

UNITED STATES OF AMERICA
BEFORE THE NUCLEAR REGULATORY COMMISSION
OFFICE OF THE SECRETARY

August 8, 2005 (2:00 pm)

OFFICE OF SECRETARY
RULEMAKINGS AND
ADJUDICATIONS STAFF

_____)	
In the Matter of)	
)	Docket No. 50-255
NUCLEAR MANAGEMENT COMPANY)	
PALISADES NUCLEAR GENERATING)	
STATION)	
)	
Regarding the Renewal of)	
Facility Operating License No.)	August 8, 2005
DPR-20 for a 20-Year Period)	
_____)	

REQUEST FOR HEARING
AND
PETITION TO INTERVENE

Now come the Nuclear Information and Resource Service (hereinafter "NIRS"), West Michigan Environmental Action Council (hereinafter "WMEAC"), Don't Waste Michigan (hereinafter "DWM"), the Green Party of Van Buren County (hereinafter "Green Party"), the Michigan Land Trustees (all collectively known as Petitioners-Intervenors), and Ann Aliotta, Katherine Beck, Lee Burdick, Bruce Cutean, W. Ronald Elmore, Jane Gardner, Barbara Geisler, Karen Heavrin, Janine Heisel, Mary Lou Hession, Alice Hirt, Laretta Holmes, Chuck Jordan, Judy Kamps, Gary Karch, Maynard Kaufman, Nelly Kurzmann, Nan Lewis, Michael Martin, Maria Ochs, Elizabeth Paxson, Ken Richards, Margaret Roche, Pamela S. Rups, James O. Schlobohm, Sally P. Schlobohm, Catherine Sugas, Elizabeth M. Sugas, Robin Tinholt, Barbara Trumbull, and Sally Zigmond (collectively known as Member-Intervenors) and hereby make their REQUEST FOR A HEARING and PETITION TO INTERVENE in the captioned matter, pursuant to the

Federal Register Notice of June 08, 2005 [Volume 70, Number 109, Page 33533-33535] and in accordance with the provisions of 10 CFR § 2.714 and § 2.309.

In support of their Request and Petition, said Intervenors further state as follows:

1. Nuclear Information and Resource Service is a nonprofit corporation with over 6000 members, a number of whom live in the Great Lakes Region of the United States, including over 100 in Michigan and 50 of whom make their residences within fifty (50) miles of the Palisades Nuclear Generating Station (hereinafter "Palisades"). The central office of NIRS is located at 1424 16th Street NW, Suite 404, Washington, DC 20036.

2. Western Michigan Environmental Action Council is a nonprofit, tax-exempt environmental organization started in the mid-1960's. It has 1500 members, most of whom live in Michigan, and an estimated 400 to 500 live within 50 miles of the Palisades nuclear plant.

3. Don't Waste Michigan is a nonprofit organization begun in the 1980's with about 25 members, nearly all of whom live in Michigan, and of which an estimated 5 currently live within 50 miles of the Palisades nuclear plant.

4. The Green Party of Van Buren County is a political party and association of persons which came into being around environmental issues. It has a membership of approximately 15 members, all of whom are residents of Van Buren County, Michigan, and all of whom reside within 50 miles of the Palisades nuclear plant.

5. Michigan Land Trustees (website www.michiganlandtrust.org) was founded in 1976. It is an association of 60 to 70 individuals and

families dedicated to preserving and protecting farm land in Michigan. Most of its members reside in southwest Michigan, at least 15 of whom live within the 50-mile zone around the Palisades nuclear reactor.

6. Members of these organizations who live or have property and family within the 50-mile Emergency Planning Zone (EPZ) including the immediate area around the Palisades Nuclear Generating Station which is sited in Covert, Michigan have requested Nuclear Information and Resource Service, West Michigan Environmental Action Council, Don't Waste Michigan, the Green Party of Van Buren County and the Michigan Land Trustees (hereinafter "Petitioners") to represent them and their respective interests in this proceeding.

6. The Declarations of individuals Ann Aliotta, Katherine Beck, Lee Burdick, Bruce Cutean, W. Ronald Elmore, Jane Gardner, Barbara Geisler, Karen Heavrin, Janine Heisel, Mary Lou Hession, Lauretta Holmes, Chuck Jordan, Judy Kamps, Gary Karch, Maynard Kaufman, Nelly Kurzmann, Nan Lewis, Michael Martin, Maria Ochs, Elizabeth Paxson, Ken Richards, Margaret Roche, Pamela S. Rups, James O. Schlobohm, Sally P. Schlobohm, Catherine Sugas, Elizabeth M. Sugas, Robin Tinholt, Barbara Trumbull, and Sally Zigmond are annexed to this Request and Petition, with each individual declarant identifying his or her affiliation with the petitioning organizations.

7. Petitioners-Intervenors, as organizational intervenors, believe that their members' interests will not be adequately represented without this action to intervene, and without the opportunity to participate as full parties in this proceeding. If

the Palisades Nuclear Generating Station license is renewed without resolving the Petitioners'-Intervenors' safety concerns and environmental issues, this nuclear generating station may operate unsafely and pose an unacceptable risk to the environment, thereby jeopardizing the health and welfare of the respective Petitioners'-Intervenors' members who live, recreate and have businesses within the vicinity of the nuclear power reactor.

PETITIONERS' CONTENTIONS

TECHNICAL/HEALTH/SAFETY ANALYSIS CONTENTIONS

1. The license renewal application is untimely and incomplete for failure to address the continuing crisis of embrittlement.

The Petitioners allege that the Palisades license renewal application is fundamentally deficient because it does not adequately address technical and safety issues arising out of the embrittlement of the reactor pressure vessel and unresolved Pressure Thermal Shock ("PTS") concerns that might reasonably result in the failure of the reactor pressure vessel ("RPV"). The Palisades nuclear power station is identified as prone to early embrittlement of the reactor pressure vessel, which is a vital safety component. As noted in the opinion of Petitioners' expert on embrittlement, Mr. Demetrios Basdekas, retired from the Nuclear Regulatory Commission, the longer Palisades operates, the more embrittled its RPV becomes, with decreasing safety margins in the event of the initiation of emergency operation procedures. Therefore, a hearing on the public health and safety effects of a prospective additional twenty years of operation, given the present and prospective embrittlement trend of the RPV is imperative to protecting the interests of those members of the petitioning organization who are affected by this proceeding.

2. Excessive radioactive and toxic chemical contamination in local drinking water due to emissions from Palisades nuclear power plant as part of its daily, "routine" operations.

The radioactive and toxic chemical emissions from the Palisades nuclear power plant into the waters of Lake Michigan contaminate the recently-installed drinking water supply intake for the City of South Haven, built just offshore from Van Buren State Park and just downstream from the Palisades reactor, due to the direction of the flow of Lake Michigan's waters and the very close proximity of the Palisades reactor to the South Haven drinking water supply intake. U.S. National Oceanographic and Atmospheric Administration models confirm the direction of water flow in Lake Michigan toward the

intake. Petitioners-Intervenors hope to produce public records of toxics and radiation testing of the water source to evidence this public health problem.

ENVIRONMENTAL CONTENTIONS

3. The Palisades reactor has no place to store its overflowing irradiated nuclear fuel inventory within NRC regulations.

The indoor irradiated fuel storage pool reached capacity in 1993. But the outdoor dry cask storage pads at Palisades, both the older one nearer Lake Michigan and the newer one further inland, are in violation of NRC earthquake regulations. 10 CFR § 72.212(b)(2)(i)(B) requires that:

Cask storage pads and areas have been designed to adequately support the static and dynamic loads of the stored casks, considering potential amplification of earthquakes through soil-structure interaction, and soil liquefaction potential or other soil instability due to vibratory ground motion. . . .

According to Petitioners' anticipated expert, Dr. Ross Landsman, former U.S. Nuclear Regulatory Commission Region III dry cask storage inspector, the older pad violates the liquefaction portion of this regulation, and the new pad violates the amplification portion of the regulation. Petitioners contend that neither the older nor new dry cask storage pads at the Palisades plant were designed in consideration of the factors contained in the cited regulation.

4. The unloadable, unmovable dry storage cask #4 at Palisades.

In 1993, Consumers Power (now Consumers Energy) assured a federal district judge that if it encountered problems with loaded dry casks at Palisades, it would simply reverse the loading procedure and return the high-level radioactive waste to the storage pools. But the fourth cask loaded at Palisades, in June 1994, was shortly thereafter admitted by Consumers Power to be defective, having faulty welds. However, eleven years on, Consumers has yet to unload the defective cask, because it cannot. Petitioners state that Consumers perpetrated a fraud upon the court and the public, with the complicit support by the NRC, and has critically undermined its credibility as to any pledges about the safety of dry cask storage.

The significance of this problem with cask #4 is considerable. For example, the configuration of the 18 to 19 dry casks currently stored on the older pad nearer Lake Michigan is such that the casks furthest back cannot be moved or unloaded until all other casks in front of them have been moved out of the way first. This configuration increases the risks, making it very difficult to address emergencies involving certain casks in the configuration in a timely manner.

5. *There is no permanent repository for the nuclear waste which would be generated at Palisades after 2010.*

Any waste generated at Palisades after 2010 would be excess to the capacity of the proposed national dump at Yucca Mountain, Nevada according to U.S. Department of Energy projections in its Yucca Mountain Final Environmental Impact Statement (Feb. 2002), as revealed in Tables A-7 and A-8 on pages A-15 and A-16 of Appendix A. In fact, the waste generated at Palisades from 1971 to 2010 may also be excess to Yucca, in that the proposed dump may never open. The State of Nevada maintains that NRC's "Nuclear Waste Confidence Decision" is erroneous, in that it biases NRC to favor the Yucca Mountain dump license lest it be proven wrong in its assurance to the public that a high-level radioactive waste geologic repository will open in the U.S. by 2025. Because so much uncertainty surrounds the Yucca Mountain dump proposal, as well as other high-level radioactive waste proposals, Petitioners-Intervenors contend that waste generated at Palisades during the 20 year license extension could very well be stored at Palisades indefinitely, a scenario inadequately addressed by the applicant and NRC.

6. *Intensifying sand erosion and avalanche risk around dry cask storage pads.*

The more casks loaded on the storage pads at Palisades, the more risk of erosion to the sand supporting the pads, given the large weight of the casks themselves (well over 100 tons each), weather related erosion of the sand dunes, as well as the erosion that will occur due to more severe weather impacts from the global climate crisis and climate de-stabilization. Arresting erosion at both pads is important to safety and radiation containment over the long haul, given the proximity of the waters of Lake Michigan. The State of Michigan and the U.S. Army Corps of Engineers have designated the sand dunes upon which the older pad is located - so close to the waters of Lake Michigan - as a high-risk erosion zone.

The Lake Michigan dunes are subject to "blow outs" where entire dunes are blown out during wind storms and lightning strikes. See F. Nori, P. Sholtz, and M. Bretz (Department of Physics, The University of Michigan), "Sound-Producing Sand Avalanches," Scientific American Vol. 277, No. 3 (September 1997). At Warren Dunes, some 35 miles south of Palisades, sand blowouts have been estimated to travel as much a one-quarter mile per day, exposing 5,000-year-old trees that have long since turned to charcoal. "Some chilling facts about Dunes history,"

<http://www.nwitimes.com/articles/2005/07/25/news/region/0256d4c429632b30862570460062843b.txt>

The Palisades dunes could, in a wind storm or lightning strike, shift, blow and cover the dry cask storage area. As weather patterns intensify (as anticipated) this potential for erosion will increase. Additionally, the dunes and shore line are geologically prone to sand avalanche. A sand avalanche coupled with a seismic event could compromise the integrity of one or more casks at Palisades.

7. *Non-radiological persistent toxic burdens to area water sources.*

The impact of 20 additional years of pollution by toxics disclosed but not adequately controlled under requirements of the National Pollutant Discharge Elimination System will directly affect water quality of nearby sources, including Lake Michigan. In 2000, for example, Palisades was found to be in "continuing noncompliance" for its apparent multiple misuses of Betz Clam-Trol in Lake Michigan for the dispersion of mussels and clams affecting the water intakes. See <http://www.epa.gov/region5/water/weca/reports/mi4qtr01.txt>

NPDES violations also contradicts the spirit, intention and explicit recommendation of The International Joint Commission. In its "Ninth Biennial Report on Great Lakes Water Quality," the Commission's Recommendation #16 (at p. 42) urges that "[g]overnments monitor toxic chemicals used in large quantities at nuclear power plants, identify radioactive forms of the toxic chemicals and analyze their impact on the Great Lakes ecosystem."

MISCELLANEOUS CONTENTIONS

8. *Increased embrittlement of re-used fuel rods as buffers to reduce embrittlement of RPV walls.*

To mitigate the prospect of increased embrittlement of the reactor pressure vessel (RPV), the Palisades operator uses previously-irradiated fuel to create a buffer next to the RPV wall.

The second-use of irradiated fuel assemblies in the reactor core tends to weaken and damage the cladding on the fuel rods, making future waste handling, storage, and ultimate disposal - whether on-site at Palisades, in transport, and at future storage or dump sites - problematic. It poses an elevated risk for the safety of Palisades workers and the general public. Moreover, the U.S. Department of Energy ("DOE") depends on the integrity of the fuel cladding as a means of preventing or minimizing the chances of unanticipated fissioning in storage casks or other units - in effect, as a means of delaying radiation releases into the groundwater at the Private Fuel Storage (Utah) and Yucca Mountain (Nevada) sites.

8. *Environmental justice denied by the continuing operations of Palisades.*

Palisades nuclear generating station is a the source of environmental justice violations. Located within a predominantly African-American and low-income township, Palisades provides woefully inadequate tax revenues to the host community, considering the large adverse impacts and risks the reactor inflicts. Palisades' African-American employees have traditionally been stuck in the dirtiest and most dangerous jobs at the reactor, with little to no prospects for promotion. Some of Palisades' African American employees have also experienced death threats at the work place, including nooses hung in their lockers or in public places to symbolize lynching, an attempt

to silence their public statements for workplace justice.

Palisades' license extension application also has inadequately addressed the adverse impacts that 20 additional years of operations and waste generation would have on the traditional land uses, spiritual, cultural, and religious practices, and treaty rights of various federally-recognized tribes in the vicinity of the plant and beyond, as well as effects upon non-federally recognized tribes governed by international law. Only three tribes were contacted by the NRC by August 8th, 2005, and invited to participate in the license extension proceedings, which effectively excluded a number of tribes within the 50-mile zone around the reactor. For this reason alone, the August 8, 2005 deadline for requesting a hearing to intervene against the Palisades license extension should be extended, until all tribes within the 50-mile zone and beyond, which have ties to the power plant site and its environs, are contacted.

Also, Palisades' license extension application inadequately addresses the adverse socio-economic impacts of a catastrophic radiation release due to reactor core embrittlement leading to core rupture, as they would be found among the low-income Latin American agricultural workforce of the Palisades area. Too, possible synergistic effects of such catastrophic radiation releases combined with the toxic chemical exposures these low income Latin-American agricultural workers already suffer on the job have not been evaluated.

Finally, there is an unacceptable lack of Spanish language emergency evacuation instructions and notifications to serve the Spanish speaking Latino population within 50 miles of the Palisades reactor, especially migrant agricultural workers.

9. *Chronic emergency unpreparedness within EPZ.*

Emergency responders in the 50 mile zone around the Palisades nuclear reactor are inadequately trained and inadequately equipped to respond to a major radioactivity release during an accident or attack at the plant.

Even with its shiny new fire trucks, Covert, Michigan does not have the staffing, equipment, training nor preparedness for a major radiological emergency. Covert's best, good as it is, is still no match for a chernobyl style fire. The remainder of the emergency planning zone is occupied by rural, volunteer fire departments, which have even less equipment and resources with which to work. Radiation monitors and radiation-protective gear are in short supply or unheard of. Isolation wards for radioactively contaminated victims (so they don't harm the doctors and nurses and other patients) are very rare or non-existent at most, probably all, hospitals within 50 miles.

10. *Economic damage in Palisades region in event of accident or attack on the power plant causing severe radiation release.*

Given that a severe radiation release from Palisades due to accident or attack would significantly damage the economic base of western Michigan, not only within the 50 mile zone around the

reactor, but even beyond it, due to crops and products that would have to be destroyed, as well as the lingering stigma attached to western Michigan agricultural products after such a release, a Severe Accident Mitigation Analysis must be performed, publicized and circulated for public review and comment as a precondition to considering whether or not to grant a license extension.

11. Threats of terrorist attack and sabotage against the Palisades nuclear power plant.

Located on the shoreline of Lake Michigan, the source of drinking water, fish, recreation, and other economic value to tens of millions of people downstream, Palisades represents a target for potentially catastrophic terrorist attack or sabotage intended to release large amounts of radioactivity into the Great Lakes basin. Palisades represents a radioactive bull's eye on the shore of 20% of the planet's surface fresh water, the Great Lakes. The operating reactor (containing many billions of curies of radioactivity) and high-level waste storage pool (containing tens to hundreds of millions of curies) are vulnerable to such attack, as are the outdoor dry storage casks, so highly visible stored in plain sight.

12.

Respectfully submitted for the Petitioners,

/s/ Terry J. Lodge
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Co-Counsel for all Petitioners-Intervenors and Member-Intervenors

CERTIFICATION OF SERVICE/TRANSMISSION

I hereby certify that the foregoing Request for Hearing and Petition to Intervene, along with five (5) Notices of Appearance, was sent this 8th day of August, 2005 via email only to the following:

Office of the Secretary
United States Nuclear Regulatory Commission
Washington, DC 20555-0001
Attention: Rulemaking and Adjudications Staff
Email to Office of the Secretary : HEARINGDOCKET@nrc.gov

Office of General Counsel
United States Nuclear Regulatory Commission
Washington, DC 20555-0001
Email OGCMailcenter@nrc.gov

And that the same was sent via first-class mail on the 9th of August, 2005 to:

Jonathan Rogoff, Esq.
Vice President Counsel & Secretary
Nuclear Management Company LLC
700 First Street
Hudson, WI 54016

/s/ Terry J. Lodge
Terry J. Lodge

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NOTICE OF APPEARANCE OF PAUL GUNTER

Pursuant to 10 CFR 2.713(b), Paul Gunter hereby enters an appearance on behalf of Nuclear Information and Resource Service (NIRS) and provides the following information:

1. I am Director of the Reactor Watchdog Project for Nuclear Information and Resource Service at 1424 16th Street NW, Suite 404, Washington, DC 20036, Tel. 202 328 0002 and my email address is <pgunter@nirs.org>.

2. I have been appointed by NIRS to jointly represent the organization and its members in this proceeding.

/s/ Paul Gunter
Paul Gunter

8/8/2005
Date

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NOTICE OF APPEARANCE OF MICHAEL KEEGAN
FOR DON'T WASTE MICHIGAN

Pursuant to 10 CFR 2.713(b), Michael Keegan hereby enters an appearance on behalf of Don't Waste Michigan (DWM), and provides the following information:

1. I am Co-Chair of the board of Don't Waste Michigan at 2213 Riverside Drive, NE, Grand Rapids, MI 49505, phone (734) 735-6373 and my email address is <mkeeganj@comcast.net>.

2. I have been appointed by DWM to jointly represent the organization and its members in this proceeding.

/s/ Michael Keegan
Michael Keegan

8/8/2005
Date

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NOTICE OF APPEARANCE OF ALICE HIRT
FOR WESTERN MICHIGAN ENVIRONMENTAL ACTION COUNCIL

Pursuant to 10 CFR 2.713(b), Alice Hirt hereby enters an appearance on behalf of the Western Michigan Environmental Action Council (WMEAC), and provides the following information:

1. I am a member of WMEAC, the office of which is located at 1415 Wealthy Street, SE, Suite 280, Grand Rapids, MI 49506, phone (616) 335-3405 and my email address is <alicehirt@charter.net>.
2. I have been appointed by WMEAC to jointly represent the organization and its members in this proceeding.

/s/ Alice Hirt
Alice Hirt

8/8/2005
Date

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NOTICE OF APPEARANCE OF CHUCK JORDAN
FOR GREEN PARTY OF VAN BUREN COUNTY, MICHIGAN

Pursuant to 10 CFR 2.713(b), Chuck Jordan hereby enters an appearance on behalf of the Green Party of Van Buren County, Michigan, and provides the following information:

1. I am the Chairman of the Green Party of Van Buren County, the office of which is located at 50521 34th Avenue Bangor, MI 49013, phone (home) 269.427.8339 (cell) 269.271.2038, email <jordanc@btc-bci.com>.

2. I have been appointed by the Green party to jointly represent the organization and its members in this proceeding.

/s/ Chuck Jordan
Chuck Jordan

8/8/2005
Date

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NOTICE OF APPEARANCE OF MAYNARD KAUFMAN
FOR MICHIGAN LAND TRUSTEES

Pursuant to 10 CFR 2.713(b), Maynard Kaufman hereby enters an appearance on behalf of the Michigan Land Trustees and provides the following information:

I am a member of the Michigan Land Trustees. My office is located at my home, 25485 County Road 681, Bangor, MI 49013.

2. I have been appointed by the Michigan Land Trustees to jointly represent the organization and its members in this proceeding.

/s/ Maynard Kaufman
Maynard Kaufman

8/8/2005
Date