



December 21, 2012

L-2012-448
10 CFR 50.4
10 CFR 50.36.b
EPP 4.1

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 25, 2012 and December 9, 2012
Unusual or Important Environmental Event – Turtle Mortality

On November 25, 2012, and December 9, 2012, a dead juvenile green sea turtle (*Chelonia mydas*) was recovered from the east side of the St. Lucie Plant intake cooling canal five-inch turtle barrier net. Necropsies were performed on November 26, 2012, and December 9, 2012. The determination is that both mortalities were causal to plant operations due to drowning.

The attached report is being submitted pursuant to the requirements of Section 4.1 of the St. Lucie Units 1 and 2 Environmental Protection Plans to provide the descriptions of the reportable sea turtle mortalities that were causal to plant operations.

Very truly yours,

A handwritten signature in black ink that reads "ES Katzman".

Eric S. Katzman
Licensing Manager
St. Lucie Plant

ESK/rcs

Attachment

cc: FDEP Siting Office

JE23
NRK

DESCRIPTIONS OF THE EVENTS

On November 25, 2012, and December 9, 2012, a dead juvenile green sea turtle (*Chelonia mydas*) was recovered from the east side of the St. Lucie Plant intake cooling canal five-inch turtle barrier net. The sea turtles were sent to Nancy S. Mettee, DVM for necropsy.

The preliminary necropsies determined that both sea turtle mortalities were due to forced submergence, thus causal to plant operations.

The limits for sea turtle injuries and mortalities resulting from plant operations were set by the National Marine Fisheries Incidental Take Statement, issued and clarified by the NRC in 2001. These limits have not been exceeded.

CAUSES OF EVENTS

The cause of death for the mortality on November 25, 2012, was due to a fishing hook with a three ounce sinker and excess fishing line that was lodged in the front left flipper of the turtle. The fishing line became tangled on the five-inch net below the water line resulting in mortality.

The probable cause of death for the mortality of the December 9, 2012, was the entrainment of the sea turtle in the plant intake cooling system at the end of a breath cycle. The time required to traverse the intake pipe at the end of a breathing cycle exceeded the turtle's air reserve.

CORRECTIVE ACTION

The five-inch turtle net was inspected by staff biologists directly after both events. No irregularities were identified with the net that could have contributed to the turtle mortalities. Hourly inspections of the five-inch net continue during daylight hours, as well as daily evaluations of the entrained turtle population.

ACTIONS TO PRECLUDE FUTURE EVENTS

Aggressive turtle monitoring and removal protocols remain in place; hourly inspections of the five-inch net and constant observations on the tangle nets occur during daylight hours. When visibility allows, staff biologists perform hand and dip net turtle captures in an effort to minimize turtle residence time in the canal, thus increasing their safety margin.

AGENCIES NOTIFIED

The Florida Fish and Wildlife Conservation Commission were notified of these events on November 25, 2012, and December 9, 2012, in accordance with Marine Turtle Permit # MTP-12-125 and the Site Environmental Protection Plan.

A notification was made to the NRC on November 25, 2012, and on December 9, 2012, per the requirements of 10 CFR 50.72(b) (2) (xi).