May 16, 2007

Mr. Dale E. Young, Vice President
Crystal River Nuclear Plant (NA1B)
ATTN: Supervisor, Licensing & Regulatory Programs
15760 W. Power Line Street
Crystal River, Florida 34428-6708

SUBJECT: CRYSTAL RIVER UNIT 3 - ISSUANCE OF AMENDMENT REGARDING STEAM GENERATOR TUBE INSPECTION PROGRAM (TAC NO. MD2054)

Dear Mr. Young:

The Commission has issued the enclosed Amendment No. 223 to Facility Operating License No. DPR-72 for Crystal River Unit 3. The amendment consists of changes to the existing Technical Specifications (TS) in response to your letter dated May 25, 2006, as supplemented by letters dated December 21, 2006, March 14, 2007, and March 30, 2007. The amendment revises the steam generator tube surveillance program to one modeled after Technical Specification Task Force (TSTF) Traveler TSTF-449, "Steam Generator Tube Integrity."

A copy of the Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

/RA/

Stewart N. Bailey, Senior Project Manager
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-302

Enclosures:
1. Amendment No. 223 to DPR-72
2. Safety Evaluation

cc w/enclosures: See next page

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FLORIDA POWER CORPORATION

CITY OF ALACHUA

CITY OF BUSHNELL

CITY OF GAINESVILLE

CITY OF KISSIMMEE

CITY OF LEESBURG

CITY OF NEW SMYRNA BEACH AND UTILITIES COMMISSION,

CITY OF NEW SMYRNA BEACH

CITY OF OCALA

ORLANDO UTILITIES COMMISSION AND CITY OF ORLANDO

SEMINOLE ELECTRIC COOPERATIVE, INC.

DOCKET NO. 50-302

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 223
License No. DPR-72

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Florida Power Corporation, et al. (the licensees), dated May 25, 2006, as supplemented by letters dated December 21, 2006, March 14, 2007, and March 30, 2007, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;

   C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;

   D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and

E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-72 is hereby amended to read as follows:

   Technical Specifications

   The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 223, are hereby incorporated in the license. Florida Power Corporation shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance and shall be implemented within 90 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Thomas H. Boyce, Chief
Plant Licensing Branch II-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Facility Operating
License and Technical Specifications

Date of Issuance: May 16, 2007

ATTACHMENT TO LICENSE AMENDMENT NO. 223

FACILITY OPERATING LICENSE NO. DPR-72

DOCKET NO. 50-302

Replace the following page of Facility Operating License DPR-72 with the attached revised page. The revised page is identified by amendment number and contains a vertical line indicating the area of change.

Remove	Insert
4	4

Replace the following pages of the Appendix "A" Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove	Insert
ii	ii
vi	vi
1.1-5	1.1-5
3.4-22	3.4-22
3.4-23	3.4-23
3.4-34	3.4-34
3.4-35	3.4-35
5.0-13	5.0-13
5.0-14	5.0-14
5.0-14A	---
5.0-15	5.0-15
5.0-16	5.0-16
5.0-17	5.0-17
5.0-17A	5.0-17A
5.0-24	5.0-24
5.0-25	5.0-25
5.0-26	5.0-26
5.0-28	5.0-28
5.0-29	5.0-29

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 223 TO FACILITY OPERATING LICENSE NO. DPR-72

FLORIDA POWER CORPORATION, ET AL.

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

DOCKET NO. 50-302

1.0 INTRODUCTION

By letter dated May 25, 2006 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML061500062), as supplemented by letters dated December 21, 2006 (ML070040108), March 14, 2007 (ML070750085), and March 30, 2006 (ML071030140), the Florida Power Corporation (the licensee) requested changes to the Technical Specifications (TSs) for Crystal River Unit 3 (CR-3). The supplements dated December 21, 2006, March 14, 2007, and March 30, 2007, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on August 29, 2006 (71 FR 51229).

The proposed changes would revise the existing steam generator (SG) tube surveillance program. The changes are modeled after TS Task Force (TSTF) Standard Technical Specification Change Traveler TSTF-449, Revision 4, "Steam Generator Tube Integrity," and the model safety evaluation prepared by the NRC and published in the *Federal Register* on March 2, 2005 (70 FR 10298). In this regard, the scope of the application includes changes to the definition of leakage, changes to the primary-to-secondary leakage requirements, changes to the SG tube surveillance program (SG tube integrity), changes to the reporting requirements, and associated changes to the TS Bases.

2.0 REGULATORY EVALUATION

The background, description, and applicability of the proposed changes associated with the SG tube integrity issue and the applicable regulatory requirements were included in the NRC staff's model safety evaluation (SE) published in the *Federal Register* on March 2, 2005 (70 FR 10298). The "Notice of Availability of Model Application Concerning Technical Specification Improvement to Modify Requirements Regarding Steam Generator Tube Integrity Using the Consolidated Line Item Improvement Process," was published in the *Federal Register* on May 6, 2005 (70 FR 24126), and made the model SE available for licensees to reference.

3.0 TECHNICAL EVALUATION

In its May 25, 2006, application, and December 21, 2006, and March 14, 2007, supplements, the licensee proposed changes to the TSs that are modeled after TSTF-449. There were minor differences between TSTF-449 and the licensee's application. These included differences in the facility licensing basis (than that discussed in TSTF-449) and differences in TS numbering. These differences are discussed below.

With respect to the differences in the facility licensing basis, the differences did not invalidate the technical evaluation on TSTF-449; rather they resulted in the licensee having to slightly deviate from some of the modifications discussed in TSTF-449. For example, the licensee indicated in their Bases that the dose consequences are within the limits of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.67, rather than 10 CFR Part 100 as indicated in TSTF-449, since the current licensing basis for CR-3 uses an alternative source term in accordance with the provisions of 10 CFR 50.67. Since these differences were minor in nature, they were consistent with the plant's licensing basis, or they were consistent with the intent of TSTF-449, the NRC staff determined they were acceptable.

With respect to the differences in the numbering of the TSs, these differences were administrative in nature and did not affect the technical adequacy of the submittal. As a result, the NRC staff determined they were acceptable.

The licensee proposed a few changes that went beyond TSTF-449. For example, the licensee proposed to delete reference in TS 3.4.12 that the SGs should be operable. Since TSTF-449 requires steam generators to have tube integrity for operation in Modes 1, 2, 3, or 4, deleting this reference to operability was considered acceptable. Since these differences were administrative in nature and did not affect the technical adequacy of the submittal, the NRC staff determined they were acceptable.

In addition to these minor changes, the licensee proposed to include previously approved alternate repair criteria and repair methods into their proposed new TSs. The structure of TSTF-449 allows licensees to incorporate alternate repair criteria and methods into the TSTF-449 format. However, incorporating the previously approved repair criteria and repair methods into the TSTF-449 format resulted in several additions, deletions and changes to the requirements due to the format, content, and performance-based approach of TSTF-449. The staff verified that (a) the inspection criteria associated with these repair criteria and methods were moved, as appropriate, to the inspection section of the proposed SG TSs, (b) the repair criteria were moved, as appropriate, to the repair criteria section of the proposed SG TSs, (c) the repair methods were moved to the repair method section of the proposed SG TSs, and (d) the reporting requirements were moved to the reporting section of the proposed SG TSs. There were some pre-existing reporting requirements associated with these repair criteria that were deleted since the standard TSTF-449 format requires reporting of this information. In addition, the timing for several of the reports was changed from "prior to Mode 4" to "180 days after the initial entry into Mode 4." This change in the timing of the report was considered acceptable since 180 days is consistent with the TSTF-449 reporting timeframe and operating experience indicates that the growth and initiation of the indications discussed in these reports does not warrant a report prior to Mode 4. The licensee also deleted several references to the categorization of the inspection results because the categorization scheme previously used was not included in TSTF-449, since it did not focus on the goal of maintaining tube integrity. In

addition, the licensee made several editorial changes to clarify the alternate repair criteria requirements, remove unnecessary text, or to maintain consistency with the terminology in TSTF-449. In summary, the NRC staff determined that the previously approved repair criteria and repair methods were appropriately incorporated into the plant's TSs.

The remainder of the application was consistent with, or more limiting than, TSTF-449.

Consistent with TSTF-449, the proposed TS changes include: (1) a revised definition of LEAKAGE, (2) a revised TS 3.4.12, "RCS (Reactor Coolant System) Operational Leakage," (3) a new TS 3.4.16, "Steam Generator (OTSG [once-through steam generator]) Tube Integrity," (4) a revised TS 5.6.2.10, "Steam Generator (OTSG) Program," (5) a revised TS 5.7.2.c, d, and e, for steam generator reports, and (6) a revised Table of Contents to reflect the proposed changes. The licensee included in its application the revised TS Bases to be implemented with the TS change. The NRC staff finds that the TS Bases Control Program is the appropriate process for updating the affected TS Bases pages and has, therefore, not included the affected Bases pages with this amendment.

The staff determined that the model safety evaluation is applicable to this review and finds the proposed changes acceptable.

The proposed TS changes establish a programmatic, largely performance-based regulatory framework for ensuring SG tube integrity is maintained. The NRC staff finds that it addresses key shortcomings of the current framework by ensuring that SG programs are focused on accomplishing the overall objective of maintaining tube integrity. It incorporates performance criteria for evaluating tube integrity that the NRC staff finds consistent with the structural margins and the degree of leak tightness assumed in the current plant licensing basis. The NRC staff finds that maintaining these performance criteria provides reasonable assurance that the SGs can be operated safely without increase in risk.

The revised TSs will contain limited specific details concerning how the SG Program is to achieve the required objective of maintaining tube integrity; the intent being that the licensee will have the flexibility to determine the specific strategy for meeting this objective. However, the NRC staff finds that the revised TSs include sufficient regulatory constraints on the establishment and implementation of the SG Program such that they provide reasonable assurance that tube integrity will be maintained.

Failure to meet the performance criteria will be reportable pursuant to the requirements in 10 CFR 50.72 and 50.73. The NRC reactor oversight process provides a process by which the NRC staff can verify that the licensee has identified any SG Program deficiencies that may have contributed to such an occurrence and that appropriate corrective actions have been implemented.

In conclusion, the NRC staff finds that the TS changes proposed by the licensee in its May 25, 2006, application and December 21, 2006, March 14, 2007, and March 30, 2007, supplements conform to the requirements of 10 CFR 50.36 and establish a TS framework that will provide reasonable assurance that SG tube integrity is maintained without undue risk to public health and safety.

4.0 STATE CONSULTATION

Based upon a letter dated May 2, 2003, from Michael N. Stephens of the Florida Department of Health, Bureau of Radiation Control, to Brenda L. Mozafari, Senior Project Manager, U.S. Nuclear Regulatory Commission, the State of Florida does not desire notification of issuance of license amendments.

5.0 ENVIRONMENTAL CONSIDERATIONS

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (71 FR 51229). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

7.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: K. Karwoski

Date: May 16, 2007