REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8603060181 DOC. DATE: 86/02/28 NOTARIZED: YES DOCKET #
FACIL: 50-335 St. Lucie Plant, Unit 1, Florida Power & Light Co. 05000335
AUTH. NAME AUTHOR AFFILIATION
WOODY, C. O. Florida Power & Light Co.
RECIP. NAME RECIPIENT AFFILIATION
MIRAGLIA, F. J. Division of Pressurized Water Reactor Licensing - B (post 8

SUBJECT: Application for amend to License DPR-67, extending OL expiration date from 100701 to 160301. Supporting info encl.

DISTRIBUTION CODE: A001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 6
TITLE: OR Submittal: General Distribution

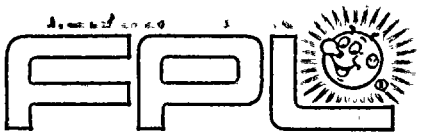
NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR	COPIES ENCL
	PWR-B ADTS	1	0	PWR-B PD8 PD 01	5	5
	PWR-B EB	1	1	PWR-B PEICSB	1	1
	PWR-B FOB	1	1	SELLS, D	1	1
	PWR-B PEICSB	1	1	PWR-B RSB	1	1
INTERNAL:	ADM/LFMB	1	0	ELD/HDS2	1	0
	NRR/DHFT/TSCB	1	1	NRR/ORAS	1	0
	REG FILE 04	1	1	RGN2	1	1
EXTERNAL:	24X	1	1	EG&G BRUSKE, S	1	1
	LPDR 03	1	1	NRC PDR 02	1	1
	NSIC 05	1	1			

Add: NRR PWR-B ADTS

TOTAL NUMBER OF COPIES REQUIRED: LTTR ~~23~~ 24 ENCL ~~19~~ 20

P. O. BOX 14000, JUNO BEACH, FL 33408



FLORIDA POWER & LIGHT COMPANY

FEB 28 1986

L-86-66

Office of Nuclear Reactor Regulation
Attention: Mr. Frank J. Miraglia, Director
Division of PWR Licensing - B
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Miraglia:

Re: St. Lucie Unit 1
Docket No. 50-335
Proposed License Amendment
Operating License Expiration Date

In accordance with 10 CFR 50.90, Florida Power & Light Company submits three signed originals and forty copies of a request to amend Facility Operating License DPR-67.

This amendment will extend the date of expiration of the St. Lucie Unit 1 operating license so that the forty year term begins with the date of issuance of the operating license rather than the date of issuance of the construction permit. The term of the operating license of St. Lucie Unit 1 would be extended from July 1, 2010 to March 1, 2016. The proposed change is shown on the accompanying page 5 of the Operating License DPR-67. A discussion of the change is included in the attached safety evaluation/no significant hazards considerations determination.

The proposed amendment has been reviewed by the St. Lucie Plant Facility Review Group and the Florida Power & Light Company Nuclear Review Board.

A copy of the proposed amendment is being forwarded to the state designee for the State of Florida, in accordance with 10 CFR 50.91 (b)(1). FPL Check No. 0520 is attached as remittance for the license amendment application fee as specified in 10 CFR 170.21.

Should you have any questions regarding this submittal, please feel free to contact us.

Very truly yours,

C. O. Woody
Group Vice President
Nuclear Energy

A001 Add: NRR PWR-B ADTS
1/1

COW/RJS/gp
Attachments
cc: Dr. J. Nelson Grace, USNRC, Region II
Mr. Allan Schubert, Florida Department of Health & Rehabilitative Services
Harold Reis, Esquire, Newman & Holtzinger

RJS3/015/1

Appendix B to this license, the Environmental Technical Specifications, contains requirements that implement these and other environmental conditions of this license.

2.G This license is effective as of the date of issuance and shall expire at midnight, ~~July 1, 2010.~~ March 1, 2016. Renumbered per Am. 36 9-18-80

See D.L. Ziemann for Implementation of Amend 6-17-76

FOR THE NUCLEAR REGULATORY COMMISSION

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Enclosures:
1. Incomplete Construction Items, Preoperational Tests, Startup Tests, and Other Items Which Must be Completed
2. Appendices A & B - Technical Specifications

Date of Issuance: MAR 01 1976

SAFETY EVALUATION

NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

BACKGROUND

The Atomic Energy Act of 1954, as amended, specifies in Section 103 c. that a license shall be issued for a specified period of time, not exceeding forty years. This limitation has been codified in 10 CFR 50.51.

Prior to 1982, the Commission granted operating licenses to nuclear power reactors with the date of expiration linked to the issuance date of construction permits. This practice was modified in response to a request by Commonwealth Edison Company for the Commission to issue operating licenses (OL) for La Salle Units 1 & 2 for a full term of forty years beginning with the date of issuance of the operating licenses. This request was approved, and La Salle Unit 1 received an OL for forty years from the date of OL issuance in 1982. In an August 16, 1982 memorandum to the Commission, Mr. William Dircks elaborated on the new OL position and directed the staff to issue an OL for the term requested by the applicant, but in no case to exceed forty years from the date of issuance of the OL.

Other requests from utility applicants for forty year licenses, starting from the date of issuance of the license, have been granted for new plants. This includes Florida Power & Light Company St. Lucie Unit 2, which received a forty year license beginning with the issuance of the OL in 1983.

The Commission practice of granting effective forty year OLs has also, upon request by the licensee, been extended to plants licensed prior to 1982. Baltimore Gas & Electric Company requested a license amendment to change the OL expiration dates of its Calvert Cliffs Units 1 and 2 to extend the duration of both licenses to forty years from the date of issuance. The Commission granted this request and issued these amendments in mid 1985.

Florida Power & Light Company's St. Lucie Unit 1 license is similar to the Calvert Cliffs Units' licenses in that they were all licensed before 1982 and their forty year lifetime originally started from the date of their construction permits. This amendment request for St. Lucie Unit 1 is to modify its license in the same manner that was granted to the Calvert Cliffs Units' licenses, that is, to extend the duration of the license to forty years by changing the license expiration date.

DISCUSSION

The construction permit for St. Lucie Unit 1 was issued on July 1, 1970. Construction activities were completed six years later and the Commission issued the operating license on March 1, 1976. The license granted was for a term of forty years, commencing with the issuance of the construction permit. Considering the time that was required for plant construction, the operating license was, in reality, for a term of approximately thirty-four years, terminating in the year 2010. This proposed license amendment is for a full forty year operating license term for St. Lucie Unit 1 beginning with the date of issuance of the OL and ending in the year 2016.

[illegible]

Two requirements were identified in the policy established in the April 20, 1985 memorandum from Hugh L. Thompson, Jr. to Harold R. Denton, for operating plants requesting a forty-year term starting from the date of the operating license. Florida Power & Light Company has determined that operation of St. Lucie Unit 1 for forty years meets these two requirements in that (1) there is no significant impact on the final safety analysis report (FSAR) and (2) all environmental effects have been evaluated as addressed in the St. Lucie Unit 1 and Unit 2 Final Environmental Statements.

The Commission, by granting St. Lucie Unit 1 an operating license, had reviewed and determined that these two requirements were met for the approximately thirty-four years of operating life. All issues associated with extending the duration of the operating license to an effective duration of forty years were considered in the original design as defined in the FSAR and are the subject of these ongoing programs:

- Mechanical Equipment - Inspection and testing in accordance with Section XI of the ASME Code and the Technical Specifications insure detection of unexpected degradation.

- Electrical Equipment - Aging analyses have been performed for all safety-related electrical equipment in accordance with the requirements of 10 CFR 50.49, identifying qualified lifetimes for this equipment. These lifetimes are incorporated into plant equipment maintenance and replacement practices to ensure that all safety-related electrical equipment remains qualified and available to perform its safety function throughout a forty year lifetime.

- Structures and Systems - The plant is designed for a forty year service life and incorporates features to facilitate inspections.

- Reactor Pressure Vessel - The design of the reactor vessel and its internals considered the effects of forty years of operation at full power with a plant capacity of 80% (32 effective full power years). Analyses have demonstrated that expected cumulative neutron fluences will not be a limiting consideration. The RT (PTS) at the end of the 40 year operating life was calculated in accordance with the requirements of 10 CFR 50.61 and found to be below the 50.61 screening criteria. In addition to these calculations, surveillance capsules placed inside the reactor vessel provide a means of monitoring the cumulative effects of power operation.

Based upon these programs and our evaluation of the potential impacts associated with this request, Florida Power & Light has determined that the proposed change does not pose any safety problems for the additional six years of operation requested in this amendment change.

Environmental impacts associated with a forty year license were originally evaluated in the St. Lucie Unit 1 Environmental Report. Since the publishing of this document, another evaluation of environmental impacts has been conducted for the St. Lucie site. The "Final Environmental Statement related to the operation of St. Lucie Plant, Unit No. 2" (NUREG-0842) was published in April 1982 and assessed the environmental impacts of the operation of Unit 2 which began commercial operation in 1983. As stated earlier, the Commission evaluated

the environmental impacts and based upon its evaluation, granted a forty year operating license to Unit 2 beginning with the date of operation rather than the date of construction. Thus, the Commission has assessed that the environmental consequences and mitigation actions were acceptable to the year 2023. This date is approximately seven years beyond this request to amend the St. Lucie Unit 1 license to terminate on March 1, 2016. Therefore, the environmental impacts associated with the operation of St. Lucie Unit 1 for forty years are bounded by the St. Lucie Unit 2 evaluation and are acceptable.

CONCLUSION

The proposed change to the Operating License does not involve an unreviewed safety question nor any significant hazards considerations because:

1. a. The probability of the occurrence of an accident previously evaluated in the FSAR has not been affected because the FSAR determination was based on the fact that a forty year life was considered during the design and construction of the plant.

   b. The consequences of an accident previously evaluated in the FSAR have not been adversely affected because they were determined based upon a forty year life.

   c. The probability of a malfunction of equipment important to safety previously evaluated in the FSAR has not been reduced because the calculations for determining the probability were based upon a forty year life. All safety-related electrical equipment meet the Environmental Qualifications requirements of 10 CFR 50.49.

   d. The consequences of a malfunction of equipment important to safety have not been changed because they were originally determined for a facility that would operate for forty years.

2. a. The possibility of an accident of a different type than analyzed in the FSAR has not been created because all the accidents analyzed were based upon a facility with an operating life of forty years.

   b. The possibility of a malfunction of equipment important to safety of a different type than any analyzed in the FSAR has not been created for the reason given in 2.a.

3. a. The margin of safety as defined in the basis for any Technical Specifications is not reduced by the proposed change. The length of the license does not affect any of the bases since any bases that relied on length of plant operation was calculated upon a forty year period of operation.

STATE OF FLORIDA)
) ss.
COUNTY OF DADE)

C. O. Woody being first duly sworn, deposes and says:

That he is a Group Vice President of Florida Power & Light Company, the Licensee herein;

That he has executed the foregoing document; that the statements made in this document are true and correct to the best of his knowledge, information, and belief, and that he is authorized to execute the document on behalf of said Licensee.

C. O. Woody

C. O. Woody

Subscribed and sworn to before me this

28 day of February, 1986.

Rita W. Costantino

NOTARY PUBLIC, in and for the County of Dade, State of Florida

NOTARY PUBLIC STATE OF FLORIDA
MY COMMISSION EXPIRES DEC 5 1986
BONDED THRU GENERAL INSURANCE UND

My Commission expires: _____