



FPL

October 29, 2015

L-2015-277
10 CFR 50.4
10 CFR 50.36.b
EPP 4.1

U.S. 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: October 14, 2015 and October 18, 2015
Unusual or Important Environmental Event - Turtle Mortality

On October 14, 2015 and on October 18, 2015 two dead juvenile green sea turtles (*Chelonia mydas*) were recovered from the east side of the St. Lucie Plant Intake cooling canal five-inch barrier net. A necropsy was performed on October 14, 2015 and on October 19, 2015 respectively. The determination is that both mortalities are causal to plant operations due to forced submergence.

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 description of a reportable sea turtle mortality that was causal to plant operations at the St. Lucie Plant.

Sincerely,

Eric S. Katzman
Licensing Manager
St. Lucie Plant

ESK/rcs

Attachment

cc: FDEP Siting Office

IE77
NLR

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DESCRIPTION OF THE EVENT

On October 14, 2015, and on October 18, 2015 two dead juvenile green sea turtles (chelonian mydas) were recovered from the east side of the St. Lucie Plant Intake canal five-inch turtle barrier net. The sea turtles were sent to Nancy S. Mettee, DVM for necropsy on October 14, 2015, and October 19, 2015 respectively.

The October 14, 2015 necropsy determined that the mortality was most likely due to forced submergence, thus causal to plant operations.

The necropsy performed on October 19, 2015 for the second turtle noted a congenital abnormality in the vascular system that may have indirectly resulted in extensive internal hemorrhage with minimal trauma. The necropsy concluded that the mortality was due to exsanguination due to stress of forced submergence, also 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.

CAUSE OF EVENT

The most probable cause of the mortality is that the turtles were entrained in the plant's intake cooling system at the end of a breath cycle. The time required to traverse the intake pipe exceeded the turtles' air reserve.

CORRECTIVE ACTION

The five-inch turtle net was inspected by staff biologists directly after the mortalities. No issues were identified that could have contributed to the mortalities. Hourly inspections of the five-inch net are performed during daylight hours, as well as constant surveillance of the two tangle nets.

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.

AGENCIES NOTIFIED

The Florida Fish and Wildlife Conservation Commission were notified on October 14, 2015 and then again on October 18, 2015 in accordance with Marine Turtle Permit# MTP-125 and the Site Environmental Protection Plan.

A notification was made to the NRC on October 14, 2015 and on October 18, 2015 per the requirements of 10 CFR 50.72(b) (2) (xi).