

TECHNICAL SPECIFICATION CHANGE REQUEST NO. 17

Replace pages 3/4 4-5, 3/4 4-33, 3/4 5-1, 3/4 5-6 and 6-17 with the attached revised pages 3/4 4-5, 3/4 4-5a, 3/4 4-33, 3/4 5-1, 3/4 5-6 and 6-17.

Proposed Changes

See the attached revised pages. Page 3/4 4-33 was previously submitted on July 13, 1979, as part of Technical Specification Change Request No. 47.

Reason for Proposed Change

The Nuclear Regulatory Commission, in their letter of November 11, 1977, requested Florida Power Corporation to submit additional information concerning the low temperature overpressure protection mitigating system (OMS) for Crystal River - Unit 3. As part of the response to that request, FPC proposed technical specification changes on January 23, 1978.

On June 20, 1979, the NRC contacted FPC and stated that the proposed Technical Specification Changes were inadequate and on June 25, 1979, FPC received a telecopy from the NRC which included certain items that the NRC would find acceptable in OMS technical specifications.

The enclosed proposed Technical Specification Change Request incorporates those items of the NRC telecopy that are applicable to the Crystal River - Unit 3 overpressure mitigating system.

Safety Analysis of Proposed Change

The overpressure mitigating system at Crystal River - Unit 3 for postulated low temperature overpressure events during shutdown conditions consists of (1) a steam bubble and/or nitrogen blanket in the pressurizer which provides the control room operator sufficient time to terminate an event, and (2) the pressurizer electromatic relief valve which limits the reactor coolant pressure to within Appendix G limits. The two subsystems are separate and independent and together they provide single failure protection against overpressurization.

This Change Request incorporates those requirements needed to insure the operability of the overpressure mitigating system into the Crystal River - Unit 3 technical specifications.

This change does not involve an unreviewed safety question nor does it revise any of the assumptions used in the Safety Analyses. It does bring the technical specifications in line with the installed equipment at Crystal River - Unit 3.

REACTOR COOLANT SYSTEM

3/4.4.4 PRESSURIZER

LIMITING CONDITION FOR OPERATION

3.4.4.1 The pressurizer shall be OPERABLE with:

- a. A steam bubble,
- b. A water level between 40 and 290 inches.

APPLICABILITY: MODES 1 and 2

ACTION:

With the pressurizer inoperable, be in at least HOT STANDBY with the control rod drive trip breakers open within 6 hours.

SURVEILLANCE REQUIREMENTS

4.4.4.1. The pressurizer shall be demonstrated OPERABLE by verifying pressurizer level to be within limits at least once per 12 hours.

REACTOR COOLANT SYSTEM

PRESSURIZER

LIMITING CONDITION FOR OPERATION

3.4.4.2 The pressurizer shall be OPERABLE with:

- a. A steam bubble and/or a nitrogen blanket
- b. A water level <220 inches.
- c. The heater banks deenergized when not required.

APPLICABILITY: MODES 4*, 5* and 6*

ACTION:

With the pressurizer inoperable, restore the pressurizer to OPERABLE status within 1 hour or vent the Reactor Coolant System within 12 hours.

SURVEILLANCE REQUIREMENTS

4.4.4.2. The pressurizer shall be demonstrated OPERABLE at least once per 12 hours by:

- a. Verifying the pressurizer level to be within its limit, and
- b. Verifying the heater banks are deenergized if not required.

*With the Reactor Coolant System not vented.

REACTOR COOLANT SYSTEM

RELIEF VALVE - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.4.11 The pressurizer electromatic relief valve shall be OPERABLE with a lift setting of <550 psig.

APPLICABILITY: MODES 4*, 5* and 6*

ACTION:

- a. With the pressurizer electromatic relief valve not OPERABLE, restore the valve to OPERABLE status within 1 hour or vent the Reactor Coolant System within 12 hours.
- b. In the event the pressurizer electromatic relief valve is actuated and relieves Reactor Coolant System pressure, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation.

SURVEILLANCE REQUIREMENTS

4.4.11 The pressurizer electromatic relief valve shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that the pressurizer electromatic relief isolation valve is open, and
- b. At least once per 18 months, during shutdown, by verifying the lift setting
- c. Prior to enabling the valve during startup and shutdown, by verifying its setpoint.

*With the Reactor Coolant System not vented.

3/4.5 EMERGENCY CORE COOLING SYSTEMS (ECCS)

CORE FLOODING TANKS

LIMITING CONDITION FOR OPERATION

3.5.1 Each reactor coolant system core flooding tank shall be OPERABLE with:

- a. The isolation valve open^{1/},
- b. A contained borated water volume between 7555 and 8005 gallons of borated water,
- c. Between 2270 and 3500 ppm of boron, and
- d. A nitrogen cover-pressure of between 575 and 625 psig.

APPLICABILITY: MODES 1, 2 and 3*

ACTION:

- a. With one core flooding tank inoperable, except as a result of a closed isolation valve, restore the inoperable tank to OPERABLE status within one hour or be in HOT SHUTDOWN within the next 12 hours.
- b. With any core flooding tank inoperable due to the isolation valve being closed, either immediately open the isolation valve or be in HOT STANDBY within one hour and be in HOT SHUTDOWN within the next 12 hours.

SURVEILLANCE REQUIREMENTS

4.5.1 Each core flooding tank shall be demonstrated OPERABLE:

- a. At least once per 12 hours by:
 1. Verifying the contained borated water volume and nitrogen cover-pressure in the tanks, and
 2. Verifying that each tank isolation valve is open.

*With Reactor Coolant pressure >750 psig.

^{1/} Each core flooding tank isolation valve may have its power supply breakers "racked out" in Modes 4, 5, and 6.

EMERGENCY CORE COOLING SYSTEMS

ECCS SUBSYSTEMS - $T_{avg} < 280^{\circ}\text{F}$

LIMITING CONDITION FOR OPERATION

3.5.3 As a minimum, one ECCS partial subsystem comprised of the following shall be OPERABLE:

- a. One OPERABLE high pressure injection (HPI) pump,
- b. One OPERABLE low pressure injection (LPI) pump,
- c. One OPERABLE decay heat cooler, and
- d. An OPERABLE flow path^{1/} capable of taking suction from the borated water storage tank (BWST) and transferring suction to the containment emergency sump.

APPLICABILITY: MODE 4.

ACTION:

- a. With no ECCS partial subsystem OPERABLE because of the inoperability of either the HPI pump or the flow path from the borated water storage tank, restore at least one ECCS subsystem to OPERABLE status within one hour or be in COLD SHUTDOWN within the next 20 hours.
- b. With no ECCS subsystem OPERABLE because of the inoperability of either the decay heat cooler or LPI pump, restore at least one ECCS subsystem to OPERABLE status or maintain the Reactor Coolant System T_{avg} less than 280°F by use of alternate heat removal methods.
- c. In the event the ECCS is actuated and injects water into the reactor coolant system, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.9.2 within 90 days describing the circumstances of the actuation and the total actuation cycles to date.

SURVEILLANCE REQUIREMENTS

4.5.3 The ECCS partial subsystem shall be demonstrated OPERABLE per the applicable Surveillance Requirements of 4.5.2.

^{1/} The high pressure injection isolation valves may have their power supply breakers "racked out" in Modes 4, 5, and 6 when the Reactor Coolant System is not vented.

ADMINISTRATIVE CONTROLS

occurrence of the event. The written report shall include, as a minimum, a completed copy of a licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

- a. Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the technical specifications but which do not prevent the fulfillment of the functional requirements of affected systems.
- b. Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation.
- c. Observed inadequacies in the implementation of administrative or procedural controls which threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems.
- d. Abnormal degradation of systems other than those specified in 6.9.1.8.c above, designed to contain radioactive material resulting from the fission process.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Director of the Office of Inspection and Enforcement, Region II, within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

- a. ECCS Actuation, Specification 3.5.2 and 3.5.3.
- b. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.3.
- c. Inoperable Meteorological Monitoring Instrumentation, Specification 3.3.3.4.
- d. Seismic event analysis, Specification 4.3.3.3.2.
- e. Inoperable Fire Detection Monitoring Instrumentation, Specification 3.3.3.7.
- f. Inoperable Fire Suppression System, Specifications 3.7.11.1, 3.7.11.2, and 3.7.11.3.
- g. Operation of Pressurizer Electromagnetic Relief Valve, Specification 3.4.11.