



January 9, 2003

L-2003-005
10 CFR 51
10 CFR 54

Chief, Rules and Directives Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, D.C. 20555-0001

11/01/02
CFR 66674
(5)

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DIRECTIVES

Re: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Comments on Draft Supplemental Environmental Impact Statement for
License Renewal of Nuclear Plants Supplement 11

Florida Power & Light Company (FPL), the applicant for the renewal of operating licenses DPR-67 and NPF-16 for St. Lucie Nuclear Plant, Units 1 and 2 respectively, provides the following comments on the referenced Draft Supplement Environmental Impact Statement (DSEIS).

FPL agrees with the overall conclusions and proposed findings in the DSEIS. FPL offers the following comments in the Attachment to this letter. FPL urges the Commission to issue a final EIS addressing the environmental impacts of the proposed renewal of the St. Lucie Units 1 and 2 operating licenses as soon as possible.

Should you have any questions concerning FPL's comments, please contact S. T. Hale at (772) 467-7430.

We appreciate the opportunity to comment on the DSEIS.

Very truly yours,

D. E. Jernigan
Vice President
St. Lucie Plant

DEJ/STH/hlo
Attachment

Attachment = ADM-013

FRIDS = ADM-03
Add = M. Hagganik (MTM2)

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**COMMENTS ON DRAFT GENERIC ENVIRONMENTAL IMPACT
STATEMENT (NUREG 1437 SUPPLEMENT 11)
ST. LUCIE UNITS 1 AND 2
LICENSE RENEWAL APPLICATION**

PAGE	LINE NUMBER	COMMENT
xviii	26	Delete "and chronic effects from electromagnetic fields " Add period after "justice." FPL did not present an analysis of chronic effects from electromagnetic fields.
1-07	28	Change the word "Westinghouse" to "Combustion Engineering "
2-01	35	Change "Juniper" to "Jupiter."
2-05	28, 31, 34	Change "Florida Aquifer" to "Floridan Aquifer."
2-08	31-34	Clarify by including information that FPL has dredged the intake canal on several occasions, most recently in the fall of 2002. On one occasion, in the mid-1990's, the dewatered sediments were sold as clean fill.
2-14	32	SEIS states, "The last 2.4 km (1.5 mi) of the right-of-way is shared with three other 230 kV lines..." should be corrected. There are four other 230 kV lines entering the Midway Substation.
2-14	33	SEIS states "...total right-of-way width is approximately 1080 feet " Although there is a short section of North-South leg that is approximately 1080 ft., the majority of the right-of-way is approximately 800 feet.
2-15	06	Correct spelling of "right-or-way" to "right-of-way."
2-17	02	It is not clear that the site no longer has a package plant. Reword as follows: Period after "wastewater " Second sentence to read, "The treated wastewater was previously discharged to the discharge canal. Now the site sanitary wastewater is discharged to St. Lucie County's South Hutchinson Island Water Reclamation Facility for treatment."
2-21	01	The conversion of 236,146 lb of bluefish should be corrected to 107,000 kg.
2-22	31-32	Sentence should read, "The whales are listed as endangered by the Federal government and the State of Florida."
2-28	02	"Habiats" should be corrected to "Habitats."
2-32	27	This section, "Radiological Impacts" is not appropriate in this chapter. The conclusions regarding the effects and impacts of offsite emissions should be moved to the corresponding section in Chapter 4, Section 4.3.
2-35	22 and 41	The "a" designation on the reference citation, U.S. Census Bureau 2000a, should be dropped as it is not consistent with that listed in the reference section.
2-35	31-37	Note that the projected values for 2010 and 2020 are higher than that presented in ER and a different source is used. However, the growth rates are the same as presented in the ER for these years. In addition, the calculations for the annual growth rates appear to be incorrect. For Martin County the values should be 12.8, 5.8, 2.6, 2.0, and 1.7, respectively for the years presented in Table 2-7; similarly the values for St. Lucie County should be corrected to 7.1, 7.2, 2.8, 2.2, and 1.8.

PAGE	LINE NUMBER	COMMENT
2-36	24	The value given for the peak demand per day, 5.8 MGD is not consistent with that stated in the ER (5.4 MGD).
2-37	9	Change "Solerno" to Salerno "
2-37	20	Delete "and crosses I-95 near Ft. Pierce." Add new sentence "I-95 crosses to the west of the Florida Turnpike south of Stuart and crosses back to the east at Ft. Pierce."
2-38	Table 2-9	Values presented in this table should be verified and corrected. Given the residential land use for St. Lucie County of 138 mi ² is correct, the conversion to km ² should be corrected from 97 to 357. The sum of the land use values for St. Lucie County in mi ² should be corrected from 542 to 641. If correct, the percent of total values should be corrected accordingly.
2-40	25	"are" should be "is "
2-41	04	The value given for the population of Stuart, 14,633 is inconsistent with that stated in the ER (4,633). The number in the ER contained a typographical error and the value presented in the SEIS has been verified to be correct.
2-41	05-07	Growth rates provided for St. Lucie and Martin counties (28% and 26%, respectively) are not consistent with values presented in Table 2-7. See earlier comment regarding corrections to this table. These growth rates should be corrected accordingly.
2-41	37	The values for the agricultural land use for both St. Lucie and Martin County should be corrected in accordance with corrections made in Table 2-9.
2-41	38	The reference for agricultural land use values should be corrected from Table 2-10 to Table 2-9.
2-41	41	The number of farms in St. Lucie and Martin counties (805) is inconsistent with that presented in the ER (359). The value presented in the ER has been verified to be correct for the number of <u>farms that hire</u> and the number presented in the SEIS has been verified to be correct for the <u>total number of farms</u> . Relative to the discussion of migrant farm workers, it would be more appropriate to use the number of farms that hire.
2-42	06	Reference citation USDA 2001a is inconsistent with that listed in the reference list Delete the "a" designation.
2-42	24	Second column should be titled "Total Property Tax Levied for all Property in St. Lucie County."
2-42	25-29	Property tax amounts paid to St. Lucie County for St. Lucie Units 1 and 2 for years 1996, 1998, and 1999 vary slightly from the dollar amounts presented in the ER. The amount in the ER for 2000 was an estimate and was reflective of the total FPL property tax for St. Lucie County. To clarify the record, the ER value for the 2000 taxes to be paid for St. Lucie 1 and 2 only would have been correctly stated as \$18.8 million. Also, in line 29, "\$18.888,240" should be corrected to "\$18,888,240 "

PAGE	LINE NUMBER	COMMENT
2-42	25-29	The 1999 tax assessment for St. Lucie 1 and 2 (\$22,807,970) is 10.3% of the total property taxes (\$221,893,569) and the 2000 tax assessment for St. Lucie 1 and 2 (\$18,888,240) is 8.5% of total county property taxes (\$222,310,596). These results will change the average quoted on page 4-26 line 13. Correct table entries accordingly.
2-42	Note (c)	Should read "State of Florida data on migrant farm workers were not available "
2-43	17	"...Brighton Seminole, located about 76 km (47 mi) to the east of the St. Lucie plant..." should be corrected by changing the word "east" to "southwest."
2-47	9-10	Change "before construction" to "before operation."
4-02	09	"of" should be "to."
4-02	26 and 32	Altered Salinity Gradients is applicable to plants discharging to estuarine systems. Given that St. Lucie discharges to an ocean environment, this issue is not applicable to St. Lucie. Eutrophication is an issue applicable to small stratified water bodies. Given that St. Lucie discharges to a large oceanic water body, this issue is not applicable to St. Lucie. These issues should be removed from this table and added to Appendix F.
4-03	15	Delete this line. St. Lucie 1 & 2 use once-through cooling and the GEIS reference discussion relative to cooling system noise impacts is specific to cooling towers. It is incorrect to group the noise issue with the cooling system impacts. The GEIS addresses plant noise beyond that associated with the cooling system.
4-05	37-38	"...and the ecological risk assessment study for the cooling canal system (Ecological Associates 2001)." The referenced study was a survey report not a risk assessment for the cooling canal system. Also cited on page 4-6, line 24.
4-09	13-21	Delete these lines. See the comment above for page 4-03 line 15.
4-12	39	"...impacts related to entrainment and no..." should be corrected to read "...impacts related to impingement...."
4-13	13	Reference citation (USAEC 1973) is not consistent with that listed in the reference list and should be corrected to (AEC 1973).
4-14 4-16	34 22-31	Delete these lines. GEIS Section 4.5.3 does not address on-site land use
4-17	27	"licence" should be "license "
4-28	16-20	<p>The Florida State Historic Preservation Officer has stated that renewal of the operating licenses for St. Lucie Units 1 and 2 would not affect historic properties. Based on this finding, it is not clear why the DSEIS contains the wording at lines 16-20, particularly where no refurbishment activities will occur. This wording should be deleted.</p> <p>The current Environmental Protection Plan addresses the performance of environmental evaluations. This statement bounds the requirements for environmental evaluations. The SEIS should not impose any new or additional environmental commitments.</p>
4-33	06	The conversion of 35.3 MGD should be corrected from $14.8 \times 10^4 \text{ m}^3/\text{d}$ to $1.34 \times 10^5 \text{ m}^3/\text{d}$.

PAGE	LINE NUMBER	COMMENT
4-33	1-22	<p>In this paragraph, the NRC addressed groundwater use conflicts (potable and service water; plants that use > 379l/min [>100gpm]) as an applicable Category 2 issue, citing the indirect withdrawal of groundwater at the St. Lucie site in excess of 100 gpm as the basis. This determination is not consistent with the scope of this issue as defined in the GEIS and codified by 10 CFR 51. NRC in GEIS Section 4.8.1, "Groundwater Use," states, "This impact could occur as a <u>direct</u> effect of pumping groundwater, ..." (emphasis added). Furthermore, the specific concern for this issue is that the cone of depression associated with direct pumping of groundwater onsite could potentially extend beyond the plant boundaries and impact offsite groundwater users. Section 4.8.1 of the GEIS limits the scope of this issue to the direct use of groundwater and acknowledges that the indirect use through municipal supply is not of concern. Therefore, analysis of this issue should not be expanded to include indirect use. Accordingly, this section should state that there are no Category 2 issues applicable to St. Lucie Units 1 and 2 during the license renewal term.</p> <p>The statement on line 2, "There are no Category 1 issues applicable to groundwater use and quality for St. Lucie Units 1 and 2 during the renewal term." is incorrect. The issue "Groundwater quality degradation (saltwater intrusion)" is a Category 1 issue that is applicable to St. Lucie NRC in GEIS Section 4.8.2.1 characterizes this issue as Category 1 and discusses the potential for indirect impacts of St. Lucie's use of municipal supply which uses groundwater as the source water. Consistent with other sections, the table presented in this section should identify this issue as an applicable Category 1 issue.</p> <p>The 10 percent threshold used in NRC's discussion (lines 4-6) is not correctly applied given the discussion is relative to the Category 2 issue of groundwater use conflicts. This threshold was specifically used by NRC in the GEIS for the impact significance of groundwater quality relative to saltwater intrusion (See GEIS Section 4.8.2.1). The GEIS does not provide such a threshold for evaluating impacts from the direct use of groundwater. This section should be revised to address the applicable Category 1 issues and state that there are no Category 2 issues applicable to St. Lucie Units 1 and 2.</p> <p>Accordingly Table 4-8 should be deleted and it should be noted that the GEIS section cited for the Category 2 issue listed in this table should only be Section 4.8.1.1. GEIS Section 4.8.2.1 addresses the category 1 issue regarding saltwater intrusion.</p>
4-35	37	Change the word "that" to "than" and strike the words "or equal to "
4-36	10	Strike the words "met or."
4-36	18	Change "are monitored" to "are normally monitored." This reflects those times when monitoring is not possible or required by license condition.

PAGE	LINE NUMBER	COMMENT
4-37	13	<p>This discussion is not up to date. It does not consider the letter reprinted at page E-31, and does not consider FPL's letter to the Staff clarifying whether a consultation is required.</p> <p>Add the following words following the sentence ending on line 13: "By letter dated August 23, 2002, the NRC Staff requested reinitiation of consultation with NMFS regarding the incidental capture of green and loggerhead turtles at St. Lucie Units 1 and 2. By letter dated September 20, 2002, FPL informed the NRC Staff that it would cooperate with the Staff's data request regarding the consultation process, but stated that there was no factual or legal basis for the NRC's reinitiation of consultation in this case."</p>
4-40	06	"Informal consultation with the FWS was initiated by FPL in April 2001..." is not correct as only Federal agencies can initiate consultation. This sentence should be revised to read, "NRC initiated informal consultation in February 2002 with a request for information concerning which species are potentially...."
4-40	06	Reference citation FPL 2001b is not the correct correspondence discussed in this sentence.
4-44	01	"form" should be "from."
5-05	05	Change "safety analysis" to "safety assessment "
5-07	Table 5-3 Footnote (b)	Start the sentence, "The Unit 2 LOCA value, originally ..., was " The Unit 2 LOCA value needed correction and in turn effected a misstatement of the "Others" value.
5-09	11	Reference NRC 1988 is not provided in the reference list.
5-13	01,02	<p>Change the word "account" to "compensate."</p> <p>Insert the word "apparent" before "non-conservatism."</p> <p>Delete the phrase, "This relatively small non-conservatism notwithstanding,".</p> <p>Begin last sentence with "The Staff considers..."</p>
5-21	23 and 37	Reference citation NRC 1997a should be corrected to NRC 1997d. The correct source is NUREG/BR-0184 which is listed as NRC 1997d in the reference list.
5-23	03	Reference citation NRC 1997b should be corrected to NRC 1997d. The correct source is NUREG/BR-0184 which is listed as NRC 1997d in the reference list.
5-23	11	Reference citation NRC 1997a should be corrected to NRC 1997d. The correct source is NUREG/BR-0184 which is listed as NRC 1997d in the reference list.
5-24	37	Reference citation NRC 1997b should be corrected to NRC 1997d. The correct source is NUREG/BR-0184 which is listed as NRC 1997d in the reference list.
5-26	3 rd reference from bottom	The name is spelled " <u>Gleaves</u> ."
6-06	37	Add the following text after "nuclear waste: "Both the Senate and Congress subsequently voted to override a veto of the President's selection of the Yucca Mountain site by the Governor of the State of Nevada."

PAGE	LINE NUMBER	COMMENT
8-04	28	This sentence states that the volume of low-level radioactive waste could vary greatly depending on the length of time it {the reactor} operated. However, the NRC states in the GEIS (Section 7.3.2) that decommissioning waste volumes would be essentially the same for a plant operated for 40 years as for a plant operated 60 years. Resolve the apparent discrepancy by deleting the phrase "the length of time it operated."
8-05	35	NUREG-0586 (NRC 1988) is cited in the text here, but not included in the reference list in Section 8.4.
8-07	33	The statement is made that the land west of the intake canal and south of the transmission lines could not accommodate a coal or new nuclear unit, but "could potentially accommodate a completed natural gas combined cycle plant to replace St. Lucie Units 1 and 2." Several "obstacles" are mentioned, but one significant "obstacle" is omitted: the lack of an existing gas pipeline that could provide fuel to the site. This should be added to the other "obstacles" already listed.
8-10	18	The "a" used on the reference citation "FPL 2001a" should be deleted, as this designation is not used in the reference list.
8-11	03	Sentence beginning with "Annual coal consumption .." should be deleted as this information is given in the previous paragraph.
8-11	17	"Spent selective catalytic reduction (SCR) catalyst" should be deleted from the list of wastes identified in this sentence since, as noted on page 8-17, line 21, spent SCR catalyst would not be disposed of onsite.
8-13	07	For Coal-Fired New Generation – Environmental Justice was quoted in Table 8-2 as "Small" and "Small to Moderate" in Table 9-1.
8-22	17, 18	For Natural Gas-Fired New Generation – Environmental Justice was quoted in Table 8-2 as "Small" and "Small to Moderate" in Table 9-1.
8-23	25	NRC cites FPL's ER as the source in listing design assumptions for the gas-fired alternative, including use of low-sulfur number 2 fuel oil as backup fuel. Delete this design assumption from the list, since FPL did not assume use of fuel oil as a backup fuel in its ER.
8-26	20	NRC estimates spent SCR catalyst generated from operation of the gas-fired alternative to be 31 cubic meters per year. The source for this estimate is not indicated, but in Section 8.2.2, Page 8-23, Lines 29-30, NRC indicates that, unless otherwise indicated, assumptions and numerical values used throughout this section are from the FPL ER. FPL did not quantify the amount of spent SCR catalyst in its ER. It would be appropriate for the NRC to provide a reference for this quantity.

PAGE	LINE NUMBER	COMMENT
8-42	40-41	<p>The DSEIS makes the following statement in regard to additional DSM to help to address the capacity that would be lost if the OL's for the two St Lucie units are not extended: "While the DSM measures would have few environmental impacts, the operation of the new natural gas-fired plant would result in increased emissions (compared to the OL renewal alternative) and other environmental impacts."</p> <p>Delete the phrase, " While the DSM measures ... impacts," and replace with, "Additional DSM that replaces nuclear capacity, in part or in total, will result in FPL's existing fossil fuel units operating at higher capacity factors than they otherwise would, thus increasing total emissions from the FPL system."</p> <p>Start a new sentence, "In addition, the operation of a new gas-fired"</p>
9-05	28, 29	Delete the phrase "except for the SAMA identified above." Put a period after "warranted."
E-2	Table E-1	<p>Third entry (FWS and NMFS) – the FPL letters should not be referenced here. The letters from the FWS and NMFS providing the results of the consultation should be provided.</p> <p>The remarks for this entry should also be revised to discuss NRC's consultation versus the correspondence FPL had with the agency. It is incorrect to say that FPL initiated the consultation. If the FPL letters remain in the table, the second letter number should be corrected from PLL-LR-02-0054 to PSL-LR-0054.</p>
E-2	Table E-1	Fourth entry (U.S. Army Corps of Engineers) – the Authority information should be revised to read, "Rivers and Harbors Act (33 USC 403) and Clean Water Act (33 USC 1344).
E-3	Table E-1	Provide a note that the NPDES permit is the Industrial Wastewater Facility Permit. In Chapter 2 of the DSEIS it is mentioned several times as the Industrial Wastewater Permit. This would create a link for the reader.
E-4	Table E-1	<p>Updated information for these annual FWCC permits is as follows:</p> <ol style="list-style-type: none"> 1) 01S-018 has been replaced by 02R-018 and expires 6/30/2003 2) TP#206 expires 1/31/2003 3) TP#125 expires 1/31/2003 <p>Last entry – "next" should be corrected to "nest" in the Description column.</p>
E-5	Table E-1	<p>First entry – The updated information is:</p> <ol style="list-style-type: none"> 1) 56-01238-W expires 5/21/2009
F-2	15-16	Groundwater quality degradation (saltwater intrusion) is an applicable issue to St. Lucie due to their indirect use of groundwater through the municipal supply for potable and service water. Therefore this issue should be deleted from the table and appropriately discussed in Section 4.5.
F-2	Table F-1	Groundwater use conflicts (potable and service water and dewatering); plants that use >100 gpm should be added to the table as not applicable because St. Lucie Units 1 and 2 do not withdraw groundwater.