



January 28, 2005

L-2005-021
10 CFR 50.36b
EPP 5.4.2

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Re: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Environmental Protection Plan Report
Date of Event: December 30, 2004
Non-routine Environmental Event - Hydrazine Release

The attached report is being submitted pursuant to the requirements of Section 5.4.2 of the St. Lucie Unit 1 and Unit 2 Environmental Protection Plans to provide a description of a reportable hydrazine release to the onsite industrial waste water system, collecting in the west settling basin, at the St. Lucie Plant.

The release had no direct impact on the plant operating characteristics other than reducing the condenser contaminant clean up activity when the feed and bleed was secured. No human health or environmental concerns existed at the time of the release as the receiving basin is contained within the plant fencing. The hydrazine concentration was low enough that airborne exposure was not a concern.

Very truly yours,

A large, stylized handwritten signature in black ink, appearing to read 'WJ', is written over the typed name and title.

William Jefferson, Jr.
Vice President
St. Lucie Plant

WJ/GRM

Attachment

IE23

Environmental Protection Plan Report
Date of Event: December 30, 2004
Non-routine Environmental Event

Event:

On December 30, 2004 while Unit 2 was in Mode 3. A feed and bleed on the condensate system was in progress to reduce condensate contaminants. Low level (PPB range) hydrazine concentration was being maintained in the condensate system. The chemical injection system was also being used to inject hydrazine into the steam generators. A closed isolation valve on the same injection line leaked by its valve seat and allowed additional hydrazine to enter the condensate system. This increased the condensate hydrazine concentration to approximately 4 PPM (parts per million). A supervisor observed the elevated hydrazine concentration and realizing that a feed and bleed was in progress raised the concern that a reportable quantity of hydrazine may have been released. The feed and bleed was secured December 30, 2004 at 13:30 and the site SPCC plan followed leading to the National Response Center notification.

The chemical hydrazine is an extremely hazardous substance (40 CFR 355 Appendix A) with a RQ limit of 1 lb per 24 hr period. The discharge of the hydrazine and water mixture occurred from about 0530-1330 with an estimated volume of 115,000 gallons containing about 3.8 lbs hydrazine. However, all of the process water was contained in the site industrial waste water system, collecting in the west settling basin. The release had no direct impact on the plant operating characteristics other than reducing the condenser contaminant clean up activity when the feed and bleed was secured. No human health or environmental concerns existed at the time of the release as the receiving basin is contained within the plant fencing. The hydrazine concentration was low enough that airborne exposure was not a concern.

Event Evaluation:

After further investigation, FPL determined that the State of Florida Department of Environmental Protection ("FDEP") Permit Number FL0002208, National Pollutant Discharge Elimination System ("NPDES") and Industrial Waste Water Permit ("IWW") control the management of FPL industrial waste water system. Hydrazine is described as a system additive in the site IWW Permit application. In addition, wet lay-up activities including hydrazine are identified as plant system drainage to ground water. The amount of hydrazine in the process water mixture released was much lower than the concentration authorized for release from the steam generator (I-005) outfall. The hydrazine concentration in the basin was also much lower than the permitted release concentration in the discharge canal (D-001) outfall.

FPL is currently renewing its NPDES/IWW permit. FPL will evaluate additional permit language and fact sheet information to clarify that the discharge of hydrazine and water mixtures are included within its NPDES/IWW permitted I-008 outfall (south percolation basin to discharge canal).

Immediate Corrective Actions:

- The feed and bleed operation was secured upon identification of the significance of the elevated condensate hydrazine level.
- The receiving industrial waste water basin was sampled for hydrazine concentration. Following the event, the maximum concentration analyzed was 314 ppb near the outflow of the waste water pipe into the basin. Two days later, on January 1, 2005, all samples from the basin had concentrations of less than 5 ppb.

Additional Corrective Actions

- Valve SH20173 had previously been identified as leaking by its' seat and a work order to repair the valve was in place but not worked. Leakage through this valve was the apparent cause of the event. An emergent work request was processed, and the repairs completed on January 16, 2005.
- Condition Report, CR 2004-18146 was created to investigate and track corrective actions for the chemical injection system to prevent similar occurrences.
- Condition Report, CR 2004-18148 was created to investigate and track regulatory reporting requirements.

Agencies Notified:

- National Response Center – December 30, 2004 23:55hr, SARA Log # 74598. The Center notified the Florida State Warning Point during normal working hours. A follow up letter has been sent to the State Warning Point.
- Florida Department of Environmental Protection, South East District. Mr. Terry Davis. A courtesy notification was made by phone. Mr. Davis requested to be copied on the State Response Center follow up letter.
- Courtesy notification was made by phone call to the St. Lucie County Public Safety and Martin County Emergency Management organizations. Neither organization requested follow up action.