

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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In the Matter of)	
)	
Progress Energy Florida)	Docket Nos. 52-029-COL
)	52-030-COL
(Combined License Application for)	
Levy County Nuclear Plant, Units 1 & 2))	
)	ASLBP No. 09-879-04
)	

DECLARATION OF MARVIN RESNIKOFF, Ph.D.
IN SUPPORT OF INTERVENORS' CONTENTION 8a

Under penalty of perjury, Marvin Resnikoff does hereby state as follows:

1. I previously submitted declarations in this proceeding on September 15, 2010, and October 4, 2010 stating my qualifications and attaching my resume. I stated in that declaration that there is no offsite disposal for PEF available at present and that PEF must therefore plan for indefinite storage. The DCD does not describe how this will be done and cannot be relied upon by NRC staff for that purpose.
2. Amended Intervenor's contention 8a asserts that "the Levy County COL fails to offer sufficient information to demonstrate the adequacy of PEF's plans for storing Class B and C radioactive waste on the Levy site if offsite disposal capacity is not available within two years." The contention further states that "safety findings must be made before the license is issued."

3. On April 14, 2011, PEF submitted a response to NRC staff RAI that provided additional information including an advance copy of the revised FSAR Chapter 11 with additional information on the revised extended LLRW plan. In my opinion, the revised LLRW plan still does not meet the Board's requirements nor satisfy staff guidance in this matter; factual issues remain in dispute.
4. To prepare this declaration, I have read the summary disposition motion prepared by the applicant, and particularly the attachments, including the revised FSAR Chapter 11. I have also read Staff's Standard Review Plan, Section 11.4 dealing with solid waste management systems and staff guidance¹. Finally I read the Hearing Board's decision denying PEF's original summary disposition motion.
5. The Board stated that PEF's motion was denied because it did not provide sufficient information to enable the Commission to reach a final conclusion to resolve whether PEF can limit radiation exposures set forth in 10 CFR Part 20 beyond the initial storage period. This decision by the Board, especially in relation to long-term storage, is in agreement with Staff guidance²:

“The duration of the intended storage, the type and form of waste, and the amount of radioactive material present will dictate the safeguards and the level of complexity required to assure public health and safety and minimal risk to

¹ Dircks, W.J., “Storage of Low-Level Radioactive Wastes at Power Reactor Sites” Nuclear Regulatory Commission, Generic Letter 1981-038, Enclosure “Radiological Safety Guidance for Onsite Contingency Storage Capacity”, November 10, 1981. ML031110064.

² *Ibid*

operating personnel. The longer the intended storage period, the greater the degree of controls that will be required for radiation protection and accident prevention.”

6. Mr. Pilo asserts that there is sufficient time to prepare a storage pad and high integrity containers to meet the storage needs for class B and C waste. He estimates a time period of 6 months for the necessary construction. Since class B and C waste are primarily wet resins, and these are removed every 18 months, not till the 3rd removal, will an outdoor storage pad be necessary, assuming no problems, such as overloading the resins due to damaged fuel, arise.
7. However, simply constructing a pad, fencing and lighting within a 6 month period is not the primary issue. Under accident-free conditions, the storage system must meet 10 CFR Part 20 conditions and under design basis events, such as fire, tornado, earthquake, tsunami, flood and hurricanes, the radiological consequences should not exceed a small fraction of 10 CFR Part 100. Neither Mr. Pilo, nor the Levy COL has made this factual showing. I would be prepared to present testimony on this issue at a hearing.
8. As just one example, PEF should consider the environmental impact of a flood on the Levy storage site and show that radiation exposures do not exceed 10 CFR Part 29.. That this is possible is shown by the two attached figures. The location of the proposed Levy Nuclear Plant is shown on Fig. 1.1-1 (attached), PEF Environmental Report. A potential storm surge of the

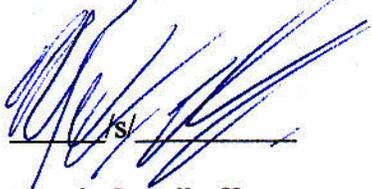
Gulf of Mexico appears in the figure, Withlacoochee Region Stormtide Zones, produced by the Florida Department of Emergency Management, U.S.

Geological Survey, and the Florida Geographic Data Library. It shows a Category 5 storm surge zone inundating the Levy site.

9. Regarding the time requirements for this outdoor storage system, I agree with the declaration proffered by Ms. Diane D'Arrigo and Dr. Arjin Makhijani in the Vogtle proceeding. They show that the Andrews County facility may not have sufficient capacity for LLRW from the Vogtle plants, and therefore, for the Levy plants as well. The proceedings for the Waste Control Specialists facility remains contested, and large number of out of state reactors wish to deposit LLRW there. The disposal capacity is presently limited. An issue not addressed by their declaration is the need for disposing of waste from the decommissioned Vermont Yankee reactor. The Andrews County facility is operated by the Vermont/Texas Compact and those States have favored status in disposing of LLRW. The State of Vermont has refused to issue a Certificate of Public Good to Entergy for a period following the 40-year operating license which expires March 21, 2012. This is a matter presently in the U.S. Court. Without this Certificate, a business cannot operate in Vermont. It is highly likely therefore that a large volume of LLRW will be generated when that reactor is decommissioned, which may begin in 2012.
10. In my opinion, LLRW from the Levy plants may remain onsite for an indefinite time period. PEF should demonstrate at this licensing proceeding that its long term outdoor storage system can meet the requirements of 10

CFR Part 20, and under accident conditions, a small fraction of 10 CFR Part
100.

I declare that the foregoing facts are true and correct to the best of my knowledge and
that the statements of opinion are based on my best professional judgment.



September 16, 2011

Marvin Resnikoff
Radioactive Waste Management Associates

