August 30, 1984

DCR016

Docket No. 50-389

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Mr. J. W. Williams, Jr.
Vice President
Nuclear Energy Department
Florida Power & Light Company
P. O. Box 14000
Juno Beach, Florida 33408

Dear Mr. Williams:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION, ST. LUCIE PLANT, UNIT NO. 2 CYCLE 2 RELOAD

In the course of its review, the NRC staff has developed a need for additional information with regard to your license amendment application for St. Lucie Plant, Unit No. 2, Cycle 2 reload.

In order to complete our review in a timely manner, it is requested that you provide responses to the questions contained in the enclosure to this letter as soon as possible.

If you have any questions, contact the project manager, D. Sells, at (301) 492-9735.

This request for additional information affects fewer than ten respondents; therefore, OMB Clearance is not required under P. L. 96-511.

Sincerely,

James R. Miller, Chief
Operating Reactors Branch #3
Division of Licensing

Enclosure:
As stated

ORB#3:DL	ORB#3:DL	ORB#3:DL
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Mr. R. E. Uhrig, Vice President
Advanced Systems & Technology
Florida Power & Light Company
P. O. Box 14000
Juno Beach, Florida 33408

Dear Mr. Uhrig:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION, ST. LUCIE PLANT, UNIT 2, CYCLE 2 RELOAD

As a result of its review, the NRC staff has developed a need for additional information with regard to your license amendment application for St. Lucie Plant, Unit No. 2, Cycle 2 Reload.

In order to complete our review in a timely manner, it is requested that you provide responses to the questions contained in the enclosure to this letter as soon as possible.

If you have any questions contact the project manager, D. Sells, at (301) 492-7?5.

This request for additional information affects fewer than ten respondents; therefore, OMB clearance is not required under P. L. 96-511.

Sincerely,

James R. Miller, Chief
Operating Reactors Branch #3
Division of Licensing

Enclosure:
As stated

ORB#3:DL / PMKreutzer / / /83

ORB#3:DL / DSells / / /83

ORB#3:DL / JRMiller / / /83

REQUEST FOR ADDITIONAL INFORMATION ON ST. LUCIE PLANT, UNIT NO. 2, CYCLE 2 RELOAD

1. Verify that the maximum radial peaking factors expected during Cycle 2 (shown in Figs. 2.4.3-1 thru 2.4.3-5 without uncertainties) do not exceed the Technical Specification limiting values or the values used in the safety analyses when uncertainties and other allowances are included.

2. What are the HFP values of total CEA worth, stuck CEA worth, and CEA bite worth?

3. Explain in more detail the Cycle 2 changes and analyses which now allow a CEA misalignment to exist for up to 60 minutes for an initial $F_r^I \leq 1.55$ compared to only 30 minutes for an initial $F_r^I \leq 1.50$ in Cycle 1.

4. Since the acceptable minimum DNBR limit is used as a criterion in anticipated operational occurrences and postulated accidents, we request that the actual value (1.28) remain in the Technical Specification bases.

5. Explain the reason for the two-component form of the uncertainties associated with the power distribution and with the ASI calibration in Table 2-1 of Appendix I.

6. Have the non-LOCA events been reanalyzed with CESEC or with the NRC approved CESEC III version?

7. Since the Batch D fuel has a smaller plenum volume, the rod pressure may conceivably increase. Please justify that the rod pressure of Batch D fuel will not exceed the system pressure for Cycle 2.

8. Would the increase of guide tube length decrease the clearance between the upper core plate and the upper end fitting, thereby compressing the springs excessively?

9. The St. Lucie 2 license condition on axial growth states that "Prior to startup following the first refueling outage, the licensee shall provide an analysis and/or make hardware modifications to assure that the shoulder gap clearance between fuel rods and fuel assembly end fittings is adequate." The axial growth for Batches B and C fuel was analyzed using the growth model in CENPD-198. CE has stated that CENPD-198 for the 16x16 fuel design in ANO-2 (which is identical in design to the St. Lucie 2 fuel) is non-conservative, but has not yet revised the growth model. Therefore, further justification is required for why Batches B and C fuel can be used for Cycle-2 operation without hardware modifications and/or applicable analysis (other than CENPD-198) as indicated in the license condition.

10. Was a new bias factor for the TM/LP setpoint obtained from the CEA withdrawal analysis or from the inadvertent opening of a PORV analysis? What new value was obtained and how were the Technical Specifications modified to include this value?

11. Do any fuel pins experience DNB during the steam generator tube rupture event? If so how many? Has Tech Spec limit for tube leakage in the unaffected SG been included for the offsite dose calculations?

12. Please explain why a Doppler coefficient multiplier of 0.85 is used in the loss of load to one steam generator whereas the most negative moderator temperature coefficient is used.

13. The staff has previously approved the CETOP-D computer code with appropriate hot assembly inlet flow starvation factors to assure conservatism with respect to the TORC code. Since these flow starvation factors are plant specific, provide the results of analysis of St. Lucie 2 Cycle 2 which show the conservatism of CETOP-D relative to TORC.

Florida Power & Light Company

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