



June 21, 2002

L-2002-120
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: May 27, 2002 and June 2, 2002
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.

At approximately 1400 hours on May 27, 2002, a dead green turtle (*Chelonia mydas*), weighing approximately 15 lbs. was recovered from the 5-inch barrier net in the intake canal. At approximately 1100 hours on June 2, 2002, a dead green turtle, weighing approximately 8 lbs., was recovered from a turtle capture net in the intake canal. Necropsies of the two turtles did not reveal any significant physical abnormalities, therefore, it is believed that both turtles probably drowned. These are the first two mortalities, or injuries, this year at the St. Lucie Plant that can be attributed to plant operation. The attached provides a description of the events.

Should there be any questions on this information, please contact George Madden at 772-467-7155.

Very truly yours,

 for DEJ
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 1400 hours on May 27, 2002, a dead green turtle (*Chelonia mydas*), weighing approximately 15 lbs. was recovered from the 5-inch barrier net in the intake canal. At approximately 1100 hours on June 2, 2002, a dead green turtle, weighing approximately 8 lbs., was recovered from a turtle capture net in the intake canal. Necropsies of the two turtles did not reveal any significant physical abnormalities, therefore, it is believed that both turtles probably drowned.

These are the first two 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. In this case, over 300 green and loggerhead turtles have been captured at the site to date, therefore, the incidental take would be calculated at four. Total incidental take limit is not final until the end of the year.

CAUSE OF THE EVENT

The 5-inch barrier net was in normal operating condition at the time of the events. Although occurrences of this nature are low, sediment build-up in the area of this net are known to increase flow velocities that could increase the chance of a turtle drowning, particularly if the turtle comes into the canal in a weakened condition.

The capture net in which the second green turtle drowned was also functioning normally at the time of the event. The net was checked between 30 and 40 minutes prior to finding the dead turtle, but it is possible that it was not seen during this check.

CORRECTIVE ACTIONS

To reduce flow velocities in the vicinity of the turtle barrier nets, FPL is currently dredging the intake canal. This could potentially reduce the current velocities by as much as 50 percent during certain periods, which, in turn, should help reduce the occasional occurrence of a turtle drowning against a barrier net.

The incidence of a turtle drowning in a capture net is very rare. The primary method of removing sea turtles from the intake canal is by use of capture nets. Almost two thousand turtles have been removed from the canal since the last sea turtle mortality occurred in the capture nets. Increased vigilance during net inspections is now being performed. It is

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likely that reducing flow velocities in the canal by dredging will also help reduce these types of events.

AGENCIES NOTIFIED

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

Four-hour notifications were made to the NRC at 1938 hours on May 27, 2002 and 1153 hours on June 2, 2002 as per 10 CFR 50.72(b)(2)(vi).