



OCT 26 2017

L-2017-189
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 3, 2017 and October 7, 2017
Unusual or Important Environmental Event - Turtle Mortality

On October 3, 2017 and on October 7, 2017 two dead juvenile green sea turtles (*Chelonia mydas*) were recovered from the St. Lucie Plant cooling canal intakes. Necropsies were performed on October 3, 2017 and on October 8, 2017 respectively. The determination is that both mortalities are causal to plant operations.

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 reportable sea turtle mortalities that were causal to plant operations.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael J. Snyder'.

Michael J. Snyder
Licensing Manager
St. Lucie Plant

MJS/rcs

Attachment

cc: FDEP Siting Office

IE77
NRR

DESCRIPTION OF THE EVENT

On October 3, 2017 and on October 7, 2017, two dead juvenile green sea turtles (chelonian mydas) were recovered from the St. Lucie Plant cooling canal intakes. Although the turtle recovered on October 3, 2017 was found alive, it died during transit to the rehabilitation facility. Necropsies were performed on October 3, 2017 and on October 8, 2017 by Nancy S. Mettee, DVM. The results of the necropsies determined that the mortalities were caused by force trauma.

The limits for sea turtle injuries and mortalities resulting from plant operations were set by the National Marine Fisheries Incidental Take Statement, issued by the NRC in 2016. These limits have not been exceeded.

CAUSE OF EVENT

These mortalities occurred after Hurricane Irma resulted in damage to the intake canal primary 5-inch and secondary 8-inch turtle net barriers. This allowed sea turtles to travel farther along the cooling canal to the intake wells.

The cause of the mortalities is force trauma from the mechanisms of the plant's intake cooling water cleaning system. The cleaning system was operating automatically during the hurricane to remove debris from the cooling water.

CORRECTIVE ACTION

The intake canal primary and secondary turtle net barriers are being restored. Until the nets are fully restored, the cleaning rake system operation protocol has been changed to operate only in the manual mode. The Intake wells are now inspected to verify the absence of turtles prior to operating the system in manual.

ACTIONS TO PRECLUDE FUTURE EVENTS

An additional 5-inch turtle barrier net has been deployed over the recently replaced 8-inch turtle barrier net. This temporary net creates a very small cross section to prevent additional turtles from reaching the intake wells. Once the primary turtle net is restored, the temporary overlay on the 8-inch net will be removed.

AGENCIES NOTIFIED

The Florida Fish and Wildlife Conservation Commission was notified on October 3, 2017 and on October 7, 2017 in accordance with Marine Turtle Permit MTP-125 and the Site Environmental Protection Plan.

Notifications were made to the NRC on October 3, 2017 and on October 7, 2017 per the requirements of 10 CFR 50.72(b) (2) (xi).