

**Florida
Power**
CORPORATION

June 22, 1983
3F-0683-12

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

Subject: Crystal River Unit 3
Docket No. 50-302
Operating License No. DPR-72
Technical Specification Change Request No. 82

Dear Mr. Denton:

Enclosed are three (3) originals and forty (40) copies of Attachments C and E of Technical Specification Change Request No. 82 requesting amendment to Appendix A of Operating License No. DPR-72.

Change Request 82 was formally submitted to the Commission on March 31, 1983 with a note that Attachments C and E would be submitted later. This letter fulfills that obligation. Attachment B will be submitted at a later date.

Florida Power Corporation considers the enclosed to be a part of Technical Specification Change Request No. 82. Thus the license fee per 10 CFR 170.22 was included in the initial submittal dated March 31, 1983.

Sincerely,

G. R. Westafer
Manager
Nuclear Licensing and Fuel Management

PGH/mm

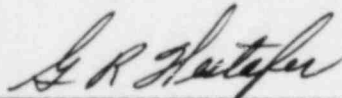
Mr. James P. O'Reilly
Regional Administrator, Region II
Office of Inspection & Enforcement
U.S. Nuclear Regulatory Commission
101 Marietta Street N.W., Suite 2900
Atlanta, GA 30303

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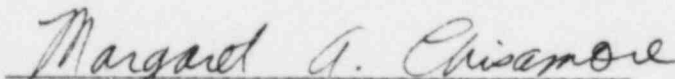
STATE OF FLORIDA
COUNTY OF PINELLAS

G. R. Westafer states that he is the Manager, Nuclear Licensing and Fuel Management, of 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

Subscribed and sworn to before me, a Notary Public in and for the State and County above named, this 22nd day of June, 1983.



Notary Public

Notary Public, State of Florida at Large,
My Commission Expires: May 29, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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

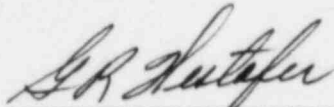
CERTIFICATE OF SERVICE

G. R. Westafer deposes and says that the following has been served on 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

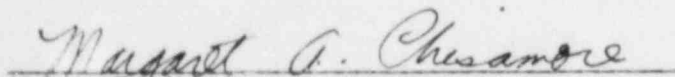
One (1) copy of Technical Specification Change Request No. 82 requesting amendment to Appendix A of Operating License No. DPR-72.

FLORIDA POWER CORPORATION



G. R. Westafer
Manager
Nuclear Licensing and Fuel Management

SWORN TO AND SUBSCRIBED BEFORE ME THIS 22nd DAY OF JUNE 1983.


Notary Public

Notary Public, State of Florida at Large
My Commission Expires: May 29, 1984

(NOTARIAL SEAL)

II. SHUTDOWN MARGIN CHANGE

Proposed Change

Change the Shutdown Margin Requirement in Technical Specification 3.1.1.1.2, 3.1.2.2, 3.1.2.4.2, 3.1.2.7, and 3.1.2.9 during MODES 4 and 5 to greater than or equal to 1.0% delta k/k as required for MODES 1, 2 and 3.

Change the specifications above to require the same LIMITING CONDITIONS FOR OPERATION and ACTION for MODES 1, 2, 3, and 4 (and 5 where applicable) by combining the similar Specifications and Actions statements.

Delete pages 1-2a and 1-16a.

Change the bases for Technical Specification 3.1.1.1.2 and 3.1.2 to reflect these changes.

Reasons for Proposed Change

With the previous alignment of the Decay Heat Removal (DHR) and Reactor Building Spray (RB Spray) systems at Crystal River Unit 3 (CR-3), accidental opening of the Engineered Safeguard actuated valves in the sodium hydroxide (NaOH) lines during DHR system operation could allow NaOH solution to enter the reactor coolant system resulting in a reduction of shutdown margin. Due to this possibility of inadvertent boron dilution, the SHUTDOWN MARGIN was restricted to greater than or equal to 3.5% delta k/k in MODES 4 and 5. The 3.5% delta k/k shutdown margin requirement, for MODES 4 and 5, assured that the reactor would not become critical if a flow path from NaOH tank BST-2 to the DHR system was established.

The possibility of a moderator dilution event by injection of NaOH solution into the DHR system has been greatly reduced by switching the NaOH solution from BST-2 to BST-1 (the old Sodium Thiosulfate Tank). NaOH, which initially gravity fed into the DHR and RB Spray system, now will only feed into the RB Spray system. Check valves in the RB Spray system prevent backflow into the DHR system. Thus, there is no need for the 3.5% delta k/k restriction and the shutdown margin requirement for MODES 4 and 5 can safely be changed to the same requirement for MODES 1, 2 and 3 (1.0% delta k/k).

At the time that the possibility of a boron dilution event was discovered, the shutdown margins for MODES 4 and 5 were separated from those for MODES 1, 2, and 3. Because the shutdown margin requirements will again be consistent for MODES 1 thru 5, the Specifications have been recombined.

Safety Analysis

Modifications to the plant (i.e. changing NaOH from BST-2 to BST-1) have made the boron dilution by injection of NaOH solution improbable. Now, instead of injecting NaOH solution into the DHR and RB spray systems, the solution is injected only into the RB Spray System.

Furthermore, NUREG-0933, Rev. 0, Issue 22, indicates that the boron dilution event does not constitute a significant safety risk to the public and should be dropped from further consideration as a generic unreviewed safety question.

Thus due to plant modification and the insignificant safety risk of a boron dilution event, changing the SHUTDOWN MARGIN to greater than or equal to 1.0% delta k/k (consistent with MODES 1,2 and 3) will not adversely effect plant safety.