

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

FLORIDA POWER CORPORATION

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ORLANDO UTILITIES COMMISSION AND CITY OF GRLANDO
SEMINOLE ELECTRIC COOPERATIVE, INC.
CITY OF TALLAHASSEE

DOCKET NO. 50-302

## CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

## AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 154 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 licensee) dated March 21, 1996, as supplemented April 8, 15, and 18, 1996, 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 1;
  - 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.

 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. 154, are hereby incorporated in the license. Florida Power Corporation shall operate the facility in accordance with the Technical Specifications.

 This license amendment is effective as of its date of issuance and shall be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon, Director

Project Directorate II-3

Division of Reactor Projects - I/II Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical Specifications

Date of Issuance: April 30, 1996

# FACILITY OPERATING LICENSE NO. DPR-72 DOCKET NO. 50-302

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

Remove	Insert
3.4-22 5.0-14 5.0-16	3.4-22 5.0-14 5.0-16
5.0-17 5.0-29	5.0-16A 5.0-17 5.0-29
B 3.4-55	5.0-29A B 3.4-55

- 3.4 REACTOR COOLANT SYSTEM (RCS)
- 3.4.12 RCS Operational LEAKAGE
- LCO 3.4.12 RCS operational LEAKAGE shall be limited to:
  - a. No pressure boundary LEAKAGE;
  - b. 1 gpm unidentified LEAKAGE;
  - c. 10 gpm identified LEAKAGE; and
  - d. 150 gpd of primary-to-secondary LEAKAGE through any one steam generator (OTSG).

Two OTSGs shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTIONS CONDITION COMPLETION TIME REQUIRED ACTION Reduce LEAKAGE to 4 hours A. RCS LEAKAGE not within A.1 within limits. limits for reasons other than pressure boundary LEAKAGE. Be in MODE 3. 6 hours B.1 B. Required Action and associated Completion AND Time not met. Be in MODE 5. 36 hours B. 2 OR Pressure boundary LEAKAGE exists.

#### 5.6 Procedures, Programs and Manuals

#### 5.6.2.10 OTSG Tube Surveillance Program (continued)

in the specific area of an OTSG are inspected with the inspection result classification and the corresponding action required as specified in Table 5.6.2-3. No credit will be taken for these tubes in meeting minimum sample size requirements. Degraded or defective tubes found in these areas will not be considered in determining the inspection results category as long as the mode of degradation is unique to that area and not random in nature.

The results of each bobbin coil sample inspection shall be classified into one of the following three categories:

In all inspections, previously degraded tubes whose degradation has not been spanned by a sleeve must exhibit significant increase in the applicable imperfection size measurement (≥ +0.3V bobbin coil amplitude increase for first span IGA indications or >10% further wall penetration for all other imperfections) to be included in the below percentage calculations.

Category	Inspection Results
C-1	Less than 5% of the total tubes inspected are degraded tubes and none of the inspected tubes are defective.
C-2	One or more tubes, but not more than 1% of the total tubes inspected are defective, or between 5% and 10% of the total tubes inspected are degraded tubes.
C-3	More than 10% of the total tubes inspected are degraded tubes or more than 1% of the inspected tubes are defective.

#### 5.6.2.10 OTSG Tube Surveillance Program (continued)

- 4. Acceptance criteria:
  - a. Vocabulary as used in this Specification:
    - Tubing or Tube means that portion of the tube or sleeve which forms the primary system to secondary system pressure boundary.
    - Imperfection means an exception to the dimensions, finish or contour of a tube from that required by fabrication drawings or specifications. Any indications below all degraded tube criteria specified in item 4 below may be considered as imperfections.
    - Degradation means a service-induced cracking, wastage, wear, or general corrosion occurring on either inside or outside of a tube.
    - 4. Degraded Tube means a tube containing a first span IGA indication with a bobbin coil amplitude ≥ 0.65V or ≥ 0.13 inches axial extent or ≥ 0.3 inches circumferential extent or imperfections ≥ 20% of the nominal wall thickness caused by degradation except where all such degradation has been spanned by the installation of a sleeve.
    - 5. % Degradation means the percentage of the tube wall thickness affected or removed by degradation.
    - 6. Defect means an imperfection of such severity that it exceeds the plugging/sleeving limit except where the imperfection has been spanned by the installation of a sleeve. A tube containing a defect in its pressure boundary is defective. Any tube which does not permit the passage of the eddy-current inspection probe shall be deemed a defective tube.

#### 5.6.2.10 OTSG Tube Surveillance Program (continued)

- 7. First span Inter-granular Attack (IGA) indications mean a bobbin coil indication located between the lower tubesheet secondary face and the first tube support plate confirmed by MRPC to have a volumetric morphology characteristic of IGA.
- 8. Plugging/Sleeving Limit means the extent of degradation beyond which the tube shall be restored to serviceability by the installation of a sleeve or removed from service because it may become unserviceable prior to the next inspection. The limit for first span IGA indications is a bobbin coil amplitude of 1.25V or an axial extent of 0.25 inches or a circumferential extent of 0.6 inches. The limit for indications other than first span IGA is 40% of the nominal tube or sleeve wall thickness. No more than five thousand sleeves may be installed in each OTSG.

- 9. Unserviceable describes the condition of a tube if it leaks or contains a defect large enough to affect its structural integrity in the event of an Operating Basis Earthquake, a loss-of-coolant accident, or a main steam line or feedwater line break, as specified in 5.6.2.10.3.c, above.
- Tube Inspection means an inspection of the entire OTSG tube as far as possible.
- b. The OTSG shall be determined OPERABLE after completing the corresponding actions (plug or sleeve all tubes exceeding the plugging/sleeving limit and all tubes containing through-wall cracks) required by Table 5.6.2-2 (and Table 5.6.2-3 if the provisions of Specification 5.6.2.10.2.d are utilized). Defective tubes may be repaired in accordance with the B&W process (or method) equivalent to the method described in report BAW-2120P.

#### 5.6.2.11 Secondary Water Chemistry Program

This program provides controls for monitoring secondary water chemistry to inhibit steam generator tube degradation and low pressure turbine disc stress corrosion cracking. The program shall include:

- Identification of a sampling schedule for the critical variables and control points for these variables;
- Identification of the procedures used to measure the values of the critical variables;

#### 5.7 Reporting Requirements

#### 5.7.2 Special Reports (continued)

The following Special Reports shall be submitted:

- a. When a Special Report is required by Condition B or F of LCO 3.3.17, "Post Accident Monitoring (PAM)
  Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.
- b. Any abnormal degradation of the containment structure detected during the tests required by the Containment Tendon Surveillance Program shall be reported to the NRC within 30 days. The report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and the corrective action taken.
- c. Following each inservice inspection of steam generator (OTSG) tubes, the NRC shall be notified of the following prior to ascension into MODE 4:
  - Number of tubes plugged and sleeved
  - 2 Crack-like indications in the first span
  - An assessment of growth in the first span indications, and
  - 4. Results of in-situ pressure testing, if performed.

The complete results of the OTSG tube inservice inspection shall be submitted to the NRC within 90 days following the completion of the inspection. The report shall include:

- 1. Number and extent of tubes inspected,
- Location and percent of wall-thickness penetration for each indication of an imperfection,
- Location, bobbin coil amplitude, and axial and circumferential extent (if determined) for each first span IGA indication, and
- Identification of tubes plugged and tubes sleeved.

#### 5.7 Reporting Requirements

#### 5.7.2 Special Reports (continued)

Results of OTSG tube inspections that fall into Category C-3 shall be reported to the NRC prior to resumption of plant operation. This report shall provide a description of investigations conducted to determine cause of the tube degradation and corrective measures taken to prevent recurrence.

LCO

#### Identified LEAKAGE (continued)

LEAKAGE and is well within the capability of the RCS makeup system. Identified LEAKAGE includes LEAKAGE to the containment from specifically known and located sources, but does not include pressure boundary LEAKAGE or controlled reactor coolant pump (RCP) seal leakoff (a normal function not considered LEAKAGE). Violation of this LCO could result in continued degradation of a component or system.

## d. Primary to Secondary LEAKAGE through All Steam Generators (OTSGs)

This LEAKAGE limit complements the statistical analysis performed as the basis for the disposition strategy for first span Intergranular Attack (IGA) eddy current indications. The statistical analysis demonstrates low probability of LEAKAGE from first span IGA indications during the operating cycle. This reduced LEAKAGE limit is intended to provide additional assurance that if primary to secondary LEAKAGE were to occur, it will be detected, and the plant shut down in a timely manner. Primary to secondary LEAKAGE must be included in the total allowable limit for identified LEAKAGE.

Two OTSGs are also required to be OPERABLE. This requirement is met by satisfying the augmented inservice inspection requirements of the Steam Generator Tube Surveillance Program (Specification 5.6.2.10).