

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

Before Administrative Judges:

Alex S. Karlin, Chairman
Dr. Anthony J. Baratta
Dr. William M. Murphy

In the Matter of
PROGRESS ENERGY FLORIDA, INC.
(Combined License Application for Levy County
Nuclear Power Plant, Units 1 and 2)

Docket No. 52-029-COL, 52-030-COL

ASLBP No. 09-879-04-COL-BD01

May 14, 2010

Motion by Joint Intervenors to Amend Contention 8 on So-Called "Low-Level" Radioactive
Waste and Safety Issues Associated with Extended On-Site Storage

Intervenors, Nuclear Information and Resource Service, Green Party of Florida and Ecology Party of Florida recently settled with Progress Energy Florida (PEF) Contention 8, a contention of omission regarding the lack of adequate provision for storage or disposal of Class B or C or Greater than Class C (GTCC) radioactive waste (so-called low level radioactive waste or LLRW) for the proposed Levy reactor. The settlement was based on a supplement to PEF's combined construction and operating license application (COLA), which now provides some information about PEF's plans for the onsite storage of LLRW at the Levy site.¹

Intervenors find that PEF's changes to the COLA do not provide sufficient detail about its plans for LLWR storage to comply with relevant NRC safety regulations or address the concerns of our members who live in the area of the proposed site with respect to the potential for extended (more than two years) storage of so-called "low-level" radioactive waste at Levy County 1 & 2. Therefore Intervenors submit this amendment to Contention 8. As demonstrated

¹ Letter from John Elnitsky, PEF, to NRC (December 4, 2009).

below, Amended Contention 8 satisfies the NRC's admissibility criteria and the NRC's standard for filing of new safety contentions under 10 C.F.R. 2.309(f)(2).

II. Background

In LBP-09-10 (July 8, 2009), the Licensing Board revised and admitted Intervenors' Contention 8 as follows:

A substantial omission in the Progress Energy Florida's (PEF) application to build and operate Levy County Nuclear Stations Units 1 and 2 is the failure to address the absence of access to a licensed disposal facility or capability to isolate the radioactive waste from the environment. PEF's FSAR does not address an alternative plan or the safety, radiological and health, security or economic consequences that will result from lack of permanent disposal for the radioactive waste generated.

While the language of Contention 8 as originally admitted by this Board included the words "inadequate" and "address compliance with Part 20 and Part 50 Appendix I (ALARA)" the contention was explicitly admitted as a contention of omission.

In a response to a request for additional information (RAI) dated December 4, 2009, PEF offered an administrative plan for onsite storage of Class B, C and GTCC waste. In an amendment to COL Section 11.4.6, PEF assumes that the waste will be shipped offsite within 2 years; but that if it is not shipped offsite within two years, PEF will implement a "waste minimization plan." PEF adds the following language to Section 11.4.6 of the COLA:

All packaged and stored radwaste will be shipped to offsite disposal/storage facilities and temporary storage of radwaste is only provided until routine offsite shipping can be performed. Accordingly, there is no expected need for permanent on-site storage facilities at LNP 1 & 2.

If additional storage capacity for Class B and C waste is required, further temporary storage would be developed in accordance with NUREG-0800, Standard Review Plan 11.4, Appendix 11.4-A. To the extent that additional storage could be needed sometime in the future, the existing regulatory framework would allow Progress Energy to conduct written safety analyses under 10 C.F.R. § 50.59. If the additional storage does not satisfy 10 C.F.R. § 50.59, a license amendment would be required.

PEF also adds the following language to Section 11.4.2.4:

In the event that off-site shipping is disrupted or facilities are not available to accept radwaste when LNP Units 1 & 2 become operational, as described in DCD Section

11.4.2.1 paragraph ten, temporary storage capability on-site is available for greater than two years at the expected rate of radwaste generation and greater than one year at the maximum rate of radwaste generation. During this period, the implementation of additional waste minimization strategies could extend the duration of temporary radwaste storage capability. Since there are no facilities currently licensed by the NRC for disposal of Greater than Class C (GTCC) LLRW, storage of GTCC would be similar to the methodology used for storage of spent fuel.

On April 14, 2010 the Intervenor and PEF filed a joint motion for settlement and dismissal of contention 8.² The joint motion memorializes the agreement that PEF would not challenge the timeliness of an amended contention from the Intervenor if it were offered within 30 days of the date of the settlement agreement. This filing is that offering.

II. Amended Contention

Intervenor bring the following amended version of Contention 8:

AMENDED CONTENTION 8: Progress Energy Florida's (PEF's) COL application is inadequate to satisfy 10 C.F.R. 52.79 because it assumes that class B and C radioactive waste³ generated by proposed Levy Units 1 and 2 will be promptly (e.g., within two years) shipped offsite, while currently there is an absence of access to a licensed disposal facility or capability to isolate the radioactive waste from the environment. The proposed amendment to the Levy County COL also 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. PEF's plan to postpone most of its decisions regarding how and where to store the waste (including "minimizing" the volume of the waste) until sometime after issuance of the license for Levy violates Section 52.79 and also the Atomic Energy Act's requirement that safety findings must be made before the license is issued.

The declaration of Diane D'Arrigo (Attachment A and also Attachment B which contains supporting information) is filed in support of this amended contention.

Intervenor provide the following basis for the contention:

As demonstrated in the D'Arrigo Declaration, PEF lacks a credible basis for its assertion that it will definitely be able to ship so-called "low-level" radioactive waste generated at the

² Filed on April 14, 2010 "Joint Motion for Approval of Settlement and Dismissal of Contention 8" by Intervenor and Applicant.

³ Intervenor continue to contend that Greater Than Class C so-called "low-level" radioactive waste will remain on site indefinitely and that it requires planning rather than hopeful reliance on DOE to provide permanent disposal. Intervenor appreciate the applicant's inclusion of this waste category in the COL language; it is not included here because of the Commission's ruling CLI-10-02 on the PEF appeal to admission of contentions 7 and 8, removing GTCC waste from the scope of this proceeding.

proposed Levy County 1 & 2 sites off of the site within two years. No such disposal option exists today and two years is not a credible time span to generate a new off-site option.

In addition, PEF's alternative plan for onsite storage is so lacking in detail as to be completely useless for showing compliance with NRC's safety regulation 10 C.F.R. 52.79. 10 CFR 52.79(a)(3) specifies that the FSAR must include:

3) The kinds and quantities of radioactive materials expected to be produced in the operation and the means for controlling and limiting radioactive effluents and radiation exposures within the limits set forth in part 20 of this chapter;

In violation of this requirement, PEF's amendments to the Levy COLA do not offer any details whatsoever about waste management and storage beyond two years. As discussed in the D'Arrigo Declaration, neither the NRC nor the public therefore has any basis for evaluating the adequacy of the COLA with respect to long-term radioactive waste storage.

PEF asserts that if it has to use long-term onsite storage, it will change its plans and make an analysis under 10 CFR 50.59; and that in the event that analysis shows that the extended waste storage would cause Levy to be out of compliance with the PEF FSAR, PEF will seek a license amendment. But a promise to seek a license amendment after the license has been issued is not adequate to satisfy the NRC's licensing standards, which require that safety of operation must be demonstrated at the time of licensing, not afterwards. For instance, 10 CFR 52.79 requires that:

The final safety analysis report shall include the following information, at a level of information sufficient to enable the Commission to reach a final conclusion on all safety matters that must be resolved by the Commission before issuance of a combined license....

In addition to the matter of storage details, any and all future treatment and processing that could add to the routine and accidental radioactive and chemical releases and exposures from the operation of the reactors, management of high and so-called "low-level" radioactive waste

and all of the accompanying activities, is necessary in order to assess the compliance with both 10 CFR 20 (for both workers and the public) as well as ALARA (10 CFR 50 Appendix I). It is incumbent upon the applicant to provide sufficient information to demonstrate compliance with all applicable regulations for the radioactive waste generated by Levy County Units 1 and 2 including 10 CFR 20, 10 CFR 30, 10 CFR 50, 10 CFR 61, 10 CFR 71, 10 CFR 100, 40 CFR 190 and 49 CFR 171-180.

Given the very real likelihood that there will not be a place to permanently isolate the waste generated by Levy 1 & 2 in a timely fashion, it is not sufficient to invoke a future license amendment⁴ as the “plan” for this waste. PEF needs to describe, in detail the plan for how it intends to manage this material with sufficient information so that NRC staff can, in fact, determine whether regulations will be met.

Conclusion

For the foregoing reasons, Amended Contention 8 should be admitted.

Respectfully Submitted,

Electronically signed by _____
Mary Olson
Southeast Regional Coordinator,
Nuclear Information and Resource Service
[ADD ADDRESS AND TELEPHONE # AND E-MAIL ADDRESS]

on behalf of the Co-Intervenors

Asheville, North Carolina
May 14, 2010

⁴ For instance, information required under 10 CFR 52.17 would be impacted by what the method of handling and storage of so-called “low-level” waste if generated and stored on the Levy site.