



Serial: NPD-NRC-2011-081
December 7, 2011

10CFR52.79

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

**LEVY NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 52-029 AND 52-030
VOLUNTARY SUBMITTAL RELATED TO THE LIQUID WASTE MANAGEMENT SYSTEM
DESCRIBED IN CHAPTER 11 OF THE FINAL SAFETY ANALYSIS REPORT - SUPPLEMENT 1**

Reference: Letter from John Elnitsky, Progress Energy, to Nuclear Regulatory Commission (NRC), Voluntary Submittal Related to the Liquid Waste Management System Described in Chapter 11 of the Final Safety Analysis Report, NPD-NRC-2011-041, May 4, 2011

Ladies and Gentlemen:

Progress Energy Florida, Inc. (PEF) hereby submits additional information concerning the liquid waste management system described in Chapter 11 of the Final Safety Analysis Report for the Levy Nuclear Plant Units 1 and 2 (LNP). This information is provided in response to a teleconference with the U. S. Nuclear Regulatory Commission (NRC) on November 9, 2011.

The requested additional information is provided in the enclosure. The enclosure also identifies changes that will be made in a future revision of the LNP application.

If you have any further questions, or need additional information, please contact Bob Kitchen at (919) 546-6992, or me at (727) 820-4481.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on December 7, 2011.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Elnitsky', written over a horizontal line.

John Elnitsky
Vice President
New Generation Programs & Projects

Enclosure

cc : U.S. NRC Region II, Regional Administrator
Mr. Brian C. Anderson, U.S. NRC Project Manager

NRC Review of Final Safety Analysis Report

PGN RAI ID #: L-0995

PGN Response to NRC Question:

Progress Energy Florida's (PEF's) submittal of May 4, 2011 (NPD-NRC-2011-041) provided additional information requested by the NRC on the Levy Nuclear Plant's (LNP) liquid radwaste system (WLS) discharge and cooling tower blowdown line. A discussion of the need for vacuum breakers on the cooling tower discharge line and their location prior to the liquid radwaste discharge piping tie-in to the blowdown line was provided, along with the conclusion that no liquid radwaste will flow through the vacuum breakers. The associated COL Application revision described in NPD-NRC-2011-041 did not include the information on the vacuum breaker locations.

An additional revision to FSAR Subsection 11.2.1.2.4, Controlled Release of Radioactivity, and a revision to Figure 10.4-201 is described below to incorporate information on the blowdown line vacuum breakers.

Associated LNP COL Application Revisions:

The following changes will be made to the LNP FSAR in a future revision:

- 1) FSAR Subsection 11.2.1.2.4, Controlled Release of Radioactivity, will be revised from:

The exterior radwaste discharge piping is enclosed within a guard pipe and monitored for leakage. The radwaste discharge piping connects to the cooling tower blowdown piping. The double wall radwaste discharge piping terminates at this connection. Dilution of the radwaste with cooling tower blowdown occurs at this connection. Beyond this point of connection, the cooling tower blowdown piping is single-walled, buried and constructed of High Density Polyethylene. Downstream of the radwaste discharge connection will be one vent valve on each blowdown line. The vents shall be capped and locked closed to prevent inadvertent operation and are capable of manual operation as required for pump startup. The radwaste discharge line will be isolated during pump startup. As required during pump startup, personnel will be present at the vent valves to allow air to escape and then to close the valve when the line fills with water. Any spillage shall be contained and properly managed in accordance with Radiation Protection and ALARA Program requirements. Leak detection of the cooling tower and radwaste mixture will be accomplished by ground water monitoring and periodic walk down of the vent valves in accordance with NEI 08-08A. This reduces the potential for undetected leakage from this discharge to the environment to support compliance with 10 CFR 20.1406. The cooling tower blowdown with the diluted radwaste is discharged to the Crystal River Energy Complex discharge canal.

To read:

The exterior radwaste discharge piping is enclosed within a guard pipe and monitored for leakage. The radwaste discharge piping connects to the cooling tower blowdown piping. The double wall radwaste discharge piping terminates at this connection. Dilution of the radwaste with cooling tower blowdown occurs at this connection. Upstream of the connection point, at the high point on the system, two vacuum breakers

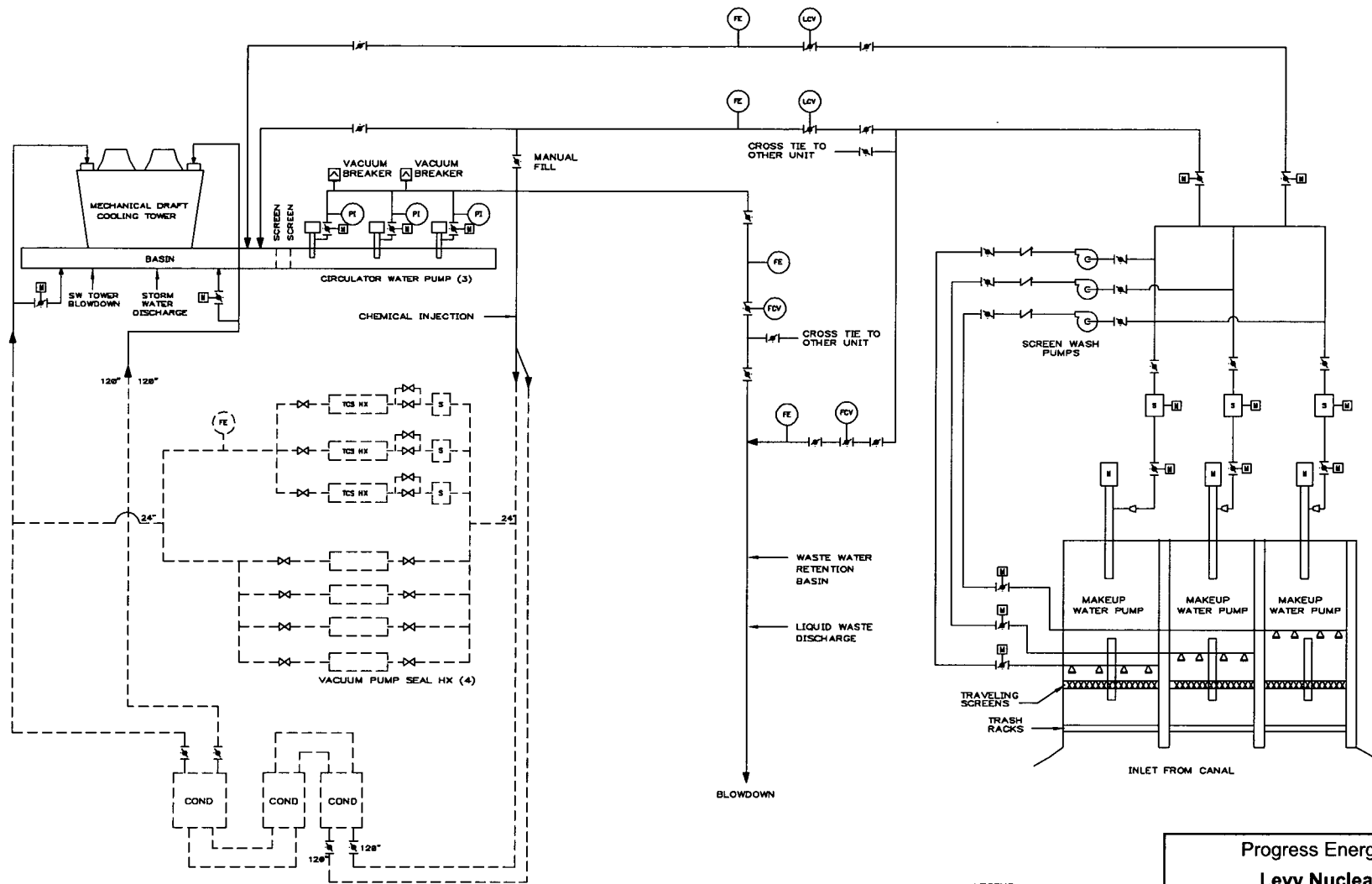
exist on the blowdown line to preclude water hammer during pump shutdown and startup and ensure the continued integrity of the line. The vacuum breaker location is shown on Figure 10.4-201; this location ensures liquid radwaste always remains downstream of the vacuum breakers. Planned liquid radwaste releases are only executed with dilution flow established either from the blowdown or Salt Water Sub-System of the Raw Water System.

Beyond this point of connection, the cooling tower blowdown piping is single-walled, buried and constructed of High Density Polyethylene. Downstream of the radwaste discharge connection will be one vent valve on each blowdown line. The vents shall be capped and locked closed to prevent inadvertent operation and are capable of manual operation as required for pump startup. The radwaste discharge line will be isolated during pump startup. As required during pump startup, personnel will be present at the vent valves to allow air to escape and then to close the valve when the line fills with water. Any spillage shall be contained and properly managed in accordance with Radiation Protection and ALARA Program requirements. Leak detection of the cooling tower and radwaste mixture will be accomplished by ground water monitoring and periodic walk down of the vent valves in accordance with NEI 08-08A. This reduces the potential for undetected leakage from this discharge to the environment to support compliance with 10 CFR 20.1406. The cooling tower blowdown with the diluted radwaste is discharged to the Crystal River Energy Complex discharge canal.

- 2) Revise FSAR Figure 10.4-201 as shown in the attachment.

Attachment:

Revised Figure 10.4-201, Circulating Water System and Raw Water System (Saltwater Subsystem), Rev. 4.



LEGEND:
 --- BY WESTINGHOUSE

Progress Energy Florida
 Levy Nuclear Plant
 Units 1 and 2
 Part 2, Final Safety Analysis Report
 Circulating Water System and Raw
 Water System (Saltwater Subsystem)
 FIGURE 10.4-201 Rev 4