



# Florida Power

CORPORATION

Crystal River Unit 3  
Docket No. 90-302

April 3, 1997  
3F0497-32

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

Subject: Technical Specification Change Request Notice 211, Revision 0

References: FPC to NRC letter, 3F0397-16, dated March 27, 1997

Dear Sir:

Florida Power Corporation (FPC) submitted Technical Specification Change Request Notice 211 for Crystal River Unit 3 in the above referenced letter. Pages 11, 12, and 13 were inadvertently omitted from the letter. The missing pages are attached. Please combine these pages with the original letter, dated March 27, 1997, that was submitted to the NRC.

Should you have any questions or require additional information, please contact Brian Gutherman at (352) 563-4566.

Sincerely,

David F. Kunsemiller, Director  
Nuclear Operations Site Support

DFK/SCP

Attachments

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

9704080307 970403  
PDR ADDCK 05000302  
P PDR



4. The random inspection of tubes adjacent to tubes listed in the OTSG Inservice Inspection Surveillance Procedure (Table 1 herein), and the balance of tube length outside the first span for those tubes, will provide continued confirmation that the population of "B" OTSG tubes which contain multiple pit-like IGA indications in the first span has been bounded.
5. No changes are being proposed to the existing repair criteria in TS 5.6.2.10 for disposition of indications. Tubes with pit-like IGA indications which equal or exceed 40% through-wall based on use of a qualified sizing technique, or which must be assumed to equal or exceed 40% through-wall due to a combination of MRPC confirmation and a lack of a qualified sizing technique, will be plugged or sleeved.
6. In the event that any of these listed tubes demonstrate a change in damage mechanism morphology, i.e. the pit-like indications evolve into crack-like indications as determined by the MRPC inspections, the NRC will be explicitly notified of the occurrence.

The proposed change will ensure that existing tube degradation is effectively monitored and that any new tube degradation is detected and appropriately dispositioned such that the integrity of the reactor coolant pressure boundary is maintained.

#### **DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION**

In accordance with 10 CFR 50.91 (a)(1), the following analysis is provided to demonstrate that the proposed changes do not represent a significant hazards consideration. According to 10 CFR 50.92 (c), the proposed changes discussed above are deemed to involve a significant hazards consideration if there is a positive finding in any one of the following areas:

1. Will operation of the facility in accordance with this proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

FPC Response:

No. The CR-3 component addressed by this proposed change is the "B" Once Through Steam Generator (OTSG), identified by plant tagging procedures as RCSG-1B. OTSGs are straight tube, straight shell heat exchangers which allow for heat removal and the subsequent production of steam as a result of heat transfer from the primary side reactor coolant to the secondary side feedwater.

Based on review of Chapter 14 of the CR-3 Final Safety Analysis Report (FSAR), analyses have been performed to assess the consequences of a steam generator tube rupture event, including the complete severance of a steam generator tube. The analyses concluded that CR-3 was sufficiently designed to ensure that in the event of a steam generator tube rupture the radiological doses would not exceed the allowable limits prescribed by 10CFR100, and would not result in additional tube failures and further

degradation of the integrity of the reactor coolant pressure boundary. In addition, these change include continuing the currently accepted primary-to-secondary leakage limit that was previously approved for the current operating cycle only. This value is conservative relative to existing safety analyses, and would result in lower doses than currently calculated and found acceptable.

The proposed change to the OTSG inspection criteria establishes that future inspections will include 100% inspection of the first span of specific tubes which are known to have indications of degradation. The degradation of these tubes is attributed to a common non-random mechanism. The results of inspections of these tubes will be dispositioned using to the same criteria as all other OTSG tubes for determination of the need for plugging or sleeving. Therefore the proposed change will not increase the probability or consequence of an accident previously evaluated, as all tubes degraded beyond acceptable limits will be subject to consistent corrective actions.

2. Will operation of the facility in accordance with this proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

FPC Response:

No. The purpose of OTSG tube inspection is to identify tubes that may have a higher potential for failure due to degradation that results in a reduced ability to withstand operating conditions. Neither the type of inspection of OTSG tubes nor the process for performing inspections will be changed by this amendment. Consistent criteria will be applied to disposition inspection results, and consistent corrective actions will be taken for tubes that exceed this criteria. These changes do not alter the design or operation of the OTSGs. Therefore, no new or different kind of accident will be created as a result of this change.

3. Will operation of the facility in accordance with this proposed change involve a significant reduction in margin of safety?

FPC Response:

No. The analyses that have been performed on the effects of OTSG tube failures as reported in the CR-3 FSAR have demonstrated that internal and offsite consequences are within allowable limits. This change will not alter the acceptance criteria for inspection results. Since this change will assure that a group of tubes with existing first span pit-like IGA indications are inspected each inspection period, the likelihood of detecting active degradation, as well as the probability of repairing degraded tubes prior to the degradation resulting in a tube rupture or through-wall opening is increased. Therefore, this change will not involve a reduction in the margin of safety.

## ENVIRONMENTAL IMPACT EVALUATION

### Radiological Evaluation

While 10 CFR 51 requires an environmental assessment (EA) or environmental impact statement (EIS) for any "major Federal action significantly affecting the quality of the human environment," it does allow the NRC discretion in evaluating the extent to which EA's or EIS's are necessary. EA's or EIS's are not required for any action included in the list of "categorical exclusions" set forth in 10 CFR 51.22(c). Specifically, 10 CFR 51.22(c)(9), provides that an EA is not required for the issuance of an amendment provided that:

- (i) the amendment involves no significant hazards consideration,
- (ii) there is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite, and
- (iii) there is no significant increase in individual or cumulative occupational radiation exposure.

FPC considers that the provisions of 10 CFR 51.22(c)(9) are applicable to this request for a Technical Specification change to the "B" OTSG tube inspection requirements. For the reasons described in this submittal, FPC believes that the three criteria of 10 CFR 51.22(c)(9) are satisfied. Therefore, this Technical Specification amendment should be considered under the "categorical exclusions" provisions of 10 CFR 51.22(c)(9). There will be no environmental impact from approval of this change to the "B" OTSG tube inspection requirements. For the reasons given in this submittal that there will be no increase in offsite consequences due to this action, its impact is bounded by the impacts assumed in the existing Final Environmental Statement (FES) for CR-3. By adopting a lower allowed primary-to-secondary leakage rate, radioactively contaminated effluents from a possible primary-to-secondary leak will be reduced. Even if the NRC chooses to perform an EA, information provided in the FES, together with this submittal should assist the NRC in making a "finding of no significant impact" in accordance with 10 CFR 51.32.

### Non-Radiological Evaluation

The non-radiological environmental concerns for the Crystal River Energy Complex that impact CR-3 are discharge canal water temperature and flow. In developing the site permit for Units 1, 2, and 3, FPC negotiated with the Environmental Protection Agency (EPA) to establish a set of effluent limitations and monitoring requirements which serve to protect the environment. The agreements between FPC and the EPA for the National Pollutant Discharge Elimination System (NPDES) establish limits on discharges to the canal. These are reflected in Permit No. FL0000159 which states:

- (1) the combined condenser flow from Crystal River Units 1, 2, and 3 shall not exceed 1897.9 million gallons per day (MGD) during the period May 1st through October 31st of each year, nor 1613.2 MGD during the remainder of the year; and