



March 10, 2015

L-2015-073  
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 Date: February 28, 2015  
Unusual or Important Environmental Event -Turtle Mortality

On February 28, 2015, a dead juvenile green sea turtle (*Chelonia mydas*) was recovered from the east side of the St. Lucie Plant intake cooling canal five-inch barrier net. The necropsy was also performed on February 28, 2015. The determination is that the mortality was 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,

A handwritten signature in black ink, appearing to read 'Eric S. Katzman'.

Eric S. Katzman  
Licensing Manager  
St. Lucie Plant

ESK/rcs

Attachment

cc: FDEP Siting Office

IE 23  
IE 77  
MLR

#### DESCRIPTION OF THE EVENT

On February 28, 2015, a dead green sea turtle (chelonian mydas) was recovered from the east side of the St. Lucie Plant intake canal five-inch turtle barrier net. The sea turtle was sent to Nancy S. Mettee, DVM for necropsy the same day.

The necropsy determined that the turtle mortality was due to forced submergence thus causal to plant operations. However the condition of the turtle was extremely compromised due to its overall condition. The necropsy revealed that many contributing factors were present. The turtle's fat stores were depleted, and the body condition was emaciated. The necropsy also indicated that the turtle suffered from severe anemia due to malnutrition, parasitism, and/or viral infection. The necropsy stated that few cases with this degree of morbidity survive even with aggressive rehabilitation efforts. The necropsy concluded that based on the debilitated condition of this turtle, death was imminent with forced submergence / drowning as the final cause of death.

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 cause of death for the mortality on February 28, 2015, was due to forced submergence. Most likely the drowning was a result of a severely compromised turtle that was extremely weak and could not move off of the net and reach the surface due to its weakened condition; strong winds from the east were also a factor for net impingement.

#### CORRECTIVE ACTION

The five-inch turtle net was inspected by staff biologists directly after the mortality. 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 February 28, 2015, in accordance with Marine Turtle Permit# MTP-125 and the Site Environmental Protection Plan.

A notification was made to the NRC on February 28, 2015, per the requirements of 10 CFR 50.72(b) (2) (xi).