



July 31, 2007

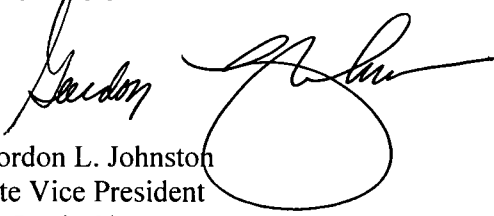
L-2007-118  
10 CFR 50.36.b  
EPP 4.1

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 Date: June 6, 2006  
Unusual or Important Environmental Event

On July 7, 2007, St. Lucie received a final necropsy report on a sea turtle mortality that occurred on June 6, 2007. The July 7, 2007 report determined that the earlier event was causal to plant operations. The causal aspect of the event was unable to be determined when the mortality was reported to the NRC via 10 CFR 50.72 on June 6, 2007. 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 causally related to plant operations at the St. Lucie Plant.

Very truly yours,

  
Gordon L. Johnston  
Site Vice President  
St. Lucie Plant

GLJ/KWF

Attachment

IE23

NRK

### EVENT DESCRIPTION

On June 6, 2007 a dead juvenile green sea turtle (*Chelonia mydas*) was recovered from the plant intake canal. The turtle was discovered by the staff biologists, impinged on the plant five-inch turtle barrier net. The turtle was subsequently sent to "Harmony Animal Hospital" for a necropsy. The preliminary necropsy report was inconclusive, as such the remains of the turtle were sent to Northwest Zoopath laboratory in Monroe, Washington on 6-26-2007 for a post necropsy tissue analysis. The post necropsy analysis was completed on 6-28-2007. Northwest Zoopath diagnosed that the cause of death was "likely related to drowning or acute aspiration". Based on the results from Northwest Zoopath, this turtle mortality is determined to be causal to plant operations.

This is the first causal incident St. Lucie Plant has had this calendar year. 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 currently not been exceeded.

### CAUSE OF EVENT

Initially this mortality was believed to be non-causal due to the preliminary necropsy report finding no significant trauma or fluid in the lungs. Subsequent microscopic tissue analysis performed by an independent laboratory confirmed that drowning was the probable cause of death. The definitive cause of the drowning can not be established, however a likely scenario is that the turtle was entrained in the plant intake pipe as it was nearing the end of its oxygen reserves, inhaled water as it traversed the intake pipe and later died from systemic shock caused by acute bacterial bronchopneumonia.

### CORRECTIVE ACTIONS

1. The plant intake canal east of the 5-inch turtle barrier net was inspected and evaluated to determine if any previously undetected hazards exist that could exacerbate any further turtle injuries or mortalities.
2. Staff biologists are on station, and maintain the hanging turtle tangle nets under constant surveillance. A new observation trailer is now in place that provides improved visual surveillance.
3. The biologists are physically positioned in a manner that enables them to immediately respond to any turtles that are captured in the hanging tangle nets.

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AGENCIES NOTIFIED

The Florida Fish and Wildlife Conservation Commission were notified of this event on June 6, 2007 in compliance with marine Turtle permit #125 and the Site Environmental Protection Plan.

A notification was made to the NRC on June 6, 2007 per the requirements of 10CFR 50.72(b)(2) (vi).