

**Florida  
Power**  
CORPORATION

February 14, 1985  
3F0285-12

Mr. H. R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Subject: Crystal River Unit 3  
Docket No. 50-302  
Operating License No. DPR-72  
Technical Specification Change Request No. 126

Dear Sir:

Enclosed are three (3) originals and forty (40) copies of Technical Specification Change Request No. 126 requesting amendment to Appendix A of Operating License No. DPR-72. As part of this request, proposed replacement pages for Appendix A are enclosed.

This submittal revises the CR-3 heatup and cooldown curves to eight Effective Full Power Years (8 EFPY) based on the analysis of the first surveillance capsule withdrawn. For completeness, 40 copies of a (non-proprietary) B&W Report, BAW 1679, Rev. 1, entitled "Analyses of Capsule CR3-B, Florida Power Corporation, Crystal River Unit 3, Reactor Vessel Materials Surveillance Program" are enclosed. Submitted on the same date under separate cover by FPC letter no. 3F0285-13 are 40 copies of a Proprietary B&W Topical Report BAW-1718 entitled "Fracture Toughness Test Results From Capsule CR3-B, Florida Power Corporation, Crystal River Unit 3, Reactor Vessel Material Surveillance Program".

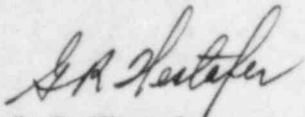
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An amendment application fee of one hundred fifty dollars (\$150), as required by 10 CFR 170, has been included with this Change Request.

Sincerely,



G. R. Westafer  
Manager, Nuclear Operations  
Licensing and Fuel Management

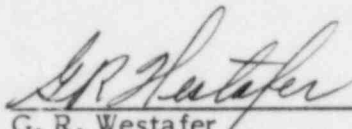
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Enclosures

cc: Dr. J. Nelson Grace  
Regional Administrator, Region II  
Office of Inspection and Enforcement  
U.S. Nuclear Regulatory Commission  
101 Marietta Street N.W., Suite 2900  
Atlanta, GA 30323

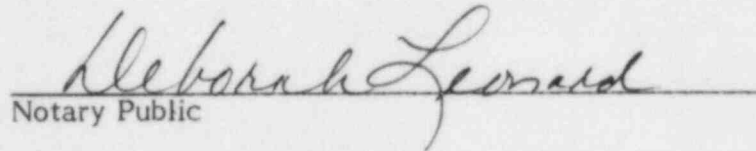
STATE OF FLORIDA  
COUNTY OF PINELLAS

G. R. Westafer states that he is the Manager, Nuclear Operations Licensing and Fuel Management for Florida Power Corporation; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information, and belief.



G. R. Westafer  
Manager, Nuclear Operations  
Licensing and Fuel Management

Subscribed and sworn to before me, a Notary Public in and for the State and County above named, this 14th day of February, 1985.



Notary Public

Notary Public, State of Florida at Large,  
My Commission Expires: November 19, 1986

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF )  
 )  
FLORIDA POWER CORPORATION ) DOCKET No. 50-302

CERTIFICATE OF SERVICE

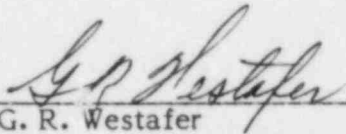
G. R. Westafer deposes and says that the following has been served on the Designated State Representative and the Chief Executive of Citrus County, Florida, by deposit in the United States mail, addressed as follows:

Chairman,  
Board of County Commissioners  
of Citrus County  
Citrus County Courthouse  
Inverness, FL 32650

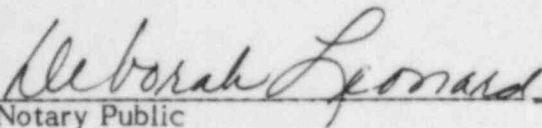
Administrator  
Radiological Health Services  
Department of Health and  
Rehabilitative Services  
1323 Winewood Blvd.  
Tallahassee, FL 32301

A copy of Technical Specification Change Request No. 126 requesting amendment to Appendix A of Operating Licensing No. DPR-72.

FLORIDA POWER CORPORATION

  
\_\_\_\_\_  
G. R. Westafer  
Manager, Nuclear Operations  
Licensing and Fuel Management

SWORN TO AND SUBSCRIBED BEFORE ME THIS 14th DAY OF FEBRUARY 1985.

  
\_\_\_\_\_  
Notary Public

Notary Public, State of Florida at Large  
My Commission Expires: November 19, 1986

(NOTARIAL SEAL)



FLORIDA POWER CORPORATION  
CRYSTAL RIVER UNIT 3  
DOCKET NO. 50-302/LICENSE NO. DPR-72  
REQUEST NO. 126, REVISION 0  
HEATUP AND COOLDOWN CURVES AND SURVEILLANCE  
CAPSULE REMOVAL SCHEDULE

LICENSE DOCUMENT INVOLVED: Technical Specifications

PORTIONS:      3.4.9.1      Pressure/Temperature Limits  
                  3.4.9        Bases

DESCRIPTION OF REQUEST:

Revise the allowable cooldown rates, the pressure/temperature curves, and the capsule removal schedule.

Specifically, replace 3.4.9.1.b of the Limiting Conditions of Operation with:

- b.      For the temperature ranges specified below, the cooldown rates should be as specified (in any one hour period):
  - i.                       $T > 270^{\circ}\text{F}$                        $\leq 100^{\circ}\text{F}/\text{Hr},$
  - ii.       $270^{\circ}\text{F} \geq T > 170^{\circ}\text{F}$                        $\leq 50^{\circ}\text{F}/\text{Hr},$
  - iii.       $170^{\circ}\text{F} \geq T$                                        $\leq 10^{\circ}\text{F}/\text{Hr},$

Delete Table 4.4-5 and replace Figures 3.4-2, 3.4-3 and 3.4-4 with the appropriate revised figures attached.

REASONS FOR REQUEST:

As required by 10 CFR 50, Appendix G and H (pre - 1983), Florida Power Corporation has removed and analyzed Reactor Vessel Surveillance Capsule B. The results of these analyses and a change in fuel management philosophy (longer fuel cycle, higher power level and ultra low leakage fuel loading schemes) have caused shifts in the estimated reference temperatures for Nil-Ductile Transition (RT NDT). This submittal revises the pressure - temperature limits to account for these shifts and to account for an additional increase in the RT NDT 'S due to extending the application of the limits from 5 EFPY to 8 EFPY.

The criticality limit curve on Figure 3.4-2, Limits For Heatup, has been deleted. Specification 3.1.1.4 requires that the Reactor Coolant System temperature be greater than or equal to 525°F during MODES 1 and 2 (with  $K_{\text{eff}} \geq 1.0$ ). This criticality curve implied that the reactor could be made critical at 362°F which is contrary to specification 3.1.1.4.

Florida Power Corporation requests that Surveillance Requirement 4.4.9.1.2 be removed from the Technical Specification. This revision will allow Florida Power to update the program as required by Appendix H, with prior NRC approval, without going through the lengthy process of a license amendment request.

### EVALUATION OF REQUEST:

The new pressure/temperature limits for the reactor coolant pressure boundary were established in accordance with the requirements of 10 CFR 50, Appendix G. The methods and criteria employed that establish operating pressure and temperature limits are described in Topical Report BAW-1679, Revision 1. The revised pressure and temperature limits correspond to the design safety analysis for avoiding excessive stresses. Thus, this Technical Specification change will not degrade plant safety.

The deletion of the Criticality Limit Curve will not affect plant safety. Specification 3.1.1.4 will continue to assure that criticality does not occur at unacceptable temperature/pressure conditions.

The withdrawal schedule as specified in 10 CFR 50, Appendix H, requires that capsules be withdrawn at designated intervals such that the capsule fluence will correspond to specified conditions of the reactor vessel with respect to irradiation damage. Regulations require that the program be maintained, to the extent practical, with the updated requirements. Therefore, to insure that capsules are withdrawn in a manner consistent with the required compatibility of capsule fluence and reactor vessel fluence, it is often necessary to revise the withdrawal sequence. Removing Surveillance Requirement 4.4.9.1.2 from the Technical Specifications will not degrade safety. Florida Power will continue to monitor reactor vessel materials in accordance with Appendix G and H.



FLORIDA POWER CORPORATION  
CRYSTAL RIVER UNIT 3  
DOCKET NO. 50-302/LICENSE NO. DPR-72  
REQUEST NO. 125, REVISION 0  
SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

**DESCRIPTION OF REQUEST:**

This submittal requests the revision of the Reactor Coolant System pressure/temperature curves and the deletion of the Surveillance Capsule Removal Schedule from the Technical Specifications. The revision to the curves will extend applicability from 5 EFPY to 8 EFPY and will assure compliance with 10 CFR 50, Appendix G. Florida Power Corporation also requests that the Surveillance Capsule Withdrawal Schedule be removed from the Technical Specifications.

**SIGNIFICANT HAZARDS CONSIDERATIONS DETERMINATION:**

- (X) Amendment is not likely to involve a significant hazards consideration.  
( ) Amendment is likely to involve a significant hazards consideration.

**BASIS FOR DETERMINATION:**

This amendment is considered not likely to involve a significant hazards consideration because:

1. The revision to the pressure/temperature curves is necessary to comply with NRC regulations (10 CFR 50, Appendix G) and is an additional limitation not presently included in the Technical Specifications (limits beyond 5 EFPY are not currently included).
2. Deletion of the Surveillance Capsule Removal Schedule is a purely administrative change. As in the past, Florida Power Corporation will follow the integrated schedule prepared and submitted to the NRC by Babcock & Wilcox. Because this schedule is expected to change as capsules are removed and analyzed, this change will allow program updates without License Amendments.