

**Florida
Power**

CORPORATION

Crystal River Unit 3
Docket No. 50-302

February 27, 1992

3F0292-11

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Technical Specification Change Request No. 195
Control Rod Position Indication

Dear Sir:

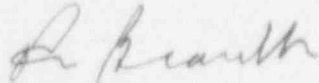
Florida Power Corporation (FPC) hereby submits Technical Specification Change Request No. (TSCRN) 195 requesting amendment to Appendix A of Operating License No. DPR-72. As part of this request, the proposed replacement pages for Appendix A and associated bases are provided.

This submittal proposes revised operability requirements for the control rod reed switch or absolute position indicator (API) channels. The proposed requirements provide a Technical Specification limitation based upon safety analysis performed for the Crystal River Unit 3 (CR-3) nuclear plant. This request also supports a proposed modification to CR-3 to replace the current single channel API with a more reliable (albeit slightly less accurate) dual channel arrangement. A statistical analysis justified the reduced accuracy and demonstrated that all safety analysis assumptions and related technical specification limits were preserved.

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The statistical analysis used to develop the operability requirements and the surveillance limits which protect that requirement has been previously reviewed and approved for use on other licensee dockets. Therefore, FPC projects the NRC review of this request will be straight-forward and requests this amendment be approved prior to startup of CR-3 following Refuel 8. Refuel 8 is presently scheduled to be completed in June 1992.

Sincerely,



P. M. Beard, Jr.
Senior Vice President
Nuclear Operations

PMB/BPW

Attachment

xc: Regional Administrator, Region II
NRR Project Manager
Senior Resident Inspector

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

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

CERTIFICATE OF SERVICE

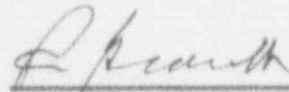
P. M. Beard Jr. deposes and says that the following has been served on the Designated State Representative and Chief Executive of Citrus County, Florida, by deposit in the United States mail, addressed as follows:

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

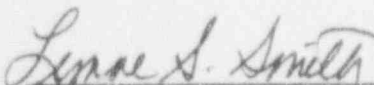
Administrator,
Radiological Health Services
Department of Health and
Rehabilitative Services
1323 Winewood Blvd.
Tallahassee, FL 32301

A copy of Technical Specification Change Request No. 195, requesting Amendment to Appendix A of Operating Licensing No. DPR-72.

FLORIDA POWER CORPORATION


P. M. Beard, Jr.
Senior Vice President
Nuclear Operations

SWORN TO AND SUBSCRIBED BEFORE ME THIS 27th DAY OF February, 1992



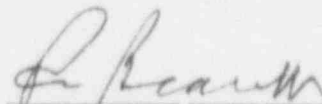
Notary Public

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

Notary Public, State of Florida at Large
My Commission Expires Dec. 18, 1995
Bonded thru Agent's Notary Brokerage


STATE OF FLORIDA
COUNTY OF CITRUS

P. M. Beard, Jr. states that he is the Senior Vice President, Nuclear Operations 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.



P. M. Beard, Jr.
Senior Vice President
Nuclear Operations

Subscribed and sworn to before me, a Notary Public in and for the
State and County above named, this 27th day of February, 1992.



Notary Public

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

Notary Public, State of Florida at Large
My Commission Expires Dec. 18, 1995
Bonded thru Agent's Notary Brokerage

SHOLLY EVALUATION OF REQUEST:

Florida Power Corporation (FPC) proposes that amending the operability requirements for the control rod reed switch position indication channels does not involve a significant hazard consideration. Providing revised surveillance criteria in conjunction with the requirement to maintain the position indication OPERABLE not only results in an equivalent license requirement to the current Crystal River Unit 3 (CR-3) Technical Specifications but also provides a requirement with a reconstitutable basis tied to the CR-3 safety analysis.

FPC concludes this change will not:

1. Involve a significant increase in the probability or consequence of an accident previously evaluated because the proposed requirements are consistent with initial assumptions in the Design Basis Accident (DBA) analysis.

The CR-3 Technical Specifications and safety analysis were reviewed against the proposed requirements. The review also considered the core reload analysis which is the vehicle for relating the safety analysis to the Technical Specifications. The reload analysis ensures the safety analysis assumptions reflected by the cycle-specific control rod position limit curves are preserved and the cycle-specific limits ensure the consequences of an accident are limited for those previously evaluated accidents. The methodology for the reload analysis includes a 1.5% uncertainty applied to group average position and has been previously reviewed and approved by the NRC. The 1.5% uncertainty accounts for the deviation of the indicated group average position from the true average position and is the basis for the proposed requirements. Thus, a requirement based on reload analysis assumptions, such as this, does not result in an increase in the consequences of a previously analyzed accident.

The ability to determine individual control rod position is not assumed as part of any safety analysis (other than to verify reactor trip). The safety analysis does assume reed switch position indication instrumentation will detect an asymmetric rod condition and provide an input to the rod control system to automatically decrease reactor power. Analysis performed for the proposed position indicators considered this function of the system and demonstrated that the proposed indicators detect the asymmetric control rod conditions with a 95% probability and 95% confidence. Thus, the only active function associated with the reed switch position indication continues to be assured with this change and the probability of a previously analyzed accident is not increased.

SHOLLY EVALUATION OF REQUEST:

2. Create the possibility of a new or different kind of accident from any accident previously evaluated. The dual channel reed switch position indication on which the proposed requirements are based, work on the same principle of operation as the currently installed, single channel position indication. The reed switch position indication is the only change to the installed plant hardware configuration. Therefore, the possibility of a new or different kind of accident is not created.
3. Involve a significant reduction in the margin of safety because the rod position indication LCO continues to require reed switch position indicator channels for each control rod to be OPERABLE. The proposed amendment changes the surveillance requirement agreement criteria to provide a limitation (1.5% uncertainty on rod group average position) with a basis in the CR-3 accident analysis. Therefore, the margin of safety provided by this LCO is not significantly reduced.

The uncertainty assumed for rod group average position is currently reflected in other CR-3 Technical Specifications as a result of the cycle-specific reload analysis. Thus, the margin of safety provided by related Technical Specifications is also unchanged.