FLORIDA POWER CORPORATION
CRYSTAL RIVER UNIT 3
DOCKET NO. 50-302/LICENSE NO. DPR-72
REQUEST NO. 124, REVISION 0
REMOTE SHUTDOWN CONTROL AND INSTRUMENTATION

LICENSE DOCUMENT INVOLVED Technical Specifications

PORTION 3.3.3.5 Remote Shutdown System

DESCRIPTION OF REQUEST

Revise the Remote Shutdown Instrumentation Specification to be consistent with the instrumentation listed in Florida Power's submittal, dated October 29, 1982, "Generic Letter 81-12 on Fire Protection". Additionally add operability and surveillance requirements for the remote shutdown system transfer switches. This system will be installed during Refuel V, with Technical Specification implementation following startup.

REASON FOR REQUEST

This Change Request is being submitted to revise the designated Remote Shutdown Instrumentation. These instruments and the transfer switches are being modified or added to comply with Section III. G, Appendix R, 10 CFR 50. The safety evaluation for this system was transmitted to Florida Power on January 6, 1983 and requests these specification changes prior to the new Remote Shutdown Panel operation.

EVALUATION OF REQUEST

The revisions proposed herein are consistent with Florida Power's submittal concerning Remote Shutdown which has been evaluated and approved by the NRC Staff. The addition of the surveillance and operability requirements for the Remote Shutdown equipment are additional limitations not presently included in the Technical Specifications and, as such, will enhance plant safety.

REFERENCES

1. Generic Letter 81-12, "Fire Protection Rule," February 20, 1981.

2. FPC to NRC Correspondence, "Generic Letter 81-12 on Fire Protection", #3F1082-2, October 29, 1982.

3. NRC to FPC Correspondence, "Appendix R Safety Evaluation," #3N0183-05, January 6, 1983.

4. FPC to NRC Correspondence, "Appendix R to 10 CFR 50, Fire Protection,"#3F 0283-11, February 11, 1983.

5. Memo to T. Wambach from M. Virgilio concerning "Model Technical Specifications for Alternative Shutdown Systems Required by 10 CFR 50, Appendix R", March 10, 1983.

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

Request:

Florida Power Corporation requests issuance of an amendment to Crystal River Unit 3 Technical Specification to replace current remote shutdown instrumentation requirements with requirements for the new remote shutdown system. This system is being added as required by the fire protection rule, and should be operational by cycle six (late 1985).

Significant hazards consideration determination:

(x) Amendment involves no significant hazards consideration.
( ) Amendment involves significant hazards consideration.

Basis for Determination:

This amendment is considered not likely to involve significant hazards consideration because it is a change to make the facility and license conform to the regulations of 10CFR50, Appendix R.

Requested Implementation Date:

Florida Power Corporation requests an implementation date prior to achieving Mode 3 for cycle six.

INSTRUMENTATION

REMOTE SHUTDOWN SYSTEM

LIMITING CONDITIONS FOR OPERATION

3.3.3.5 The remote shutdown system transfer switches, and monitoring instrumentation channels shown in Table 3.3-9 shall be OPERABLE. The readouts for the monitoring instrumentation channels shall be displayed on the remote shutdown panel.

APPLICABILITY: MODES 1, 2 and 3.

ACTION:

a. With the number of OPERABLE remote shutdown monitoring instrumentation channels less than required by Table 3.3-9, restore the inoperable channel(s) to OPERABLE status within 30 days, or be in at least HOT SHUTDOWN within the next 12 hours.

b. With one or more remote shutdown system transfer switches inoperable, restore the inoperable switch(s) to OPERABLE status within 30 days, or be in at least HOT SHUTDOWN within the next 12 hours.

c. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.3.3.5.1 Each remote shutdown monitoring instrumentation channel shall be demonstrated OPERABLE by performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 4.3-6.

4.3.3.5.2 Each remote shutdown system transfer switch shown in Table 3.3-9 shall be demonstrated OPERABLE at least once per 18 months, by operating each piece of equipment required for safe shutdown (as specified in the fire protection plan) from the remote shutdown system panel.

TABLE 3.3-9

REMOTE SHUTDOWN SYSTEM

MONITORING INSTRUMENT	MINIMUM CHANNELS OPERABLE
1. Reactor Coolant Pressure (Wide Range)	1
2. Pressurizer Level	1
3. Reactor Coolant Hot Leg Temperature (Wide Range)	1/loop
4. Steam Generator Pressure	1/steam generator
5. Steam Generator Level (Startup)	1/steam generator
6. Steam Generator Level (Operating Range)	1/steam generator
7. Source Range Flux	1
8. Emergency Feedwater Flow Rate	1/steam generator
9. Emergency feedwater normal supply tank Level	1

TRANSFER SWITCHES	SWITCH LOCATION
Remote Shutdown Panel Control Power, Train - A	4160 ES-A Switchgear Room 108 Foot Elevation, Control Complex
Remote Shutdown Panel Control Power, Train - B	4160 ES-B Switchgear Room 108 Foot Elevation, Control Complex

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION

SURVEILLANCE REQUIREMENTS

	INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1.	Reactor Coolant Pressure (Wide Range)	M	R
2.	Pressurizer Level	M	R
3.	Reactor Coolant Hot Leg Temperature (Wide Range)	M	R
4.	Steam Generator Pressure	M	R
5.	Steam Generator Level (Startup)	M	R
6.	Steam Generator Level (Operating Range)	M	R
7.	Source Range Flux	M	R
8.	Emergency Feedwater Flow Rate	M	R
9.	Emergency feedwater normal supply tank Level	M	R

3/4.3.3 MONITORING INSTRUMENTATION

3/4.3.3.1 RADIATION MONITORING INSTRUMENTATION

The OPERABILITY of the radiation monitoring channels ensures that 1) the radiation levels are continually measured in the areas served by the individual channels and 2) the alarm or automatic action is initiated when the radiation level trip setpoint is exceeded.

3/4.3.3.2 INCORE DETECTORS

The OPERABILITY of the incore detectors ensures that the measurements obtained from use of this system accurately represent the spatial neutron flux distribution of the reactor core. See Bases Figures 3-1 and 3-2 for examples of acceptable minimum incore detector arrangements.

3/4.3.3.3 SEISMIC INSTRUMENTATION

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event so that the response of those features important to safety may be evaluated. This capability is required to permit comparison of the measured response to that used in the design basis for the facility. This instrumentation is consistent with the recommendations of Safety Guide 12 "Instrumentation for Earthquakes", March 1971.

3/4.3.3.4 METEOROLOGICAL INSTRUMENTATION

The OPERABILITY of the meteorological instrumentation ensures that sufficient meteorological data is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public. This instrumentation is consistent with the recommendations of Regulatory Guide 1.23 "Onsite Meteorological Programs", February 1972.

BASES

3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The operability of the Remote Shutdown System ensures that a fire in the Main Control Room or Cable Spreading Room will not preclude safe shutdown. The equipment required to remain operable for safe plant shutdown is described in the Crystal River Unit 3 Fire Protection Plan. The equipment required to be operated from the Remote Shutdown Panel to demonstrate transfer switch operability is also described in the Fire Protection Plan.

3/4.3.3.6 POST-ACCIDENT INSTRUMENTATION

The OPERABILITY of the post-accident instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light-Water Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," December 1975.

3/4.3.3.7 FIRE DETECTION INSTRUMENTATION

The OPERABILITY of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is returned to service.