



Florida Power & Light Company, 6501 South Ocean Drive, Jensen Beach, FL 34957

December 6, 2001

L-2001-268
10 CFR 50.36b
EPP 5.4.2

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

Re: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Environmental Protection Plan Report
Event Dates: November 7, 2001 and November 8, 2001
Non-Routine Environmental Report

The attached report is being submitted pursuant to the requirements of Section 5.4.2 of the St. Lucie Units 1 and 2 Environmental Protection Plans. The attached provides a description of the sea turtle mortality event.

Should there be any questions on this information, please contact George Madden at 561-467-7155.

Very truly yours,



Donald E. Jernigan
Vice President
St. Lucie Plant

DEJ/GRM

Attachment

IE23

**ST LUCIE PLANT SEA TURTLE MORTALITIES
30-DAY WRITTEN REPORT**

EVENT DESCRIPTION

At approximately 0800 hours on November 7, 2001, a dead green turtle (*Chelonia mydas*) was recovered from the 5-inch barrier net in the intake canal. The turtle, which weighed approximately 6.5 pounds, had apparently drowned recently against the net.

At approximately 0800 hours on November 8, 2001, a dead green turtle, weighing approximately 7 pounds and a dead, emaciated loggerhead turtle (*Caretta caretta*), weighing approximately 73 pounds, were recovered from the 5-inch barrier net. Later that day (approximately 1300 hrs), another green turtle, weighing approximately 17 pounds was retrieved from this net by a diver cleaning and repairing the net. These three turtles all apparently drowned during the night, or very early during the day of discovery.

These are the first four mortalities or injuries this year at the St. Lucie Plant that can be attributed to plant operation. The limits for injuries or mortalities of these species, resulting from plant operation, was set by the National Marine Fisheries Incidental Take Statement, issued and clarified by the NRC in 2001. For green and loggerhead turtles, the limit is one percent of total captured for a calendar year. Where one percent is not a whole number, then the number will be rounded to the next higher whole number. 2001 year to date over 500 green and loggerhead turtles have been captured at the site, therefore, the incidental take limit is calculated to be six. The incidental take limit is not final until the end of the calendar year.

CAUSE OF THE EVENT

The 5-inch turtle barrier net slope had been compromised due to heavy loading of drift algae and Sargassum seaweed approximately two days prior to the first mortality. The passage of Hurricane Michelle south of the plant site caused high winds and increased seas resulting in a large influx of silt and seaweed. The net had to be partially lowered to avoid catastrophic damage.

The decreased slope of the 5-inch barrier net and abnormal flow conditions at the net were likely contributing factors to the event. It is also possible that the local sea turtle populations were stressed due to the recent offshore environmental conditions.

CORRECTIVE ACTIONS

Divers started work to correct the 5-inch barrier net situation promptly after the condition was discovered on November 8, 2001. Silt and seaweed were removed from the net until it was returned to the normal configuration on November 10, 2001. Sea turtle biologists increased

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monitoring of the net to mitigate additional sea turtle injury or mortalities when it was noted that the net configuration was compromised.

AGENCIES NOTIFIED

The Florida Department of Environmental Protection was notified of the four mortalities in compliance with Marine Turtle Permit #125.

Four-hour notifications were made to the NRC at 1032 hours on November 7, 2001, at 1039 hours and 1400 hours on November 8, 2001, pursuant to 10 CFR 50.72(b)(2)(vi).