Florida
Power
CORPORATION
Crystal River Unit 3
Docket No. 50-302

May 15, 1997
3F0597-11

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D.C. 20555-0001

Subject: Control Complex Habitability Envelope

Reference: NRC to FPC letter, 3N0497-11, dated April 8, 1997

Dear Sir:

The purpose of this letter is to provide a response to NRC requests contained in the referenced letter regarding the Control Room Emergency Ventilation System (CREVS) and the Control Complex Habitability Envelope (CCHE). As requested by NRC, Florida Power Corporation (FPC) confirms that if breaches occur in the CCHE in excess of the allowed total breach area, as established by calculations referenced in FSAR paragraph 7.4.9, that both trains of CREVS will be declared inoperable, and CR-3 will comply with Conditions D or E of Technical Specification LCO 3.7.12. The Crystal River Unit 3 (CR-3) procedures and administrative control processes applicable to operability of CREVS and maintaining the integrity of the CCHE are described in Attachment A.

If you have any questions, please contact the Manager, Nuclear Licensing at (352) 563-4566.

Sincerely,

B J Hickle

B. J. Hickle, Director
Nuclear Plant Operations

BJH/SCP

Attachment

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

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ATTACHMENT A
CONTROL COMPLEX HABITABILITY ENVELOPE ADMINISTRATIVE CONTROLS

The following discussion outlines the procedures and administrative control processes applicable to operability of CREVS maintaining the integrity of the CCHE.

CONTROL OF BREACHES

CP-147, "CONTROL COMPLEX HABITABILITY ENVELOPE (CCHE) BREACHES", provides instructions for personnel discovering a CCHE breach, planning activities which will cause a breach in the CCHE, and for documenting and tracking breaches. The procedures described below, which perform inspection or maintenance of CCHE components, refer to CP-147 for actions to be taken when breaches are discovered. The 'PERSONNEL INDOCTRINATION' section of CP-147 contains instructions to enter Technical Specification (TS) LCO 3.7.12, Conditions D or E, as applicable, when breaches exist in the CCHE in excess of the allowed total breach area. Condition D is for both trains of CREVS inoperable in Modes 1, 2, 3, or 4, and requires entry into TS LCO 3.0.3 immediately. Condition E is for both trains of CREVS inoperable during movement of irradiated fuel assemblies and requires suspension of movement of irradiated fuel assemblies.

DOORS

PM-175,"CONTROL COMPLEX HABITABILITY ENVELOPE (CCHE) DOOR MAINTENANCE", provides instructions for inspection and maintenance of CCHE doors. This includes measuring the size of any breaches or gaps in door seals, and notifying the Nuclear Shift Supervisor of breaches. This procedure is performed every 120 days. A computerized scheduling system provides notification of inspection due dates under this procedure. Maintenance is performed, as necessary, based on inspection results. The CCHE door inspections are identified in the preventative maintenance scheduling system as Control Sheet (CS) 5262.

SP-805, "SURVEILLANCE OF PLANT FIRE DOORS", directs monthly surveillance of fire doors throughout the plant, including the CCHE doors. Fire protection staff perform the surveillances to verify the general condition of the fire doors. The staff, under the surveillance procedure, pays particular attention to the condition of CCHE door seals. Checking for breaches is stressed for CCHE doors, and notification to the Operations Shift Supervisor of their existence is required. Performance of this procedure is scheduled through the computerized Surveillance Coordinating and Tracking (SCAT) system.

SP-805A, "ANNUAL INSPECTION OF PLANT FIRE DOORS", provides instructions for inspection of fire doors to National Fire Protection Association Standard 80-1983, "Standard for Fire Doors and Windows." This is a more rigorous inspection of fire rating aspects of doors than SP-805 and includes instructions for identification of CCHE breaches associated with doors. Performance of this procedure is scheduled through the computerized SCAT system.

WALL PENETRATIONS

SP-407, "FIRE BARRIER PENETRATION SEALS", provides for inspection of penetration seals in rated fire walls. This includes the walls which make up the exterior of the CCHE. This surveillance is performed once per 18 months, however, the penetrations are divided into ten groups with one group inspected each 18 months. If the failure rate for the group being inspected exceeds 5%, then additional groups must be inspected until a failure rate of less than 5% is achieved. Performance of this procedure is scheduled through the computerized SCAT system.

DAMPERS

PM-139, "HVAC EQUIPMENT CHECK AND SERVICE", provides instructions for heating ventilation and air condition equipment inspection and maintenance. This includes dampers in the control room emergency ventilation system that provide isolation of the CCHE. Specific information is provided regarding the dampers that comprise the CCHE boundary and the required actions for discovery of breaches. Inspections of the CCHE boundary dampers are scheduled once per 24 months and are identified in the computerized preventative maintenance scheduling system as CS 5026.

Numerous procedures perform surveillance, calibration, and functional testing of the radiation and toxic gas detection systems which provide signals to close CCHE isolation dampers for CREVS operation in the recirculation mode.

SP-353, "CONTROL ROOM EMERGENCY VENTILATION SYSTEM AND RM-A5 MONTHLY TEST", performs monthly surveillance of the CREVS intake radiation monitors (gas and iodine/particulate). The surveillance verifies that upon actuation of the monitor that the resulting output signals close the CCHE isolation dampers.

PT-368, "TOXIC GAS DETECTOR FUNCTIONAL TEST", performs monthly tests of the sulfur dioxide (SO_2) and chlorine detectors monitoring the CREVS intake duct. The functional tests verify detector actuation, and that the resulting signals close the CCHE isolation dampers within the required actuation time.

PT-366, "TOXIC GAS DETECTOR SYSTEM CALIBRATION (TRAIN A)" and PT-367, "TOXIC GAS DETECTOR SYSTEM CALIBRATION (TRAIN B)", perform calibration of the SO_2 and chlorine detectors monitoring the CREVS intake duct. The calibration also verifies that the resulting signals close the CCHE isolation dampers within the required actuation time.

PT-373, "CR1 & 2 TOXIC GAS DETECTION SYSTEM FUNCTIONAL CHECK", performs a monthly functional check of the two SO_2 detectors installed in the vicinity of the SO_2 storage tank at Crystal River Units 1 & 2. The functional check verifies detector actuation, and that the resulting signals close the CR-3 CCHE isolation dampers.

PM-273, "CR1 & 2 TOXIC GAS DETECTION SYSTEM CALIBRATION", performs calibration of the two SO_2 detectors installed in the vicinity of the SO_2 storage tank at Crystal River Units 1 & 2. The calibration procedure verifies detector actuation, and that the resulting signals close the CR-3 CCHE isolation dampers.

FLOOR DRAINS

There are two floor drains that can result in CCHE breaches if water is not maintained in the drain line loop seals. A preventative maintenance activity is established to replenish the water in the loop seals every 30 days. This activity is identified in the computerized preventative maintenance scheduling system as CS 5295.