



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

December 5, 2000

L-2000-251  
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  
Date of Event: November 14, 2000  
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 green sea turtle mortality event.

Should there be any questions on this information, please contact us.

Very truly yours,

Rajiv S. Kundalkar  
Vice President  
St. Lucie Plant

RSK/GRM

Attachment

cc: Regional Administrator, Region II, USNRC  
Senior Resident Inspector, USNRC, St. Lucie Plant

IE23

**ST. LUCIE PLANT SEA TURTLE MORTALITY  
30-DAY WRITTEN REPORT**

**EVENT DESCRIPTION**

At approximately 1645 hours on November 14, 2000, a dead green sea turtle (*Chelonia mydas*) was found in the 5-inch barrier net in the intake. The turtle, which weighed approximately 7.5 lbs., appeared to be have been in healthy condition but apparently became wedged in the net. The likely cause of death was drowning.

This mortality brings the total to two for green turtles so far this year at the St. Lucie Plant. The mortality limit for this species in the National Marine Fisheries Incidental Take Statement, issued to the site by the NRC in 1997, is three or 1.5% of the total captured, whichever is greater. To date, the total number of green sea turtles captured (>285) brings the percentage lethal take allowed to four.

**CAUSE OF THE EVENT**

The intake canal barrier nets and the catch nets are inspected hourly during daylight hours. This turtle was not found during these inspections, but during routine maintenance to remove debris from the barrier net. The turtle was found between one to two feet below the surface at low tide. Poor water clarity at the time did not allow the turtle to be seen by normal visual inspections.

The 5-inch turtle barrier net, which was installed upstream of the 8-inch barrier net, was not fully raised at the time of the event, due to heavy loading with *Sargassum* seaweed, but this does not appear to be the cause of the mortality. This particular net was installed in early 1996, at the request of the National Marine Fisheries Service, to prevent small turtles from getting back to the plant intake wells. The smaller mesh is generally considered safer than the larger mesh barrier net, which is now used as a back-up. Prior to this incident, the 5-inch net has not had a turtle mortality directly related to its operation. Approximately three thousand turtles have been removed from the canal during the period.

**CORRECTIVE ACTIONS**

Further cleaning of the 5-inch barrier net allowed it to be raised back into its normal position November 18, 2000. Although the condition of the net at the time of the event is not believed to be the primary cause of the mortality, this will eliminate it as a contributing factor.

Any type of barrier to prevent turtles from entering the plant intake wells would present some risk in itself. This particular barrier has proved to be of least risk to sea turtles than any other means employed to date.

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AGENCIES NOTIFIED

The Florida Fish and Wildlife Conservation Commission was notified of the mortality in compliance with Marine Turtle Permit No. 125.

Four-hour notification was made to the NRC at 1735 hours on November 14, 2000 in accordance with 10 CFR 50.72(b)(2)(vi).