

Mr. W. S. Wilgus  
Vice President, Nuclear Operations  
Florida Power Corporation  
ATTN: Manager, Nuclear Licensing  
P. O. Box 219  
Crystal River, Florida 32629

Dear Mr. Wilgus:

SUBJECT: CRYSTAL RIVER UNIT 3 - ISSUANCE OF AMENDMENT RE: CONTAINMENT LEAKAGE RATES (TAC NO. 73568)

The Commission has issued the enclosed Amendment No. 120 to Facility Operating License No. DPR-72 for the Crystal River Unit No. 3 Nuclear Generating Plant (CR-3). This amendment consists of changes to the Technical Specifications (TS) in response to your application dated June 12, 1989.

This amendment changes the TS to allow an alternate method for calculating containment leakage rates.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's biweekly Federal Register notice.

Sincerely,

Original signed by

Harley Silver, Project Manager  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation


Enclosures:

- 1. Amendment No. 120 to DPR-72
- 2. Safety Evaluation

cc w/enclosures:  
See next page

LAF:PDII-2  
DPM:Mer  
8/31/89

PE:PDII-2  
Gwinner:jd  
08/31/89

  
PM:PDII-2  
HSilver  
08/31/89

D:PDII-2  
H Berkow  
9/1/89

OGC  
Burd  
9/8/89

CP-1  
ca

DATED: September 12, 1989

AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE NO. DPR-72-CRYSTAL RIVER UNIT 3

~~CONFIDENTIAL~~  
NRC & Local PDRs  
PDII-2 Reading  
S. Varga, 14/E/4  
G. Lainas, 14/H/3  
H. Berkow  
G. Wunder  
D. Miller  
H. Silver  
OGC-WF  
D. Hagan, 3302 MNBB  
E. Jordan, 3302 MNBB  
B. Grimes, 9/A/2  
T. Meek(4), P1-137  
Wanda Jones, P-130A  
J. Calvo, 11/F/23  
J. Miller, 11/F/23  
ACRS (10)  
GPA/PA  
OC/LFMB  
M. Sinkule, R-II

cc: Plant Service list

DFal  
/

Mr. W. S. Wilgus  
Florida Power Corporation

Crystal River Unit No. 3 Nuclear  
Generating Plant

cc:

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General Counsel  
Florida Power Corporation  
MAC - A5D  
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U.S. Nuclear Regulatory Commission  
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Department of Health and  
Rehabilitative Services  
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Administrator  
Department of Environmental Regulation  
Power Plant Siting Section  
State of Florida  
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Attorney General  
Department of Legal Affairs  
The Capitol  
Tallahassee, Florida 32304



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

FLORIDA POWER CORPORATION  
CITY OF ALACHUA  
CITY OF BUSHNELL  
CITY OF GAINESVILLE  
CITY OF KISSIMEE  
CITY OF LEESBURG  
CITY OF NEW SMYRNA BEACH AND UTILITIES COMMISSION, CITY OF NEW SMYRNA BEACH  
CITY OF OCALA  
ORLANDO UTILITIES COMMISSION AND CITY OF ORLANDO  
SEBRING UTILITIES COMMISSION  
SEMINOLE ELECTRIC COOPERATIVE, INC.  
CITY OF TALLAHASSEE

DOCKET NO. 50-302

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 120  
License No. DPR-72

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Florida Power Corporation, et al. (the licensees) dated June 12, 1989, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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F PIC

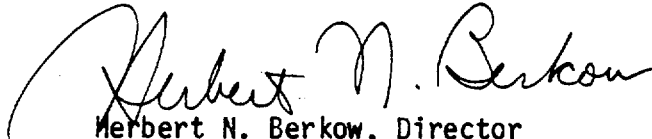
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-72 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 120, are hereby incorporated in the license. Florida Power Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 30 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Herbert N. Berkow, Director  
Project Directorate II-2  
Division of Reactor Projects - I/II  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the Technical  
Specifications

Date of Issuance: September 12, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 120

FACILITY OPERATING LICENSE NO. DPR-72

DOCKET NO. 50-302

Replace the following page of the Appendix "A" Technical Specifications with the attached page. The revised page is identified by amendment number and contains vertical lines indicating the area of change. The corresponding overleaf page is also provided to maintain document completeness.

Remove

3/4 6-2

Insert

3/4 6-2

### 3/4.6 CONTAINMENT SYSTEMS

#### 3/4.6.1 PRIMARY CONTAINMENT

##### CONTAINMENT INTEGRITY

##### LIMITING CONDITION FOR OPERATION

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3.6.1.1 Primary CONTAINMENT INTEGRITY shall be maintained.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

Without primary CONTAINMENT INTEGRITY, restore CONTAINMENT INTEGRITY within one hour or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

##### SURVEILLANCE REQUIREMENTS

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4.6.1.1 Primary CONTAINMENT INTEGRITY shall be demonstrated:

- a. At least once per 31 days by verifying that:
  1. All penetrations\* not capable of being closed by OPERABLE containment automatic isolation valves and required to be closed during accident conditions are closed by valves, blind flanges, or deactivated automatic valves secured in their positions, except those valves that may be opened under administrative controls per Specification 3.6.3.1, and
  2. All equipment hatches are closed and sealed.
- b. By verifying that each containment air lock is OPERABLE per Specification 3.6.1.3.

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\*Except valves, blind flanges, and deactivated automatic valves which are located inside the containment and are locked, sealed, or otherwise secured in the closed position. These penetrations shall be verified closed during each COLD SHUTDOWN except that verification of these penetrations being closed need not be performed more often than once per 92 days.

## CONTAINMENT SYSTEMS

### CONTAINMENT LEAKAGE

#### LIMITING CONDITION FOR OPERATION

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3.6.1.2 Containment leakage rates shall be limited to:

- a. An overall integrated rate of  $\leq L_a$ , 0.25 percent by weight of the containment air per 24 hours at  $\geq P_a$ , 53.3 psig.
- b. A combined leakage rate of  $\leq 0.60 L_a$  for all penetrations and valves subject to Type B and C tests, when pressurized to  $\geq P_a$ .

**APPLICABILITY:** MODES 1, 2, 3 and 4.

#### **ACTION:**

With either (a) the measured overall integrated containment leakage rate exceeding  $0.75 L_a$  or (b) with the measured combined leakage rate for all penetrations and valves subject to Type B and C tests exceeding  $0.60 L_a$ , restore the leakage rate(s) to within the limit(s) prior to increasing the Reactor Coolant System temperature above 200°F.

#### **SURVEILLANCE REQUIREMENTS**

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4.6.1.2 The containment leakage rates shall be demonstrated at the following test schedule and shall be determined in conformance with the criteria specified in Appendix J of 10 CFR 50:

- a. Three Type A tests (Overall Integrated Containment Leakage Rate) shall be conducted at  $40 \pm 10$  month intervals during shutdown at  $\geq P_a$ , 53.3 psig, during each 10-year service period. The third test of each set shall be conducted during the shutdown for the 10-year plant inservice inspection.





UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 120 TO FACILITY OPERATING LICENSE NO. DPR-72

FLORIDA POWER CORPORATION, ET AL.

CRYSTAL RIVER UNIT NO. 3 NUCLEAR GENERATING PLANT

DOCKET NO. 50-302

INTRODUCTION

By letter dated June 12, 1989, Florida Power Corporation (FPC or the licensee) requested an amendment to the Technical Specifications (TS) appended to Facility Operating License No. DPR-72 for the Crystal River Unit No. 3 Nuclear Generating Plant (CR-3). The proposed amendment would allow the licensee to use an improved method to calculate containment leakage rate.

EVALUATION

The CR-3 TS on containment leak rate testing are intended to duplicate the requirements of Appendix J to 10 CFR Part 50. On November 15, 1988, Appendix J was revised to allow an alternative method, known as the Mass Point Method, to calculate containment leakage rate.

The Mass Point Method involves calculation of air mass at various times, and the plotting of mass against time. A linear regression line is then plotted through the mass-time points using a least squares fit. The slope of this line is divided by its intercept, and the result is multiplied by an appropriate constant to obtain leakage rate. This method has been incorporated in a new ANSI standard (ANSI/ANS-56.8-1981) and has been reviewed and approved by the Commission.

The CR-3 TS refer to containment leakage rate testing by methods in use before the approval of the Mass Point Method. Specifically, they require testing in accordance with ANSI N45.4-1972. Therefore, in order to reflect the current 10 CFR Part 50 requirements, the TS must be revised such that references to this older ANSI standard for leakages testing are removed. This change will not relieve the licensee of requirements to comply with applicable regulations. It will simply allow the use of an additional methodology that has been incorporated into the regulations for general industry use.

SUMMARY

Based on our review, the changes proposed in this request are adequate and acceptable.

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FEC

ENVIRONMENTAL CONSIDERATION

This amendment involves a change in the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes to surveillance requirements. We have determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: September 12, 1989

Principal Contributor:  
G. Wunder