

**Florida  
Power**  
CORPORATION

June 11, 1982  
#3F-0682-16  
File: 3-0-3-a-3

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Crystal River Unit 3  
Docket No. 50-302  
Operating License No. DPR-72  
Nuclear Safety Task Force Followup Actions

Dear Mr. Denton:

After the transient that occurred on February 26, 1980, Florida Power Corporation formed a Nuclear Safety Task Force to investigate the overall safety of Crystal River Unit 3. This Task Force made a number of recommendations for safety improvements and made a number of recommendations concerning subjects to be studied in greater detail to evaluate the potential for safety improvements. After the Nuclear Safety Task Force completed its mission, the Nuclear Safety Modifications Control Task Force (NSMCTF) was formed to prioritize outstanding recommendations and to monitor progress to assure timely resolution. This prioritization has been completed and the NSMCTF is continuing to track overall progress being made.

In our letters of March 6, 1981, and April 16, 1981, we advised you of the disposition of many of the Task Force recommendations and indicated we would provide you a summary of the results of the engineering studies being performed pursuant to Nuclear Safety Task Force recommendations and our plans for further pursuit of these items. By this letter, Florida Power Corporation fulfills that commitment.

As a result of the preliminary engineering studies that were performed, the NSMCTF determined that some of the concerns of the Nuclear Safety Task Force were either unfounded or had no relation to nuclear safety. As a result of this determination, with the concurrence of the NSMCTF, these items have been closed.

The remaining open items will be pursued to completion at a rate commensurate with their safety significance. Resource commitments for resolution of these recommendations must be determined with full recognition of the relative safety significance of many other projects. The amount of progress made in resolution of these remaining recommendations is heavily influenced by the many other safety significant

8206160051 820611  
PDR ADOCK 05000302  
P PDR

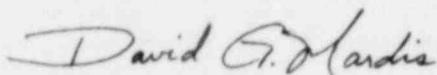
Pool

Mr. Harold R. Denton  
June 11, 1982  
Page 2

Plant additions and modifications currently in the design stage. We do, however, remain committed to the resolution of all Nuclear Safety Task Force recommendations affecting safety.

Attachment 1 details the current status of each item listed in our April 16, 1981 submittal. We will provide you with another update on the status of these items during the first quarter of 1983.

Very truly yours,



David G. Mardis  
Acting Manager  
Nuclear Licensing

Attachment

AEF:mm

cc: Mr. J. P. O'Reilly, Regional Administrator  
Office of Inspection & Enforcement  
U.S. Nuclear Regulatory Commission  
101 Marietta Street N.W., Suite 3100  
Atlanta, GA 30303

ATTACHMENT 1  
STATUS OF ENGINEERING STUDIES RESULTING FROM  
NUCLEAR SAFETY TASK FORCE RECOMMENDATIONS

ITEM NO.	DESCRIPTION	PRELIMINARY STUDY RECOMMENDATION	CURRENT STATUS
1.19	Pursue one of several possible approaches for providing automatic reactor coolant pump trip.	Do nothing	Under in-house review to determine concurrence with study recommendation.
1.21	On electrical distribution panels - provide controlled drawings in each panel listing panel loads.	Drawings should be provided	Work proceeding
3.6	Review loss of ICS and NNI for different failures and their effect on the components being controlled. Examples include: 1. Decreasing FW flow while with drawing rods. 2. Mid-scale failures. 3. Examine modifications of ICS to, on loss of power: A. Fail MFW pump demand to 0. B. Fail MFW block valve closed. C. Fail low-load valve closed. D. Addition of new manual stations on demand to TBV's, ADV's, and SUFW valves. 4. Rod withdrawal limitations.	Formal study should be done of potential ICS/NNI failures	On hold pending allocation of manpower
3.9	Analyze NNI/ICS for failures which will go undetected until needed. Annunciate as "trouble." Provide clear indication that a control or indication has been lost.	Concern not warranted	Closed
3.10	Investigate whether transferring T <sub>ave</sub> control from reactor control to feed-water control improves system transient response.	Not a safety concern	Closed
3.11	Review the reliability of input signals from the NI/RPS system, specifically the RC flow signal.	Not a safety concern. Could be combined with Item 3.6.	Closed
3.12	Study whether single failures can be handled so they do not cause loss of both automatic and manual control of a single component.	Combined with Item 3.6	Closed

ITEM NO.	DESCRIPTION	PRELIMINARY STUDY RECOMMENDATION	CURRENT STATUS
3.13	Remove mixtures of power supplies where possible. The signal conditioners should be powered from the same source as indicator and transmitter.	Maintain existing design and revise procedures to align switches to NNI-X powered inputs.	Closed
3.21	In order to assure having means of relieving pressure during loss of one channel of NNI, the pressurizer spray control should be powered/controlled from diverse sources.		Preliminary study still in progress
3.22	Item 1.2 recommends setting NNI signal select switches to make the "A" loop powered from (X) and the "B" Loop powered from (Y). Certain features of the present NNI arrangement prevent this and must be changed.	Not a safety concern	Closed
3.23	Change pressurizer level compensation from temperature compensation to pressure compensation. This concern is based on level error caused by inherent time delays in the RTD sensors measuring pressurizer temperature.	Not a safety concern. Do nothing.	Closed
3.24	Review interlocks which can fail on loss of a power supply to determine if bypasses are needed to allow normal shutdown or to accommodate emergency procedures.	Detailly study should be performed.	Under in-house review
5.35	Investigate multiple channel display capability for identifying failed signals before transferring to ICS control.	Not a safety concern	Closed
5.36	Provide a diesel backup air compressor (considering loss of offsite power event).	Existing temporary diesel air compressor should be made permanent.	Work proceeding
5.49	Consider expanding the range of RC pressure indication to approximately 0-3000 psig. Consider expanding ranges of other instrumentation such as T Hot.	Existing RC pressure transmitters should be recalibrated.	On hold pending allocation of man-power.

ITEM NO.	DESCRIPTION	PRELIMINARY STUDY RECOMMENDATION	CURRENT STATUS
5.54	Identify and implement discrete changes in FW system to improve reliability and reduce safety system challenges.	Not a safety concern. Two modifications recommended for Plant reliability upgrade.	On hold pending allocation of man-power.
5.65	An inadvertent actuation of B ESFAS with A pump running could cause destruction of A MU pump (closure of MUV-64) unless operator acts. (Could cause failure of two pumps). Consider a suction pressure switch which will be defeated on a full ESFAS signal.	Should be pursued	Work proceeding
5.75	Investigate various means for assuring reference legs for steam generator levels - pressurizer levels, RC drain tank level, and makeup tank level. Provide past documentation on the subject or additional work if necessary.	Diverse type sensors should be used on some level measurements.	On hold pending allocation of man-power
5.76	Replace Bailey Meter Co. model BY transmitters with Rosemount transmitters. (Have high failure rate with pressurizer level, all BY'S tend to shift zero.)	Transmitters important to safety have been or soon will be replaced. No further action needed.	Closed
5.82	Investigate placing bypass valve around MSIV's or slow opening of MSIV's for equalizing pressure to prevent steam hammer.	Should be pursued	Work proceeding
5.95	Plant electrical auxiliaries are powered from startup transformer during operation. If loss of offsite power occurs, Plant trips because FW, CD, etc., pumps trip. Should auxiliaries be powered from Plant auxiliary transformer, so that on loss of offsite power, Plant remains on-line (since auxiliaries would not be affected)?		Preliminary study still in progress
5.105	Evaluate the sump systems for all safety-related rooms to ensure that flooding from internal or external sources is adequately addressed.	Concern not warranted. Do nothing.	Closed
5.106	Perform a detailed review of the communication paths between redundant safety-related equipment to assure against common mode failure of steaming, fire, and flood.	Concern not warranted. Do nothing.	Closed

ITEM NO.	DESCRIPTION	PRELIMINARY STUDY RECOMMENDATION	CURRENT STATUS
5.113	The existing design of the ESFAS system causes start of the decay heat pumps at 1500 psi. DH pumps cannot pump into the system until approximately 400 psig is reached. The pumps will sit on recirc for a significant length of time. Should there be a separate setpoint for DH pump actuation?	Concern not warranted. Do nothing.	Closed
6.7	Design/install backup power sources (AC and DC) for NNI-(Y) channel.	Should be pursued	Detailed study in progress
6.8	Review fuse coordination for all vital bus feeds.	Should be pursued	Detailed study in progress