

June 3, 2002

Dr. Joseph E. Powers, Acting Regional Administrator  
National Marine Fisheries Service  
Southeast Regional Office (SERO)  
9721 Executive Center Drive North  
St. Petersburg, FL 33702

SUBJECT: ENVIRONMENTAL REVIEW ON FLORIDA POWER AND LIGHT COMPANY'S  
APPLICATION FOR A 20-YEAR RENEWAL OF THE OPERATING LICENSES  
FOR ST. LUCIE, UNITS 1 AND 2

Dear Dr. Powers:

The Nuclear Regulatory Commission (NRC) is evaluating an application submitted by Florida Power and Light Company (FPL) for the renewal of the operating licenses for St. Lucie Nuclear Plant (St. Lucie), Units 1 and 2, located on Hutchinson Island, Florida. The operating license for St. Lucie Unit 1 expires in 2016 and Unit 2 in 2023. The NRC is preparing a site-specific supplement to its "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (NUREG-1437) for this proposed action. As part of the action, the NRC evaluates potential impacts to threatened and endangered species under the Endangered Species Act (ESA).

The proposed action would include use and continued maintenance of existing facilities and transmission lines and FPL has indicated that the proposed action would not result in new construction or habitat disturbance. St. Lucie and the associated transmission corridor that is under review as part of the license renewal application is located in St. Lucie County, Florida. The transmission corridor is approximately 17.7 km (11 mi) long and varies from 200 to 250 m (660 to 813 ft) in width. The plant uses once-through cooling water from the Atlantic Ocean to remove waste heat from the facility. Ocean water is drawn through three offshore intake structures into an intake canal that leads to the plant. The heated water is discharged back to the Atlantic Ocean through offshore diffusers. The Atlantic Ocean in the vicinity of the plant is considered part of the aquatic environment of interest.

On May 4, 2001, the National Marine Fisheries Service (NMFS) issued a biological opinion (F/SER/2000/01394) related to the operation of the St. Lucie plant on federally protected marine species. The May 4, 2001, biological opinion (Opinion) provided a list of protected species under the jurisdiction of NMFS known to occur in the vicinity of St. Lucie. The Opinion concluded that species of large whales and Johnson's seagrass (and its critical habitat), which are protected under the Endangered Species Act, are not likely to be affected by the continued operation of the plant. The Opinion also identified five species of sea turtle known to inhabit the waters in the vicinity of the plant that may be affected by plant operation. However, the Opinion concluded that the continued operation of the circulating seawater cooling system at St. Lucie is not likely to jeopardize the continued existence of the loggerhead (*Caretta caretta*), Kemp's ridley turtle (*Lepidochelys kempii*), green turtle (*Chelonia mydas*), leatherback turtle

(*Dermochelys coriacea*), and hawksbill turtle (*Eretmochelys imbricata*), in accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA). On June 8, 2001, by letter to Mr. R. Hoffman, the NRC confirmed the discussions of a telephone conference call clarifying certain provisions of the Incidental Take Statement (ITS) contained in the May 4, 2001, Opinion. In its reply to the June 8, 2001, letter, NMFS responded to each of the six issues identified in the NRC's letter. Based on the May 4, 2001, Opinion and on subsequent correspondence, the NRC has accepted and implemented the NMFS position on the potential for impact of plant operations on the aquatic species protected under the ESA, and we believe that no additional consultation, either formal or informal, is necessary at this time.

We understand that FPL is planning to make modifications to their intake canal and existing turtle excluder net near the A1A Bridge. These modifications have been discussed with NMFS (Mr. R. Hoffman of your staff). We believe that the proposed modifications will further reduce sea turtle morbidity and mortality that could result from plant operation.

During the course of the NRC review for the proposed license renewal action the staff did identify one requirement in the Opinion, as clarified by your October 8, 2001 letter, that we want to assure that we are interpreting correctly. In your correspondence dated October 8, 2001, in your response to our question four, you state that "... if the number of loggerhead and green turtles injured or killed as a result of plant operation were greater than 1% of the total number of loggerhead and green turtles taken by the end of said year", then reinitiation of formal consultation is required. Based on this statement the NRC will reinitiate consultation if the number of loggerheads and green turtles injured or killed in a calendar year is **greater than one** percent (rounded up to the next whole number), of the total green and loggerhead turtles taken in that calendar year. We emphasize that the action level is "greater than" rather than "greater than or equal to".

Although not required for our record of decision for the proposed license renewal action, we are requesting confirmation that no additional consultation related to federally protected species under the jurisdiction of NMFS is necessary at this time. We believe that the "Terms and Conditions" section of the Opinion will provide adequate limits and controls on the licensee to assure a continued "no jeopardy" conclusion relative to the five species of sea turtles known to inhabit the waters near the plant. Furthermore, the NRC staff recognizes that future informal and formal consultations are likely over the continued operation of the plant, even during the period of initial licensing, as changes occur in the sea turtle populations and local habitat. We are committed to continue to work closely with your staff in the protection of species under your jurisdiction. Additionally, if we have interpreted incorrectly the action level that requires reinitiation of consultation for green and loggerhead turtles we do need written clarification on the issue.

J. Powers

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If you have any comments or questions, please contact Dr. Michael T. Masnik, Senior Project Manager, at (301) 415-1191 or MTM2@NRC.GOV.

Sincerely,

**Original Signed By: PTKuo**

Pao-Tsin Kuo, Program Director

License Renewal and Environmental Impacts

Division of Regulatory Improvement Programs

Office of Nuclear Reactor Regulation

Docket Nos. 50-335 and 50-389

cc: See next page

**ST. LUCIE PLANT**

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If you have any comments or questions, please contact Dr. Michael T. Masnik, Senior Project Manager, at (301) 415-1191 or MTM2@NRC.GOV.

Sincerely,

**Original Signed By: PTKuo**

Pao-Tsin Kuo, Program Director

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