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MAR 18 1981

Docket No. 50-389

Florida Power & Light Company
ATTN: Dr. Robert E. Uhrig, Vice President
Advanced Systems & Technology
P. O. Box 529100
Miami, Florida 33152

Dear Dr. Uhrig:

Subject: Request for Additional Information for the Review of the St. Lucie, Unit 2

As a result of our review of the St. Lucie Plant, Unit 2 Environmental Report, we find that we need additional information to complete our evaluation. The specific information required is presented in the Enclosure.

Responses to the enclosed request should be submitted by May 1, 1981. If you cannot meet this date, please inform us within seven days after receipt of this letter of the date you plan to submit your responses.

Please contact Mr. Nerses, St Lucie, Unit 2 Licensing Project Manager, if you desire any discussion or clarification of the enclosed request.

Sincerely,

Original signed by
Robert L. Tedesco

Robert L. Tedesco, Assistant Director
for Licensing
Division of Licensing

Enclosure:
As stated

cc: See next page

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OFFICE	DL:LB#1	DL:LB#1	DL:AD/L				
SURNAME	VNerses/ys	BJYoungblood	RLTedesco				
DATE	3/17/81	3/17/81	3/18/81				

Dr. Robert E. Uhrig, Vice President
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Florida Power & Light Company
P. O. Box 529100
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291.0 Aquatic Resources Section, EEB

Comments on the St. Lucie OL Stage Environmental Report

291.1 Provide a table summarized by date listing sea turtle captured or otherwise taken from the intake canal and intake structure since commencement of Unit 1 operation. Indicate the date collected, the species, length, weight and condition at the time of capture.

291.2 Describe in more detail the configuration of the velocity cap intake structure. Provide a schematic drawing of the velocity cap, one of more detail than that presented as Figure 3.4-2 in the CP-ER. Provide the free open area dimensions of the ports on the velocity cap and describe any mitigative measures taken to reduce entrainment of organisms in the CWS.

291.3 Provide records of any sightings of the West Indian Manatee from the St. Lucie area.

291.4 Provide the estimated flow rate through the emergency water supply system from Big Mud Creek during test conditions. Provide a range of expected values of water quality of the water withdrawn from Big Mud Creek specifically, but not limited to, total suspended solids, dissolved oxygen, salinity and temperature. Compare these values to values obtained from water withdrawn from the Atlantic Ocean.

291.5 Provide a chart of the bathymetry of Big Mud Creek and nearby Indian River to and including the intercoastal waterway.

291.6 Indicate the maximum and average duration of flow through the Big Mud Creek intake during quarterly testing.

291.7 In addition to responses to other specifically requested information provide a summary and brief discussion in table form, by section, of differences between currently projected environmental effects of the nuclear power station (including those that would degrade, and those that would enhance environmental conditions) and the effects discussed in the environmental report submitted at the construction stage.

291.8 Provide an estimate of the maximum probable yearly recreational harvest of finfish, shellfish and molluscs harvested from waters within a 50 mile radius of the station that potentially could be contaminated by radionuclides due to a maximum probable accident. The harvest estimates should be summarized by species and location of capture (water body segment) and provide an explanation of how the estimate was obtained.

291.9 Using data from the last 5 years, provide an estimate of the maximum probable yearly commercial harvest of finfish, shellfish, and molluscs harvested from waters within a 50 mile radius of the station that potentially could be contaminated by radionuclides due to a maximum probable accident. The harvest estimates should be summarized by species and location of capture (water body segment) and provide a generalized explanation of how the estimate was obtained.

291.10 Provide a short narrative of the fishery resources of the Big Mud Creek and the Indian River in the vicinity of Big Mud Creek.

310.0 SITING ANALYSIS BRANCH

COMMENTS AND QUESTIONS ON THE ST. LUCIE UNIT NO. 2 OL-ER

310.1 The projections of age distribution for the year 2000 (Sections 2.1.2.1.6 and 2.1.2.2.8) are based on 1970 U. S. data. However, it is the case that:

- The data were about eight years old when used
- The U. S. population is "aging" as the postwar babies mature.
- Florida has an older population than the U. S.
- Florida's population grew by 28 percent between 1970 and 1977 (2.1.2.2.5)
- 90 percent of Florida's growth is attributable to net migration (2.1.2.2.5)
- more relevant bases of age distribution exist such as U. S. Bureau of Census, Current Population Reports, Series P-25, No. 796, "Illustrative Projections of State Populations by Age, Race, and Sex: 1975 to 2000," U. S. Government Printing Office, Washington, DC 1979.

Present revised Tables 2.1-2 and 2.1-4 using a more appropriate age distribution base.

310.2 In Table 2.1-3 footnote "+" refers to a place having a 1970 population of 5,772. However, there is no place listed with the "+" nor with the 1970 population of 5,772. What town does the "+" refer to?

310.3 Include the estimates of beach usage in Table 2.1-6, Transient Population: Attendance at Attractions and Events, while acknowledging "the lack of comprehensive data" concerning beaches. (2.1.2.3)

310.4 The Tourists and Seasonal Visitors Section (2.1.2.3.1) contains no time element to indicate whether the estimates are for yearly, daily, etc. attendance rates. One may surmise that the data are daily based on Table 2.1-5. That information should be presented in the analysis as well as the table.

310.5 Peak daily class attendance estimates at colleges (2.1.2.3.4 and 6.1.4.2.3) appear to be about 13 percent of enrollment based on Table 2.1-7. Even if one assumes an equal distribution of daily attendance, the peak days would be 16 and 20 percent of enrollment assuming 6 day and 5 day school weeks respectively. How was peak class attendance calculated?

310.6 The Hutchinson Island Residential Units Section (2.1.3.5.1) reports construction of a 203 unit apartment and 32 unit townhouse complex called Sand Dollar Villas to be completed in 1980. Sand Dollar Villas is 1.4 miles from the plant site.

The 1983 resident population forecasts (Figure 2.1-6, sheet 3 of 8) indicate 36 residents between 1 and 2 miles from the site in sectors SE and SSE. The 1983 peak daily and seasonal transient population (Figure 2.1-10, sheet 3 of 8) for the same sectors is 0. Reconcile the inconsistencies between the reported construction and the population forecasts for both resident and transient population within two miles of the plant.

310.7 The ER-CP for St. Lucie Unit No. 2 states that "studies conducted to date indicate that the land available for development on Hutchinson Island will be almost totally utilized by the end of this decade (by 1980)..." p. 2.2-4 Rev. 6-5/9/75.

Future residential development on Hutchinson Island "which falls within the five mile radius is expected to experience considerable development" (ER-OL 2.1.3.6 part b). The same section discusses the limited fresh water supply being a constraint to growth on the island. Are there plans to expand the supply of potable water to the island? If so, when and how would residential development of this island be affected?

310.8 The FES-CP presents an estimated 1980 population for 0-5 miles of 1620 and from 5-10 miles of 61,000 (Figure 2.6). The ER-OL has estimates for 1980 of 12,291 and 70,594 for the 0-5 and 5-10 mile rings respectively. (Figure 2.1-6) While the 5-10 mile population estimates are only 15 percent off between the FES-CP and the ER-OL, the 0-5 mile estimates are over 650 percent different.

a. Are there any additional developments (besides Sand Dollar Villas and Oceana) under construction or being planned on Hutchinson Island? If so, give location, number of units, estimated date of completion, and revise resident and transient population estimates within five miles of the plant to be consistent with the available information.

b. Revise Table 2.1-12, Land Uses and Land Cover within Five Miles of St. Lucie Unit 2, to reflect these new developments.

310.9 Tables 2.1-8 and 2.1-9 have references to the methodology in Sections 2.1.3.8.2 and 2.1.3.8 respectively. The tables contain data on transient populations using highways, air and rail. The sections referenced describe water use. Provide the correct references.

310.10 Explain why the 8 percent growth rate was used in projecting transient visitors for the years 1978 to 1985 and the 2.1 percent rate for 1985 to 2030; especially since the 8 percent figure is based on 1977-1978 data and the 2.1 percent rate is based on 1970-1978 data. (6.1.4.2.3)

310.11 Provide an estimate of the average annual number of workers required for the operation of St. Lucie Unit No. 2. State whether the workers are employees of FPL or contractors. Also provide an estimate of the average annual operating workers' payroll for the unit.

310.12 Local purchases of goods and services for a nuclear power plant operation may frequently have a significant impact on the local economy. (For these purposes local may be defined as either the host county or the host county and one or more contiguous counties.)

Please provide information on local purchases of goods and services expected to be made by the plant during a typical year of operation. To the extent possible, identify specific types and dollar amounts of these purchases. If it appears that there will be no significant local purchases, explain why.

310.13 Construct a table containing dollar estimates of taxes attributable to St. Lucie No. 2, for the first five full years of operation. Provide the dollar estimates by type of tax, and by taxing jurisdiction. What percent of the jurisdictions' total tax revenues are represented by the taxes attributable to the St. Lucie No. 2 plant?

310.14 The first paragraph in Section 2.1.2.1.5 confuses growth rates or compound interest and simple interest. It mentions of an "increase of 123.6 percent over the 52 year period, an average annual rate of growth of 2.4 percent". Actually, the annual growth rate of a 123.6 percent increase over 52 years is 1.56 percent.

Correct this and other population growth rates which were calculated by simple rather than compound interest.

MAR 18 1981