

UNITED STATES OF AMERICA  
BEFORE THE NUCLEAR REGULATORY COMMISSION

July 14, 2006 (4:08pm)

Before the Atomic Safety and Licensing Board

OFFICE OF SECRETARY  
RULEMAKINGS AND  
ADJUDICATIONS STAFF

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In the Matter of	)	Docket No. 50-255-LR
NUCLEAR MANAGEMENT COMPANY	)	ASLBP No. 05-842-03-LR
PALISADES NUCLEAR GENERATING STATION	)	
Regarding the Renewal of Facility Operating License No. DPR-20 for a 20-Year Period	)	October 6, 2005
_____	)	

**PETITIONERS' COMBINED RESPONSE IN OPPOSITION TO NRC STAFF  
AND NUCLEAR MANAGEMENT COMPANY MOTIONS TO STRIKE**

Now come the Nuclear Information and Resource Service, *et al.*, Petitioners-Intervenors herein (and hereinafter referred to as "Petitioners"), by and through counsel, and respond to the "NRC Staff Motion to Strike Petitioners' Combined Reply to NRC Staff and Nuclear Management Company Answers" (hereinafter referred to as "Staff Motion"), and to the "Nuclear Management Company's Motion to Strike Petitioners' September 16, 2005 Combined Reply to NRC Staff and Nuclear Management Company Answers" (hereinafter referred to as "NMC Motion").

**ARGUMENT**

***A. The Combined Reply contains 'legitimate amplification'  
of the original contentions***

The "Petitioners' Combined Reply to NRC Staff and Nuclear Management Company Answers" (hereinafter "Combined Reply") filed on September 16, 2005 was, on its face, a *bona*

*fide* effort to respond to the legal objections raised by the Staff and NMC answers, focusing on “the legal or logical arguments presented.” Petitioners used arguments of law coupled with factual renderings to rebut claims by NMC and the Staff respecting deficiencies in the contentions. Pages 2-23 of the Combined Reply, in particular, are a frontal assault on the arguments postulated by the Staff and NMC on the embrittlement issue. Moreover, there are specific references sprinkled throughout the Combined Reply to specific pages where points of the Staff’s and NMC’s arguments are raised, and responded to by Petitioners, see Combined Reply pp. 24, 25, 26, 36-37, 38, 39, 40, 41, 44, 45, 46, 47.

Although the Commission enjoins that reply memoranda must be “narrowly focused on the legal or logical arguments presented in the applicant/licensee or NRC staff answer,” there is no limitation as to what information, materials or arguments may be introduced to support intervening parties’ responses to avoid dismissal of contentions. Indeed, the licensing board in the oft-cited *Louisiana Energy Services* litigation recognized that there may properly be “legitimate amplification” of contentions in the course of making a reply to a procedural attack on a contention:

Accordingly, in making our rulings below, we do so based on the issue statements provided in the initial NMED and AGNM hearing petitions, as they may have been *legitimately amplified* in those petitioners’ replies to the LES and staff responses to their hearing petitions. (Emphasis supplied)

*Louisiana Energy Services, L.P.* (National Enrichment Facility), Docket No. 70-3103-ML, LBP-04-14, p. 16.

Although the Staff and NMC would have the Board believe that Petitioners somehow must disclose, if not prove, every aspect of their contentions when they file them, an intervention petition need only, at bottom, “provide sufficient information to show that a genuine dispute exists with the applicant/licensee on a material issue of law or fact.” 10 CFR § 2.309(f)(1)(vi) . The purpose of the contentions is simply to establish a genuine material

dispute adequate to warrant further inquiry. This is a standard somewhat lower than the standard for summary disposition. It remains true that "at the contention filing stage the factual support necessary to show that a genuine dispute exists need not be in affidavit or formal evidentiary form and need not be of the quality necessary to withstand a summary disposition motion." Rules of Practice for Domestic Licensing Proceedings--Procedural Changes in the Hearing Process, Final Rule, 54 Fed. Reg. 33,168, 33,171 (Aug. 11, 1989).

The Staff and NMC argue that the disclosure of "new support" (Staff Motion p. 2) somehow comprises a prohibited amendment or new argument that was not articulated in the original Petition to Intervene. NMC similarly complains (NMC Motion p. 3) that Petitioners "supply a series of documents that were neither referenced in, nor supplied with, the petition, and seek to raise a multitude of new issues and claims nowhere to be found in the Petition."

Petitioners wholly disagree that their Combined Reply was used as a vehicle to raise new arguments or claims not found in the original contentions or to cure deficient contentions. While Petitioners did flesh out their contentions, they did not depart from the essential core issues raised in them. There is no regulation that requires disclosure of 100% of all evidence which an intervenor might possibly adduce in support of a contention, at the time the contention is written. The Staff's and NMC's *ipse dixit* arguments aside, a fair reading of the Combined Reply reveals that at worst the Petitioners "legitimately amplified" the disputes established in their original well-pleaded contentions.

Notably, neither the Staff nor NMC claims any actual prejudice or injury to their respective interests as a consequence of the disclosures contained in the Combined Reply. After all, the original contentions were filed August 8, 2005 and the offending Combined Reply was submitted on September 16, 2005. So as they attack filings submitted in the very first 5 weeks of this proceeding - involving a license extension which, if granted, would not become

effective until 2011 - the Staff and NMC are urging some vague calumny will befall the NRC if detailed merits submissions are actually considered on their merits. NMC urges that the continued meaningfulness of the NRC's hearing procedures hangs upon the Board's ruling on the utility's motion to strike.<sup>1</sup>

Technical perfection is not an essential element of contention pleading. *Private Fuel Storage, L.L.C.* (Independent Spent Fuel Storage Installation), LBP-01-3, 53 NRC 84, 99 (2001). The sounder practice is to decide issues on their merits, not to avoid them on technicalities. *Consumers Power Company* (Palisades Nuclear Plant), LBP-79-20, 10 NRC 108, 116117 (1979).

**B. The Contentions and their treatment  
in the Combined Reply are congruent**

**1. Embrittlement**

The so-called "embrittlement" contention, Contention No. 1,<sup>2</sup> passes the six-element test of 10 CFR § 2.309(f)(1). Petitioners articulate safety concerns and a decreasing margin of safety to be expected as the Palisades reactor ages its way through a 20-year licensing extension. The potential effects of aging - which NMC explains is a core consideration in the

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<sup>1</sup>From NMC's Motion, p. 3: "If the hearing procedures established in Part 2 are to have any meaning whatsoever, the reply must be stricken."

<sup>2</sup>***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.

scope of this licensing renewal proceeding - on the reactor pressure vessel is raised by this contention. Petitioners state that the application is deficient in the analysis and data it provides. It would appear that they provided a specific statement of an issue of law or fact; explained the basis for the contention; demonstrated that the issue is within the scope of the proceeding; showed that the issue is material to the findings the NRC must make in order to grant a license extension; provided a concise statement of the alleged expert opinion which supports their position on the issue; and provided sufficient information to show that a genuine dispute exists with NMC on a material issue of fact.

By its objection, NMC clearly grasped the meaning of the issues raised by the contention, see NMC's Answer pp. 10-12, and then the utility argued the facts, castigating Petitioners for "blithely ignoring the Application's explication of how the age-related effects of RPV neutron irradiation embrittlement will be managed at the Palisades plant." NMC Answer p. 13, concluding with further *argument over facts*, asserting that "[n]owhere does the contention take issue with any aspect of the program described in the Application for managing RPV embrittlement and PTS or provide any reasoned statement why the Application is unacceptable in some material respect" (Emphasis in original). NMC Answer p. 13. And at NMC Answer p. 14, NMC further joins the argument over the meaning of factual assertions in the contention, claiming that Petitioners' expert opinion misses the point because "the question . . . is whether the Application provides for adequate management of RPV embrittlement."

But NMC's *ipse dixit* assertion of necessity fails to acknowledge this statement in Contention No. 1:

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.

Thus NMC is reduced to merely battling over the meaning of words in its try to dislodge

the embrittlement contention, and so is offended when Petitioners set out extensive facts and arguments in support of the principle contended issue, see Combined Reply pp. 2-23, which legitimately amplify the issue as expressed in the contention.

## **2. Toxic threats to South Haven water supply**

A similar pattern appears around Contention No. 2,<sup>3</sup> which alleges radiation and chemical toxicity to the South Haven, Michigan drinking water supply through its water intake, which is situated near Palisades. Petitioners specifically stated the issue, accompanied by a brief explanation of the basis, and it is obvious on the face of the contention that it falls within the scope of the proceeding and that the issue is material to the findings the NRC must make to support the action that is involved in the proceeding. The Petitioners summarized the facts supporting their position and mentioned their source, and overall, evidence a genuine dispute. When challenged by the Staff's and NMC's Answers, the Petitioners provided reports of toxic releases, evidence of the flow of Lake Michigan toward the water intakes, and cited the recently-released BEIR VII report of the National Academies of Science Committee on the Biological Effects of Ionizing Radiation which showed, Petitioners contended, an unmistakable significant relevance to Palisades' putative 20-year extension. Combined Reply pp. 24-33.

The information provided in the Combined Reply further explained Contention No. 2. It did not raise new arguments or accomplish anything but the legitimate amplification of the contention.

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### **<sup>3</sup>*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..

### 3. Inadequately-built dry cask storage facilities

The precision with which Contention No. 3 was drawn<sup>4</sup> makes it admissible on its face. It contains a specific statement of the issue of law and fact to be controverted, explains the basis for the contention, demonstrates that the issue is within the scope of the proceeding because of the inherent garbage disposal problem it poses, and is material to the necessary findings of the NRC because dry cask storage is a major part of the waste disposal stream for Palisades. Further, Contention No. 3 summarized an expert opinion from a recently-retired NRC inspector formerly responsible for Palisades who had raised his technical objection repeatedly while in the employ of the NRC, and Petitioners quoted the explicit NRC regulation to which the expert's opinion and professional objection is directed. Finally, the contention demonstrated a genuine dispute which necessitates further inquiry.

By the Combined Reply (at pp. 36-44) Petitioners amplified the factual assertions of the Contention, which is that the dry cask arrangements have violated NRC regulations since their inception. Dr. Ross Landsman's declaration merely added sworn testimonial weight to the already-obvious and well-pleaded contention. The information set forth in the Combined Reply on this issue was at worst, cumulative. It raised neither new arguments nor new facts previously unknown to the NRC and NMC. Rather, both the Commission and NMC have been

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***<sup>4</sup>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.

aware of Dr. Landsman's particularized objections for years.

#### **4. Nonradiological toxic burdens to Lake Michigan**

Contention No. 7,<sup>5</sup> nonradiological toxic burdens to Lake Michigan, also complies with the six elements of 10 CFR § 2.309(f)(1). When the Staff argued in its Answer (p. 22) that the NRC does not have jurisdiction over NPDES matters, Petitioners appropriately responded via the Combined Reply (p. 45) with points of law, which is precisely what is contemplated by NRC precedent and rule.

In the original contention, Petitioners cited a U.S. Environmental Protection Agency report showing Palisades to be in noncompliance with National Pollutant Discharge Elimination System requirements, which tends to prove that the utility was disobeying an important federal water quality law. Petitioners supplemented that document with additional reports, which showed a continuing history of years of noncompliance with NPDES. The Petitioners demonstrated that the noncompliance pattern falls within the scope of this license extension proceeding - in legitimate response to the Staff's objection. By so doing, Petitioners legitimately amplified this contention.

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<sup>5</sup>***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 contradict 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."

## 5. Environmental justice

The environmental justice claim, Contention No. 8,<sup>6</sup> conforms to the six elements of 10 CFR § 2.309(f)(1). The extensive amplification in the Combined Reply added evidentiary dimension to the draft contention.

### CONCLUSION

Although the requirements of 10 CFR § 2.309 must ultimately be met, every benefit of the doubt should be given to the potential intervenor in order to obviate dismissal of an intervention petition because of inarticulate draftsmanship or procedural or pleading defects. *Sequoyah Fuels Corp.* (Gore, Oklahoma Site Decontamination and Decommissioning Funding), LBP-94-8, 39 NRC 116 (1994). As such, petitioners will usually be permitted to amend petitions containing curable defects. *Virginia Electric & Power Co.* (North Anna Power

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<sup>6</sup>***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.

Station, Units 1 & 2), ALAB-146, 6 AEC 631 (1973). See also *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-1, 33 NRC 15, 40 (1991); *Long Island Lighting Co.* (Shoreham Nuclear Power Station, Unit 1), LBP-91-7, 33 NRC 179,195 (1991); *Seguoyah Fuels Corporation and General Atomics* (Gore, Oklahoma Site), LBP-94-19, 40 NRC 9,15 (1994).

Less than two (2) months have elapsed since the original contention submittals. The contemplated license extension cannot be effective before 2011. If the Board concludes there are pleading errors, then Petitioners request the time and opportunity to correct them. The policy of the Nuclear Regulatory Commission officially remains in favor of determining disputes on their merits, instead of merely rendering rote, mechanistic decisions irrelevant to substantial justice. The Licensing Board must do more than act as an "umpire blandly calling balls and strikes for adversaries appearing before it." *Pacific Gas & Electric Co.* (Diablo Canyon Nuclear Power Plant, Units 1 & 2), LBP-94-35, 40 NRC 180, 192 (1994); Georgia Institute of Technology (Georgia Tech Research Reactor), LBP-97-7, 45 NRC 265, 271 n.7 (1997).

The motions to strike should be denied in their entireties, and Petitioners' five remaining contentions should be admitted.

Respectfully submitted for the Petitioners,

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)		
	)		
NUCLEAR MANAGEMENT	)	Docket No.	50-255-LR
COMPANY, LLC	)		
	)		
(Palisades Nuclear Plant)	)	ASLBP No.	05-842-03-LR

CERTIFICATE OF SERVICE

I hereby certify that copies of the "PETITIONERS' COMBINED RESPONSE IN OPPOSITION TO NRC STAFF AND NUCLEAR MANAGEMENT COMPANY MOTIONS TO STRIKE" in the above-captioned proceeding have been served on the following through deposit in the NRC's internal mail system, with copies by electronic mail, as indicated by an asterisk, by U.S. mail, first class, as indicated by double asterisk, with copies by electronic mail, or by U.S. mail, first class, as indicated by triple asterisk, were delivered to all parties at the following mailing addresses; all on this 6th day of October, 2005:

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