4 Transfer of Post-retirement Health Care Assets and Liabilities

Consumers intends to transfer post-retirement healthcare/life insurance assets and liabilities for all transferred Bargaining Unit Employees and Salaried Employees participating in the plans (currently 145 Salaried and 114 Bargaining Unit) consistent with FAS 106 regulations. As of April 30, 2005, Consumers' liability for these plans was estimated at approximately \$20 million. Consumers notes that both the fund balance as well as the affected employee population is subject to change.

9.2.3 Decommissioning Terms

The Buyer will assume the obligation for 100 percent of the cost of (i) long-term storage of spent nuclear fuel, both at the site and following removal, for permanent disposal by the federal government, (ii) decommissioning in accordance with NRC regulations sufficient for termination of the NRC license, and (iii) restoring the site to a greenfield condition similar to its original condition at such time as the site is no longer used for an electric generating Plant or for storage of spent nuclear fuel. In addition, other decommissioning-related terms include:

- The NRC minimum decommissioning fund estimate (pursuant to 10 CFR 50.75 (b) and (c)) for Palisades as of March 31, 2005 was \$351.2 million. The estimated minimum decommissioning amount as of December 31, 2005 was approximately \$359.2 million. Based on a license expiration date of 2031 and a real investment growth rate of 2 percent, the current funding (as of 12/31/05) associated with the NRC minimum is approximately \$221.7 million; the same calculation assuming a real growth rate of 3 percent would produce a current funding estimate of approximately \$173.4 million.
- Consumers current decommissioning assets are as follows:



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ENCLOSURE 13

PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

Docket No. 50-255

MICHAEL A. TORREY DIRECT TESTIMONY

1	Q.	What level of funding is expected to be in the decommissioning funds at the time the sale
2		closes?

- Based on a March 1, 2007 closing date, \$200 million is expected in the Palisades Non-Qualified funds, and \$366 million is expected in the Palisades Qualified Fund, for a total of \$566 million in both Palisades funds. The Non-Qualified Funds consist of two separate funds - an MPSC jurisdictional fund and a FERC jurisdictional fund. The MPSC fund balance is expected to be \$189 million and the FERC fund balance is expected to be \$11 million on March 1, 2007.
- How does the sale affect the decommissioning funds? Q.
- Subject to the receipt of necessary regulatory approvals, the Non-Qualified Funds will be A. released and immediately be available to cover sale-related costs and to provide other customer benefits. The Asset Sale Agreement ("ASA") requires that the Company transfer the target decommissioning amount from the Palisades Qualified Fund to Entergy. Subject to the receipt of the necessary IRS tax ruling, Qualified Funds in excess of the decommissioning target specified by Entergy (or in excess of the IRS ruling), will be returned to the Company and become available to benefit customers.
- Q. What is Entergy's decommissioning target specified in the ASA?
- The decommissioning target specified in the ASA is \$250 million. 18 A.
 - Q. Could the decommissioning target change?
- 20 Yes. As specified in the ASA, a delay in the closing date beyond March 1, 2007 will Α. 21 cause Entergy's decommissioning target to increase.

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ENCLOSURE 14

PETITION BY VAN BUREN COUNTY, ET AL FOR LEAVE TO INTERVENE AND REQUEST FOR HEARING REQUEST FOR EXTENSION OF TIME AND REQUEST FOR DISCOVERY

Docket No. 50-255

DAVID W. JOOS DIRECT TESTIMONY

capital expenditures would increase even further. The increasing capital requirements at Palisades, combined with other already substantial financing requirements, were an important factor that we concluded supported a decision to sell Palisades.

Third, the timing to sell Palisades seemed to be right. As is discussed in more detail by Mr. Reed, the market for nuclear generating assets is strong and competitive. Seven different buyers have won recent auction transactions. The total transaction value (i.e., purchase price, PPA terms, decommissioning fund treatment) of these transactions has trended upward. We believed that it was possible to obtain transaction terms that retained access to the power produced at Palisades on terms comparable to or more favorable than the cost of continued ownership by Consumers Energy, while also freeing up funds from the decommissioning trusts that could be utilized for other purposes beneficial to customers. These considerations further supported a decision to explore the sale of Palisades.

Fourth, continued ownership of a nuclear plant entails considerable risk. Some of these risks are highlighted above; namely, the risk that NMC would no longer be a viable option for continued management of Palisades and the impracticality of resuming direct operation of Palisades. In addition, there are significant risks associated with the future capital needs of a nuclear unit. While many of those can be identified and planned for, the nature of the nuclear industry is that issues that arise at other operating nuclear units often have an impact on all units. Many of these are essentially impossible to predict, but can have a substantial impact on the owners of these units. Further, an extended outage of a nuclear unit can be very costly, since the fixed costs of the plant continue and replacement power costs can be significant. A performance-based PPA structure can

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DAVID W. JOOS DIRECT TESTIMONY

mitigate this risk. In addition, there is considerable risk associated with the decommissioning of nuclear units. This risk includes the investment performance of the decommissioning trust funds, as well as the difficulty in accurately projecting the cost of decommissioning the plant, and the risk associated with carrying out the decommissioning. The prospect of being able to transfer these risks to a new owner, while retaining the right to the output of the plant for a substantial term also supported a decision to sell Palisades.

For these reasons, in December 2005, Consumers Energy elected to proceed with the auction of Palisades.

- Q. Please describe the Big Rock ISFSI.
- A. The Big Rock ISFSI consists of eight dry storage casks that contain spent fuel bundles (and reactor-generated greater than class C waste ("GTCC waste")) from the Big Rock Nuclear Plant, and associated facilities. The Big Rock ISFSI stands on a concrete pad in a secure, fenced and monitored location within the site of the former Big Rock Nuclear Plant site. After the shutdown of the operating plant in 1997, Consumers Energy removed the spent fuel bundles from the operating plant and placed them in the ISFSI. The ISFSI will remain on the current site until the spent fuel bundles and GTCC waste are transferred off-site to a U.S. Department of Energy (DOE) facility or some other licensed storage facility.
- Q. Why is the Big Rock ISFSI part of the Palisades transaction?
- A. The salc of the Big Rock ISFSI was offered on an optional basis to bidders. This option was offered because of Consumers Energy's desire to minimize the future costs and risks associated with the ownership of nuclear assets. Since we had made the decision to seek

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LEWIS REED & ALLEN P.C.

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December 5, 2006

Writer's Direct No. (269) 553-1423 E-Mail Address: rreed@lewisreedallen.com

DOCKETED USNRC

Secretary

ATTN: Rulemakings and Adjudications Staff U.S. Nuclear Regulatory Commission Washington, D.C. 0555-0001

December 5, 2006 (11:59am)

OFFICE OF SECRETARY RULEMAKINGS AND ADJUDICATIONS STAFF

Re: In the Matter of Consumers Energy Company, Nuclear Management Company, LLC, and Entergy Nuclear Palisades, LLC and Entergy Nuclear Operations (Palisades Nuclear Plant, License No. DPR-20)

Docket No. 50-255

Dear Sir/Madam:

Enclosed find an original and two copies of the following:

- 1. Appearance.
- 2. Petition by Van Buren County, Covert Township, Covert Public Schools, Van Buren County Intermediate School District, Van Buren County District Library, Lake Michigan College and South Haven Hospital (Collectively Referred to as "Local Units") for Leave to Intervene and Request for Hearing, Request for Extension of Time and Request for Discovery.
 - 3. Proof of Service.

Please direct any questions you may have to the undersigned. Thank you for your assistance.

Yours vary truly,

H/14V//K

RDR/jac Enclosures

UNITED STATES OF AMERICA BEFORE THE NUCLEAR REGULATORY COMMISSION

In the Matter of

CONSUMERS ENERGY COMPANY, NUCLEAR MANAGEMENT COMPANY, LLC and ENTERGY NUCLEAR PALISADES, LLC and ENTERGY NUCLEAR OPERATIONS.

Docket No. 50-255

(Palisades Nuclear Plant, License No. DPR-20)

APPEARANCE

RICHARD D. REED, of the law firm of LEWIS, REED & ALLEN, P.C., represents that he is a member in good standing of the State Bar of Michigan (see attached Certificate of Good Standing) and that, pursuant to an Intergovernmental Agreement between the following-named proposed intervenors, hereby enters his Appearance for and on behalf of:

- 1. Van Buren County, 219 Paw Paw Street, Paw Paw, Michigan, 49079.
- 2. Covert Township, P.O. Box 35, Covert, Michigan, 49043.
- 3. Covert Public Schools, 35323 M-140 Highway, Covert, Michigan, 49043.
- 4. Van Buren County Intermediate School District, 490 South Paw Paw Street, Lawrence, Michigan, 49064.
- 5. Van Buren County District Library, 200 North Phelps Street, Decatur, Michigan, 49045.
 - 6. Lake Michigan College, 2755 East Napier Avenue, Benton Harbor,

Michigan, 49022-1899.

7. South Haven Community Hospital, 955 South Bailey, South Haven,

By:

Michigan, 49090.

Dated:

December 5, 2006

1 /

Richard D. Reed (P49296)

Attorneys for Intervenors

BUSINESS ADDRESS:

LEWIS, REED & ALLEN, P.C.

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UNITED STATES OF AMERICA BEFORE THE NUCLEAR REGULATORY COMMISSION

In the Matter of

CONSUMERS ENERGY COMPANY, NUCLEAR MANAGEMENT COMPANY, LLC and ENTERGY NUCLEAR PALISADES, LLC and ENTERGY NUCLEAR OPERATIONS.

Docket No. 50-255

(Palisades Nuclear Plant, License No. DPR-20)

PROOF OF SERVICE

I, JULIE A. COSGROVE, hereby certify that I am employed by the law firm of LEWIS, REED & ALLEN, P.C., and that on December 5, 2006 I served, by electronic mail and by first class mail, postage fully prepaid, the Appearance and Petition by Van Buren County, Covert Township, Covert Public Schools, Van Buren County Intermediate School District, Van Buren County District Library, Lake Michigan College and South Haven Hospital (collectively referred to as "Local Units") for Leave to Intervene and Request for Hearing, Request for Extension of Time and Request for Discovery on the following persons, addressed as indicated:

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Secretary of the Commission

ATTN: Rulemakings and Adjudications Staff

U.S. Nuclear Regulatory Commission

Washington, DC 20555-0001

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Julie A. Cosgrove

Dated:

December 5, 2006

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From:

<dreed@lewisreedallen.com>

To:

"HearingDocket" <HearingDocket@nrc.gov>

Date:

Wed, Dec 27, 2006 3:50 PM

Subject:

Re: In the Matter of Palisades Nuclear Plant, License No. DPR-20,

Docket No. 50-

255

This will confirm the communication between Rebecca Gitter (NRC) and attorney Paula Aylward (Lewis Reed & Allen) on 12/20/06 that the enclosures submitted with Local Units' Petition to Intervene (and other relief) are all publicly available documents.

If you need further information, please let us know. Thank you.

Richard D. Reed Lewis, Reed & Allen, P.C. 136 East Michigan Avenue, Suite 800 Kalamazoo, Michigan 49007 (269) 388-7600 (Voice) (269) 488-3833 (Fax) rreed@lewisreedallen.com (E-mail) www.lewisreedallen.com (Website)

DOCKETED USNRC

December 27, 2006 (3:50pm)

OFFICE OF SECRETARY RULEMAKINGS AND ADJUDICATIONS STAFF

Docket No. 50-255

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To: <rreed@lewisreedallen.com>

c.gov>

"Adria Byrdsong" <ATB1@nrc.gov>, "Emile Julian"

<ELJ@nrc.gov>

cc:

12/26/2006 09:19

Subject: In the Matter of Palisades Nuclear Plant, License

ΑM

No. DPR-20, Docket No. 50-255

Mr. Reed,

We have reviewed your Petition for Leave to Intervene and Request for Hearing, Request for Extension of Time and Request of Discovery and noticed that some of the attachments were marked Confidential-Draft and some contained financial information. We spoke with Ms. Fries via telephone earlier in December and she explained that the documents were all publicly available and we neglected to request an email to support her statement. Please provide us with an email to support the public availability of the petition so that we may include it on our Electronic Hearing Docket.

HearingDocket - ne. III the Matter of Landagoo (100)

Thank you,

Rulemakings & Adjudications Staff Office of the Secretary U.S. Nuclear Regulatory Commission Mail Envelope Properties (4592DC97.CDF: 18:52447)

Subject:

Re: In the Matter of Palisades Nuclear Plant, License No. DPR-20,

Docket No. 5

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Block List is not enabled