



December 4, 2013

L-2013-328  
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: November 26, 2013  
Unusual or Important Environmental Event - Turtle Mortality

On November 26, 2013, 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. A necropsy was performed on November 27, 2013, to determine cause of mortality. The determination is that the mortality was causal to plant operations due to forced submersion.

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', written in a cursive style.

Eric S. Katzman  
Licensing Manager  
St. Lucie Plant

ESK/rcs

Attachment

cc: FDEP Siting Office

Handwritten initials 'TE77' and 'MRB' in black ink, located in the bottom right corner of the page.

#### DESCRIPTION OF THE EVENT

On November 26, 2013 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 the following day to Nancy S. Mettee, DVM for necropsy.

The necropsy confirmed that the sea turtle mortality was 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.

#### CAUSE OF EVENT

On the night of November 25, 2013 the plant experienced a significant intrusion event of algae that resulted in the submersion of the plant's 5-inch turtle exclusion net. The amount of algae caused an increase of the water velocity in and adjacent to the net as the net was loading with algae. Apparently, as the net submerged the turtle was caught at the top of the net and could not escape the force/velocity of the water.

#### CORRECTIVE ACTION

Divers, suction hoses, pumps, and filtering systems were deployed to commence recovery activities to remove algae deposition, and restore the net to its design configuration. The responders were in the water removing debris from the net within two hours of notification. Recovery activities resulted in placing the net above water within four hours of diver notification, and the net was fully restored by November 25, 2013.

#### ACTIONS TO PRECLUDE FUTURE EVENTS

Biota removal equipment is staged at the 5-inch turtle net during known times of increased intrusion potential (6 months per year). A contracted dive company provides expeditious response with personnel trained to mitigate these intrusion events. Also, the site operates in a conservative manner by scheduling staff biologists to perform night monitoring of intrusion rates and the net configuration during known or suspected night intrusion activity. These increased surveillances have resulted in the deployment of divers during the night to mitigate intrusion.

#### AGENCIES NOTIFIED

The Florida Fish and Wildlife Conservation Commission were notified on November 26, 2013 in accordance with Marine Turtle Permit# MTP-125 and the Site Environmental Protection Plan.

A notification was made to the NRC on November 26, 2013 per the requirements of 10 CFR 50.72(b) (2) (xi).