



Crystal River Nuclear Plant
15760 W. Power Line Street
Crystal River, FL 34428

Docket 50-302
Operating License No. DPR-72

Environmental Protection Plan
(Non-Radiological)
Technical Specifications
Appendix B – Part II

June 19, 2014
3F0614-04

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

Subject: Crystal River Unit 3 – Sea Turtle Mortality Report

Dear Sir:

Duke Energy Florida, Inc., hereby provides a copy to the Nuclear Regulatory Commission (NRC) of a sea turtle mortality report that was submitted to the U. S. National Marine Fisheries Service (NMFS). The report to the NMFS is required by NMFS's Crystal River – Unit 3 (CR-3) Biological Opinion, dated August 8, 2002, Terms and Conditions, Item 2. Reporting to the NRC is required by the CR-3 Facility Operating License, Appendix B – Part II, Environmental Protection Plan (Non-Radiological) Technical Specifications, Section 4.0, Environmental Conditions, specifically, Section 4.2.3(b), NFMS Non-discretionary Terms and Conditions.

This letter establishes no regulatory commitments.

If you have any questions regarding this submittal, please contact Ms. Erika Tuchbaum, Lead EHS Professional, at (352) 464-7909.

Sincerely,

Blair P. Wunderly
Plant Manager
Crystal River Nuclear Plant

BPW/ff

Attachment

xc: NRR Project Manager
Regional Administrator, Region I

TE 77
NRR



Crystal River Nuclear Plant
15760 W. Power Line Street
Crystal River, FL 34428

Docket 50-302
Operating License No. DPR-72

June 19, 2014
LRP14-0018

U.S. National Marine Fisheries Service
South East Regional Office
Attn: Assistant Regional Administrator
Protected Resources Division
263 13th Avenue, South
Saint Petersburg, Florida 33701

Subject: Crystal River Unit 3 – Sea Turtle Mortality Report

Dear Sir:

The National Marine Fisheries Service (NMFS), Nuclear Regulatory Commission, and the Crystal River Energy Complex (CREC) completed an Endangered Species Act Section 7 formal consultation process. In the Biological Opinion, issued August 8, 2002 by the NMFS, terms and conditions were included which required that if any listed species are apparently injured or killed in the CREC intake canal or the Crystal River Unit 3 (CR-3) bar racks, a report summarizing the incident must be provided to the NMFS.

On March 26, 2014, a juvenile Green Turtle (*Chelonia mydas*) sea turtle was recovered in the rotating screen wash debris basket at the Crystal River Units 1&2 (CR 1&2) cooling water intake structure. The green turtle exhibited no obvious external visible signs of trauma, and a necropsy was performed at the University of Florida, Aquatic Pathobiology Laboratory to assist in determining the cause of death.

Following the completion of a gross necropsy and histopathological diagnostics, a final pathology consultation report was issued on May 20, 2014. The necropsy determined that the green turtle was in poor general health and had multiple problems that are common observations in chronically debilitated individuals of this species, including emaciation, anemia, and fibropapillomatosis. Many of the diagnoses reflect poor nutritional condition, chronic disease, and minor lesions associated with endoparasites. The chronic poor condition of the sea turtle indicates that it was debilitated prior to entering the CREC intake canal, and it would have been in a profoundly weakened state and susceptible to further compromise by interaction with the cooling water intake. There was no evidence of seawater aspiration, but this may not be a good indicator of submergence based on the animal's compromised condition.

However, circumstances of discovery are critical to any final determination as to cause of death. Since fresh dead sea turtles tend to initially sink and only float after they undergo putrefaction, it is improbable that this sea turtle did not die at or near the location of discovery. Debilitated sea turtles can die from relatively minimal additional stress or exertion since there are often metabolic derangements and other confounding conditions in these animals. The discovery of this sea turtle in the rotating screen wash debris basket at the CR 1&2 cooling water intake structure, which is a location downstream of and behind fixed intake bar racks, leads to the conservative conclusion that interaction with the cooling water intake structure contributed to the death of this animal, and hence the death is considered causally-related to CREC operations.

Currently this is the only causally-related mortality for CREC in 2014.

Duke Energy Florida, Inc. continues to implement the reasonable and prudent measures described in the current incidental take statement to minimize impacts on sea turtles from facility operation.

This letter establishes no regulatory commitments.

If you have any questions regarding this submittal, please contact Ms. Erika Tuchbaum, Lead EHS Professional, at (352) 464-7909.

Sincerely,

A handwritten signature in black ink, appearing to read "Blair P. Wunderly". The signature is written in a cursive style with a large, looping "y" at the end.

Blair P. Wunderly
Plant Manager
Crystal River Nuclear Plant

BPW/ff