Florida Power
CORPORATION

November 9, 1984
3F1184-05

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. 125

Dear Sir:

Enclosed are three (3) originals and forty (40) copies of Technical Specification Change Request No. 125 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 amendment will allow Florida Power Corporation (FPC) to consider a decay heat removal (DHR) loop to be in operation during Mode 6 if it is circulating less than 2700 GPM. Currently, a DHR loop must be circulating at least 2700 GPM to be considered "in operation", which leads to restricted containment access during low flow operations.

An amendment application fee (Check No. 698969) 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

PGH/feb

Enclosures

cc: Mr. J. P. O'Reilly
Regional Administrator, Region II
Office of Inspection and Enforcement
U.S. Nuclear Regulatory Commission
101 Marietta Street N.W., Suite 2900
Atlanta, GA 30323

A001
1/ w/check $150.00
#698969

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 9th day of November, 1984.

Deborah Lenard
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	)	
	)	DOCKET No. 50-302
FLORIDA POWER CORPORATION	)	

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

Three (3) copies of Technical Specification Change Request No. 125, requesting amendment to Appendix A of Operating Licensing No. DPR-72.

FLORIDA POWER CORPORATION

G. R. Westafer

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

SWORN TO AND SUBSCRIBED BEFORE ME THIS 9th DAY OF NOVEMBER, 1984.

Deborah Leonard

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. 125, REVISION 0
OPERATION OF DECAY HEAT REMOVAL

LICENSE DOCUMENT INVOLVED: Technical Specifications

PORTION: 3.9.8 Coolant Circulation

DESCRIPTION OF REQUEST:

Revise the surveillance requirement of Specification 3.9.8, Mode 6 operation of decay heat removal, to be similar to the standard technical specification surveillance for Mode 5. Specifically, delete the requirement to verify a specific decay heat removal flow rate.

REASON FOR REQUEST:

At certain times during Mode 6, the Reactor Coolant System water level must be lowered below the vessel flange (ie., Reactor Vessel head removal). At this water level there is not enough Net Positive Suction Head to allow the Decay Heat removal pump to operate at 2700 gpm and so flow is throttled to approximately 1500 gpm. Therefore, the required decay heat removal loop must be considered not in operation and containment penetrations providing direct access from the containment atmosphere to the outside atmosphere must be closed.

During Refuel IV while working on the main steam relief valves and the once-through steam generator B (OTSG B), work was delayed until the OTSG was isolated to prevent direct access to the outside atmosphere. Thus if the reactor vessel water level must be lowered for long periods of time, parallel activities within the containment can be significantly delayed due to penetration isolation.

In addition to Reactor Vessel Head removal and installation, the water level is also lowered for special maintenance such as OTSG leak inspection or repairs. These evolutions may take days or weeks to accomplish. This will allow continued access to the containment and thus avoid activity delays when DHR flow must be throttled.

EVALUATION OF REQUEST:

The purpose of Specification 3.9.8 is to assure that:

1) Sufficient cooling capacity is available to maintain the Reactor Coolant System temperature below 140°F.

2) Sufficient circulation is maintained to minimize a boron dilution incident and to prevent boron stratification.

The 2700 GPM flow rate currently specified is based on the Emergency Core Cooling System (ECCS) analysis. This flow rate corresponds to the minimum flow rate necessary to cool the core during a loss-of-coolant-accident occurring at 102% of 2772 MWt. During Mode 6 (refueling) less heat is being generated by the core, thus this flow rate is not necessary.

Boron stratification will not occur because coolant will continue to circulate and cause adequate mixing.

The Crystal River Unit 3 Final Safety Analysis Report discusses the Boron Dilution incident in Section 14.1.2.4. This analysis uses the most conservative assumption of zero Decay Heat Removal flow to determine if the reactor returns to criticality. As stated previously, coolant will be circulated thus some margin still exists to minimize this incident.