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Docket No. 50-302

Mr. Walter S. Wilgus
Vice President, Nuclear Operations
Florida Power Corporation
ATTN: Manager, Nuclear Licensing
& Fuel Management
P. O. Box 14042, M.A.C. H-2
St. Petersburg, Florida 33733

Dear Mr. Wilgus:

SUBJECT: CRYSTAL RIVER UNIT 3 - REQUEST FOR REVISION TO PROPOSED NUREG-0737
TECHNICAL SPECIFICATONS

The NRC has issued guidance to all owners of Pressurized Water Reactors regarding implementation of Technical Specifications (TS's) for various NUREG-0737 items. That guidance was embodied in Generic Letter (GL) 82-16 issued on September 20, 1982, and GL 83-37, issued on November 1, 1983. Florida Power Corporation (FPC) has, within a number of different submittals and requests, provided proposed TSs for most of the items covered by GL 82-16 and GL 83-37. Specifically, some of the proposed TSs were contained in FPC's Radiological Effluent TS Change Request No. 36, dated January 17, 1983 (and supplemented on November 1, 1983, December 16, 1983 and March 22, 1984) and other proposed TSs were submitted with Attachment C to TS Change Request No. 82, dated June 22, 1983 (and supplemented on February 24, 1984 and May 31, 1984).

As part of the review of the TSs, proposed for Crystal River Unit 3 (CR-3), we have compared the latest versions of those submitted by FPC with the model TSs contained in GL 82-16 and GL 83-37. The results of our review are presented in two Safety Evaluation Reports, one of which is concerned with the comparison with GL 82-16 (Enclosure 1) and the other with the comparison with GL 83-37 (Enclosure 2). Please note that the items related to items I.A.1.3 and II.K.3.3 require additional Technical Specification submittals by you.

These SER's discuss other revisions that are required to be made to the proposed TSs prior to issuing them as an amendment to the license. License amendments will be issued in the near future for those items which are acceptable.

We consider issuance of the TSs for NUREG-0737 items to be a priority item. You are requested to provide a response to the attached within 45 days of receipt of this letter. Your response should include revised proposed TS pages, as appropriate. Since all such additional submittals must be noticed in the Federal Register, with allowance of a 30-day public comment period, your timely response is requested.

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Mr. Walter S. Wilgus

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Should you have any questions regarding this letter of the attached Safety Evaluations, please contact the NRC Project Manager assigned to Crystal River 3.

Sincerely,

"ORIGINAL SIGNED BY
JOHN F. STOLZ"

John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing

Enclosures:


- 1. Safety Evaluation GL 82-16
- 2. Safety Evaluation GL 83-37


cc w/enclosures: See next page

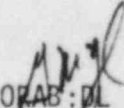
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
ensure license amendment is issued in a timely manner



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ENCLOSURE 1

SAFETY EVALUATION BY THE OFFICE NUCLEAR REACTOR REGULATIONS
RELATED TO AMENDMENT TO THE FACILITY OPERATING LICENSE No. DPR-72
FLORIDA POWER CORPORATION
CRYSTAL RIVER NUCLEAR GENERATING UNIT 3
DOCKET No. 50-302

Introduction

Generic Letter (GL) 82-16 dated September 20, 1982 identified thirteen items contained in NUREG-0737 for which Technical Specifications are required, provided guidance for the scope of these specifications, and requested that each licensee submit an application for a license amendment for those items not covered adequately by current Technical Specifications.

Florida Power Corporation (FPC), the licensee for Crystal River 3 (CR3), provided a response to GL 82-16 by a letter dated September 16, 1983, and has also proposed Technical Specification changes to a number of GL 82-16 items in earlier submittals. The licensee responses to GL 82-16 and the proposed Technical Specification changes have been reviewed with the technical assistance of EG&G. The EG&G Technical Evaluation Report, EGG-EA-6434 is attached.

Evaluations and Conclusions

Our evaluations and conclusions regarding licensee conformance with the guidance of GL 82-16 for each of the thirteen items are covered in the following subparagraphs:

1. STA Training (I.A.1.1.3)

The EGG Report (Enclosure 1) concludes that no further licensing action is required for this item and that current Technical Specification Table 6.2-1 meets the intent of I.A. 1.1.3. We concur with the EG&G conclusion.

2. Shift Manning - Overtime Limits (I.A.1.3.1)

The licensee should be formally requested to submit a TS change request to include this item. The FPC basis for not including this item, despite repeated requests (GL 82-02, 82-12 and 82-16), is the NRR Safety Evaluation Report (SER) dated December 7, 1981. This SER concluded that "...FPC policy for the limitation of overtime to be acceptable", and is silent on the subject of the TS. A review of the original NUREG 0737 item indicates that TS changes were not required. It was also noted that the overtime policy, which was found acceptable in the SER, has since been changed by GL 82-02 and 82-12. Therefore, we concur with the EG&G report that this should be included in the TS in order to control changes.

3. Short Term Auxiliary Feedwater System (AFWS) Evaluation II.E.1.1)

Current Technical Specifications address II.E.1.1 guidance with one exception. To address this exception FPC in a letter dated November 18, 1983 committed, following a refueling or an outage lasting greater than 30 days, to verify that the proper EFWS flow path exists by an actual demonstration of EFW flow from the condensate storage tank to the steam generators. With NRC approval of this final TS change, all licensing action for II.E.1.1 will be complete.

4. Safety Grade AFW Initiation and Flow Indication (II.E.1.2)

TS changes are to be submitted upon completion of system installation in Refuel V. A review of the current CR3 TS indicates that the July 2, 1980 model TS have also not been incorporated.

5. Dedicated Hydrogen Penetrations (II.E.4.1)

The CR3 design included dedicated, single failure proof, hydrogen containment penetrations.

The June 22, 1983 FPC TS change submittal No. 82 requests the containment isolation valves for the Hydrogen purge system from the Reactor Building be added to TS table 3.6-1. These four valves are numbered LRV-70, 71, 72 and 73. The four containment isolation valves are non-automatic isolating and will be maintained shut during modes 1-4. With these valves normally shut during operating modes 1-4, these valves will be in the isolation position and TS 3.0.4 will not be applicable. The function, as listed in the proposed Table 3.6.1, is "ISO. H2 purge system from RB." In the CR3 system design these isolations would prevent leakage into the lines which fitup to the Hydrogen Recombiner. The Hydrogen Recombiner will be installed in a Post-Accident situation and thus it is imperative that these valves remain closed. The CR3 safety analysis appears to indicate that TS Action Statement b or c would ensure these valves are closed if inoperable.

It has been determined that the above TS change is acceptable only with the Function Column changed to read "closed during normal operation". This will eliminate the ambiguity between the CR3 Safety Analysis indication that action statements b and c will require isolation when in fact they should be closed at all times during operational modes 1-4.

6. Containment Pressure Set Point (II.E.4.2.5)

EGG concludes that no further licensing action is required since a staff SE dated December 10, 1984 concluded that the present containment pressure set points are acceptable. We concur with the EG&G conclusion.

7. Containment Purge Valve (II.E.4.2.6)

The June 22, 1983 FPC TS Change submittal No. 82 requests that Table 3.6-1 be modified to require that Containment Purge and Exhaust valves AHV-1A, B, C, and D be closed during operating conditions 1, 2, 3, and 4. The licensee

format for achieving this is by denoting with a double pound sign (##) and defining this to mean "the containment purge supply and exhaust valves must be closed during Modes 1, 2, 3 and 4." The proposal also deletes the isolation time of 60 seconds but retains the auto isolation feature. A surveillance is also added to require a verification every 31 days that the valves are shut while in modes 1, 2, 3 and 4. On April 29, 1982 NRR issued a letter to FPC on the status of Generic Item B-24 and TMI Action Item II.E.4.2.5. This letter also provided sample model Technical Specifications. The licensee submittal does not incorporate in the proposed surveillance section 4.6.3.1.3 that the valves will be determined "Locked (or sealed) closed." The submittal also does not address the seal deterioration and leakage concern as discussed in the April 29, 1982 letter.

The current submittal is acceptable with the word "locked" or "sealed" inserted in the proposed surveillance. The licensee should submit additional TS change to complete the other items addressed in the April 29, 1982.

8. Radiation Signal on Purge Valves (II.E.4.2.7)

The EG&G report concludes that no further licensing action is required since the containment purge valves are locked closed during Modes 1, 2, 3 and 4, and therefore, automatic closing of the valve on high radiation signal is not required. We concur with the EG&G conclusion, however technical specifications are required as discussed in item 7 above.

9. Upgrade Babcock and Wilcox (B&W) AFWS (II.K.2.8)

The EG&G report concludes that the licensing actions to be taken under II.E.1.1 and II.E.1.2 will address this items. Therefore no further licensing action will be required for this item. We concur with the EG&G conclusion.

10. Anticipatory Trip - B&W Plants (II.K.2.10)

In the letter of June 22, 1983, FPC proposed changes to Technical Specifications 3.3.1-1 and to Table 2.2-1 and 3.2-1 of the Technical Specification which contains Reactor Protection System Setpoints and response times. These changes are needed because of the addition of two anticipatory reactor trips. These new trips are:

- a. Anticipatory reactor trip on a main turbine trip.
- b. Anticipatory reactor trip on a trip of both main feed water pump.

These trips are intended to reduce the consequences of undercooling transients that result in a pressure increase in the reactor coolant system. This new specification requires that four channels be used to monitor the main turbine and four channels monitor the main feedwater pumps. In the event where reactor power is greater than 20% full power and two channels indicate a loss of the main turbine or both main feedwater pumps, a reactor trip will occur.

The proposed TS change to Table 2.2-1 does not specify trip set points and allowable values in accordance with the guidance provided in Generic Letter 82-16. Rather the TS change provides for a trip setting of greater than 20% of rated thermal power with either a main turbine trip or a trip of both main feedwater pumps. The proposed change to TS table 2.2-1 is not acceptable and should be modified to provide trip set points as follows:

	<u>Functional Unit</u>	<u>Trip Set Point</u>	<u>Allowable Valves</u>
10.	Anticipatory Reactor Trip - Main Turbine (4)	Main Turbine control oil pressure >45 psig	Main Turbine control oil pressure >45 psig
11.	Anticipatory Reactor Trip - Both Main Feedwater Pumps (4)	Pump Control Oil pressure >55 psig	Pump Control Oil pressure >55 psig

(4) Trip automatically bypassed below 20 percent of rated thermal power.

The proposed TS changes to TS 3.3.1-1 are acceptable. The staff concurs with the licensee that the Modes in which surveillance is required should include Modes 1 and 2 rather than Mode 1 as was suggested by Generic Letter 82-16. The staff also notes that Action Statement 3 requirement of Generic Letter 82-16 is consistent with current Crystal River Technical Specification 3.3.1.1 Action Statement 3. Therefore no change to the action statement is required.

The proposed TS change to Table 3.2-2 is acceptable.

The licensee should submit modifications to the Technical Specification as committed to above for Table 2.2-1. The change to TS 3.3.1-1 and Table 3.2-1 are acceptable and should be approved with the issuance of the modified Table 2.2-1.

11. B&W Thermal-Mechanical Report (II.K.2.13)

The EG&G Report concludes that the Thermal-Mechanical Report for CR-3 which was submitted to NRC on January 30, 1981 is being handled as an active TMI action item under a separate TAC number (45197) and that no licensing action is required by GL 82-16. We concur with the EG&G conclusion.

12. Reporting SV and RV Failure and Challenges (II.K.3.3)

The EG&G Report concludes that the present TS do not comply with II.K.3.3 requirement and that further licensing action is required. Even though the licensee has committed to report challenges to the valves in the CR-3 annual report, TS sections 6.9.1.5 and 6.9.1.8b dealing with annual reports and prompt notification do not specifically address the reporting of challenges to the SV's and RV's.

We concur with the EG&G conclusion. FPC should be requested to submit TS change to conform to the requirements of GL 82-16.

13. Anticipatory Trip on Turbine Trip (II.K.3.12)

This item applies to Westinghouse designed plants.

Attachment:
EG&G Technical Evaluation Report,
EGG-EA-6434