Florida Power
CORPORATION

May 1, 1985
3F0585-01

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. 128

Dear Sir:

Enclosed are three (3) originals and forty (40) copies of Technical Specification Change Request No. 128 requesting amendment to Appendix A of Operating License No. DPR-72. As part of this request, proposed replacement pages for Appendix A are enclosed.

The change request proposes several technical specification changes to resolve conflicts between current technical specifications and commitments made in order to provide low temperature over pressurization protection (see letter from R. W. Reid, NRC, to W. P. Stewart, FPC, dated July 3, 1979). The specific commitments in conflict are:

A. High pressure injection (HPI) discharge valves are closed and "racked out" below 280°F.

B. During shutdown, the HPI pumps are only tested with the vessel head removed.

To resolve the conflicts, the HPI valves will be "racked in" during Mode 6 and Specification 4.5.2.f will allow testing the valves in Mode 6. Specifications 4.5.2.g and 4.8.1.1.2.c.3 will allow testing during Mode 3. To support our startup schedule for Cycle 6, FPC requests approval and implementation of this amendment by July (prior to entry into Mode 5).

A001 3/4D Reid w/out check

Please note FPC has clarified the above commitments to allow HPI discharge valve breakers to be "racked in" during Mode 6, to allow testing. Additionally, commitment "B." has been clarified to specify "during shutdown" does not include Mode 3, hot standby.

An amendment application fee, check number 722640, of one hundred fifty dollars ($150), as required by 10 CFR 170, has been included with this change request.

Sincerely,

G R Westafer

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

PGH/feb

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

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 1st day of May, 1985.

Margaret A. Masters

Notary Public

Notary Public, State of Florida at Large,

My Commission Expires: May 29, 1988

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

A copy of Technical Specification Change Request No. 128 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 1st DAY OF MAY 1985.

Margaret Masters

Notary Public

Notary Public, State of Florida at Large
My Commission Expires: May 29, 1988

(NOTARIAL SEAL)

FLORIDA POWER CORPORATION
CRYSTAL RIVER UNIT 3
DOCKET NO. 50-302/LICENSE NO. DPR-72
REQUEST NO. 128, REVISION 0
SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

REQUEST:

Florida Power Corporation requests issuance of an amendment to Crystal River Unit 3 Technical Specifications to allow performance of certain Engineered Safeguards Equipment Tests during Mode 3 instead of during shutdown. Specifically, Florida Power Corporation recommends that the High Pressure Injection Flow Balance Test and the Diesel Generator Load Test be performed during Mode 3 to reduce the possibility of a low temperature over-pressurization occurrence.

SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION:

(✓) Amendment involves no significant hazards considerations.

( ) Amendment involves significant hazards considerations.

BASIS FOR DETERMINATION:

This amendment is considered not likely to involve a significant hazards consideration because it is a change which may affect a safety margin but is still within acceptance criteria (see Example VI, FR 14870, April 6, 1983). Branch Technical Position RSB 5-2 provides criteria for low temperature over-pressurization protection. However, this does not provide guidance for resolution of the conflict beween Technical Specification tests and low temperature over-pressurization protection commitments. Thus, we have applied the criteria in the safety evaluation for over-pressurization protection (Amendment 21, dated July 3, 1979). Specifically, "Testing of HPI Pumps During Shutdown Will Only Be Performed With the Vessel Head Removed". Since the HPI flow balance test and the diesel generator load test should not or cannot be performed with the vessel head removed, a Mode 3 test is proposed.

A Mode 3 test (instead of a Mode 4, 5 or 6 test) may affect the equipments' expected reliability. However, this effect should be insignificant because other tests are performed prior to Mode 3. Additionally, a test during Mode 3 has a larger impact on the HPI nozzle thermal cycles. These nozzles are replaced before the thermal cycles may become significant. Thus, compared to the possibility of over-pressurization at low temperatures, reliability and nozzle thermal shock concerns are less significant.

The change to Specification 4.5.2.f is administrative (see example i) and is, thus, not likely to involve a significant hazards consideration.

FLORIDA POWER CORPORATION
CRYSTAL RIVER UNIT 3
DOCKET NO. 50-302/LICENSE NO. DPR-72
REQUEST NO. 128, REVISION 0
ENGINEERED SAFETY FEATURES ACTUATION SYSTEM
TESTING CONFLICTS

LICENSE DOCUMENT INVOLVED: Technical Specifications

PORTION: 3.5.2 ECCS Subsystems
3.8.1.1 A.C. Sources

DESCRIPTION OF REQUEST:

Revise the above Specifications to allow:

1. High Pressure Injection (HPI) pumps and valves to be tested during Mode 6 by deleting "during shutdown" from requirement 4.5.2.f.

2. High Pressure Injection Flow Balance Test to be performed during Mode 3, HOT STANDBY. Specifically, add a footnote to requirement 4.5.2.g which states, "The HPI Flow Balance Test shall be performed prior to entering Mode 2."

3. The Emergency Diesel Generator (EDG) Load Test to be performed during Mode 3, HOT STANDBY. Specifically add a footnote to requirement 4.8.1.1.2.c.3 which states, "This test shall be performed prior to entering Mode 2." Additionally, the frequency for this test has been revised to require a refueling cycle frequency instead of 18 months.

REASON FOR REQUEST:

On October 1, 1976, the NRC requested that Florida Power Corporation begin efforts to design and install plant systems to mitigate the consequences of pressure transients at low temperatures. A requirement to install a long term means of overpressurization protection was required by License Condition 2.C(6). The overpressure protection scheme proposed consisted of (1) the pilot actuated relief valve on the pressurizer and, (2) a steam or nitrogen bubble in the pressurizer to allow sufficient time for the operator to terminate an event. After installing the low pressure actuation setpoint on the power operated relief valve (PORV) and committing to numerous administrative controls, the NRC concluded that License Condition 2.C(6) was satisfied and thus could be deleted. Our commitments were:

1. The PORV low pressure setpoint (550 psig) would be enabled when Reactor Coolant System (RCS) temperature is less than 280°F.

2. A steam or nitrogen blanket would be maintained in the pressurizer for heatup and cooldown. Pressurizer water level would be maintained at less than 220 inches when RCS pressure is greater than 100 psig (and less than 250 psig). A pressurizer level less than 275 inches would be maintained for RCS pressures below 100 psig.

3. The makeup tank level would be less than 86 inches when RCS temperature is below 280°F.

4. Core Flood Tank discharge valves would be closed and "racked out" below 700 psig.

5. High Pressure Injection discharge valves would be closed and "racked out" below 280°F (prior to starting Decay Heat Removal System).

6. During shutdown, the HPI pumps would only be tested with the vessel head removed.

Commitments 5 and 6 above, cause conflicts with shutdown related Technical Specifications. These conflicts are:

I. Specification 4.5.2.g requires a flow balance test of the HPI pumps and discharge lines during shutdown at 600 psig. This test cannot be performed with the HPI valves "racked out" below 280°F (Modes 4, 5, and 6). Additionally, the system cannot be pressurized to 600 psig during Mode 5, due to pressure/temperature limits. The system cannot be pressurized to 600 psig while the vessel head is removed, thus Mode 6 testing also is not possible. Thus it appears that Mode 3 is the appropriate time to perform this test.

II. Specification 4.5.2.f, HPI valve manual actuation test, certain modification functional tests, and Specification 4.0.4 require that the HPI valves be actuated, during shutdown, prior to ascension into the applicable mode. If the breakers are "racked out" for these valves below 280°F, testing is not possible as required. A revision to this specification allowing these valves to be actuated during Mode 6 resolves this conflict.

III. Specification 4.8.1.1.2.c.3. requires that the diesel generators be started, loaded with emergency loads and operated for at least five (5) minutes. To perform this test, Engineered Safeguards (ES) equipment must be actuated and loaded on the bus. This test cannot be performed during Modes 4 or 5, due to commitment 6. It is not desirable to perform this test during Mode 6, due to the potential to overfill the fuel transfer canal and the potential to increase Reactor Building airborne contamination. Thus a Mode 3 test is being proposed. Due to the length of the current modification outage and the last fuel cycle (approximately 485 EFPD), this diesel generator test cannot be performed within the 18 month frequency. Thus, the 18 month frequency should be revised to refueling cycle frequency to assure compliance.

EVALUATION OF REQUEST:

The first change described is administrative and will not degrade plant safety. The changes to allow performance of the HPI Flow Balance Test and EDG Load Test during Mode 3 are necessary to prevent or reduce the possibility of a low temperature overpressurization event.