

October 8, 1997

Mr. Roy A. Anderson
Senior Vice President,
Nuclear Operations
Florida Power Corporation
ATTN: Manager, Nuclear Licensing
Crystal River Energy Complex (SA2A)
15760 W. Power Line Street
Crystal River, Florida 34428-6708

SUBJECT: CRYSTAL RIVER UNIT 3 - STAFF EVALUATION AND ISSUANCE OF AMENDMENT
RE: STEAM GENERATOR TUBE INTERGRANULAR ATTACK DEGRADATION
(TAC NO. M98262)

Dear Mr. Anderson:

The Commission has issued the enclosed Amendment No. 158 to Facility Operating License No. DPR-72 for the Crystal River Unit 3. The amendment consists of changes to the existing Technical Specifications in response to your request dated March 27, as supplemented April 3, May 1, and August 20, 1997. Florida Power Corporation requested an amendment to permanently establish a primary-to-secondary leak rate of 150 gallons per day through any one steam generator and specify the steam generator tube inservice inspection requirements for pit-like intergranular attack degradation in the "B" Once-Through-Steam-Generator.

By letter dated August 20, 1997, you modified your original request to specify a more conservative requirement for reporting the results of any OTSG tube inspection to the Nuclear Regulatory Commission (NRC) within 90-days rather than 12 months. These changes did not affect the NRC's original proposed no significant hazards consideration.

A copy of the Safety Evaluation is enclosed. Also enclosed is the Notice of Issuance which has been forwarded to the Office of the Federal Register for publication.

Sincerely,

/s/
L. Raghavan, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket No. 50-302

Enclosures:

- 1. Amendment No.158 to DPR-72
- 2. Safety Evaluation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 28, 1997

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L. Raghavan, Project Manager
Project Directorate II-3
Division of Reactor Projects - I/II
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Docket No. 50-302

Enclosures:

1. Amendment No.158 to DPR-72
2. Safety Evaluation

Mr. Roy A. Anderson
Florida Power Corporation

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

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.
CITY OF TALLAHASSEE

DOCKET NO. 50-302

CRYSTAL RIVER UNIT 3 NUCLEAR GENERATING PLANT

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 158
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 March 27, as supplemented April 3, May 1, and August 20, 1997, 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.

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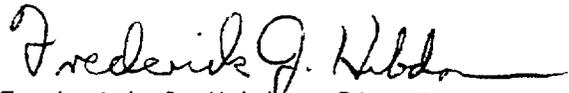
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-72 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 158, 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 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: October 28, 1997

ATTACHMENT TO LICENSE AMENDMENT NO. 158

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. The corresponding overleaf pages are also provided to maintain document completeness.

Remove

3.4-22
B3.4-54
B3.4-55
5.0-14

5.0-16
5.0-16A
5.0-17
5.0-29
5.0-29A

Insert

3.4-22
B3.4-54
B3.4-55
5.0-14
5.0-14A
5.0-16

5.0-17
5.0-29
5.0-29A

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

BASES

APPLICABLE
SAFETY ANALYSES
(continued)

The FSAR (Ref. 3) analysis for steam generator tube rupture (SGTR) assumes the contaminated secondary fluid is only briefly released via safety valves and the majority is steamed to the condenser. The 1 gpm primary to secondary LEAKAGE is relatively inconsequential in terms of offsite dose.

The FSAR steam line break (SLB) analysis (Ref. 4) is more limiting for site radiation releases. The safety analysis for the SLB accident assumes 1 gpm primary to secondary LEAKAGE in one generator as an initial condition. The dose consequences resulting from the SLB accident meet the acceptance criteria defined in 10 CFR 100.

RCS operational LEAKAGE satisfies Criterion 2 of the NRC Policy Statement.

LCO

RCS operational LEAKAGE shall be limited to:

a. Pressure Boundary LEAKAGE

No pressure boundary LEAKAGE is allowed, being indicative of material deterioration. LEAKAGE of this type is unacceptable as the leak itself could cause further deterioration, resulting in higher LEAKAGE. Violation of this LCO could result in continued degradation of the reactor coolant pressure boundary (RCPB). LEAKAGE past seals and gaskets is not pressure boundary LEAKAGE.

b. Unidentified LEAKAGE

One gallon per minute (gpm) of unidentified LEAKAGE is allowed as a reasonable minimum detectable amount that the containment atmosphere and sump level monitoring equipment can detect within a reasonable time period. Violation of this LCO could result in continued degradation of the RCPB, if the LEAKAGE is from the pressure boundary.

(continued)

BASES

LCO

c. Identified LEAKAGE

Up to 10 gpm of identified LEAKAGE is considered allowable because LEAKAGE is from known sources that do not interfere with the detection of unidentified 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 is established to ensure that tubes initially leaking during normal operation do not contribute excessively to total leakage during postulated accident conditions. The 150 gpd limit is a conservative limit which is consistent with the operational leakage limit specified in NRC Generic Letter 95-05 for plants implementing Alternate Repair Criteria. CR-3 has elected to voluntarily adopt this conservative limit to ensure plant shutdown in a timely manner in response to detection of primary to secondary LEAKAGE. 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).

(continued)

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.

- e. Inservice tubes with pit-like IGA indications in the first span of the B OTSG, identified in the OTSG Inservice Inspection Surveillance Procedure, must be inspected with bobbin and Motorized Rotating Pancake Coil (MRPC) eddy current techniques from the lower tube sheet secondary face to the bottom of the first tube support plate during each inservice inspection of the B OTSG. No credit is to be taken for this inspection in meeting minimum sample size requirements for the random inspection. Defective tubes found during this inspection are to be plugged or sleeved. Degraded or defective tubes found during this inspection are not to be considered in determining the inspection results category for the random inspection, unless the degradation mechanism identified is a mechanism other than pit-like IGA.

(continued)

5.6 Procedures, Programs and Manuals

5.6.2.10 OTSG Tube Surveillance Program (continued)

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

-----NOTE-----
In all inspections, previously degraded tubes whose degradation has not been spanned by a sleeve must exhibit significant (>10%) further wall penetrations to be included in the below percentage calculations.

<u>Category</u>	<u>Inspection Results</u>
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.

(continued)

5.6 Procedures, Programs and Manuals

5.6.2.10 OTSG Tube Surveillance Program (continued)

4. Acceptance criteria:

a. Vocabulary as used in this Specification:

1. Tubing or Tube means that portion of the tube or sleeve which forms the primary system to secondary system pressure boundary.
2. Imperfection means an exception to the dimensions, finish or contour of a tube from that required by fabrication drawings or specifications. Eddy-current testing indications below 20% of the nominal tube wall thickness, if detectable, may be considered as imperfections.
3. 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 imperfections $\geq 20\%$ 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.
7. Pit-like Intergranular Attack (IGA) indication means a bobbin coil indication confirmed by Motorized Rotating Pancake Coil (MRPC) or other qualified inspection techniques to have a volumetric, pit-like morphology characteristic of IGA.

(continued)

5.6 Procedures, Programs and Manuals

5.6.2.10 OTSG Tube Surveillance Program (continued)

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 and is equal to 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.
 10. 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:

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

(continued)

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:
 1. Number of tubes plugged and sleeved
 2. Crack-like indications in the first span
 3. 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,
2. Location and percent of wall-thickness penetration for each indication of an imperfection,
3. Location, bobbin coil amplitude, and axial and circumferential extent (if determined) for each first span IGA indication, and
4. Identification of tubes plugged and tubes sleeved.

(continued)

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.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 158 TO FACILITY OPERATING LICENSE NO. DPR-72

FLORIDA POWER CORPORATION, ET AL.

CRYSTAL RIVER UNIT NO. 3 NUCLEAR GENERATING PLANT

DOCKET NO. 50-302

1.0 INTRODUCTION

By letter dated March 27, 1997, as supplemented April 3, and May 1, 1997, Florida Power Corporation, the licensee for Crystal River Unit 3 (CR-3), requested an amendment to the plant Technical Specifications (TS). The amendment proposed to: a) modify the maximum allowable primary-to-secondary leak rate specified in TS 3.4.12.d, Reactor Coolant System Operational Leakage, b) establish requirements for inspecting and dispositioning indications of pit-like intergranular attack (IGA) located in the first span of a known and limited population of tubes in the "B" once-through steam generator (OTSG), and c) make the existing interim reporting requirements regarding steam generator tube inservice inspection (ISI) results to become permanent.

By letter dated August 20, 1997, the licensee provided clarifications to its previous submittals and modified its original request to specify a more conservative requirement for reporting the results of any OTSG tube inspection to the Nuclear regulatory Commission (NRC) within 90-days rather than 12 months. These changes did not affect the NRC's original proposed no significant hazards consideration.

For the proposed modification to TS 3.4.12.d, the licensee has requested to set the maximum allowable leak rate through any one steam generator (SG) at 150 gallons per day (gpd). The current TS limit is 150 gpd, but it is in effect only until the Refuel 11 outage. The proposed amendment would establish 150 gpd as the permanent limit. The licensee has also requested to establish alternate inspection requirements for examining a specified region in a limited number of tubes with indications of IGA degradation. The results from these specialized inspections would not be included in the classification of SG tube ISI results in accordance with TS 5.6.2.10.2 provided the results are consistent with those obtained in previous inspections. In addition to reducing the maximum allowable primary-to-secondary leak rate and establishing specific inspection requirements for a limited population of tubes, the licensee has also requested to permanently establish the inspection reporting requirements included in the CR-3 TS that were to be in effect until the Refuel 11 outage.

2.0 BACKGROUND

Previous ISIs of the CR-3 SG tubes have identified a number of tubes with indications of pit-like IGA degradation. Destructive examinations of tubes removed from the SGs have confirmed the presence of this mode of degradation in the span of tubing above the lower tubesheet secondary face and below the first tube support plate (i.e., first span). The degradation in the region is characterized as pit-like IGA, and some indications have been present since 1980. Although the degradation has existed within a limited number of tubes for several operational cycles, growth rate studies completed by the licensee have concluded that the degradation is relatively stable based on a lack of change observed in the eddy current signal characteristics for the indications.

Prior to the Refuel 9 and 10 outages, the licensee proposed alternative voltage-based tube repair criteria to disposition tubes with indications characterized as pit-like IGA degradation. These criteria were approved only on an interim basis and considered other defense-in-depth measures to ensure adequate tube integrity over the next cycle of operation. Prior to the initiation of the next ISI, the licensee qualified an eddy current depth sizing technique that applied to the IGA degradation present in the CR-3 OTSGs. The licensee proposed to utilize this qualified method of depth sizing the degradation and will disposition confirmed pit-like IGA indications in accordance with the existing depth-based repair limits in the TS (i.e., 40 percent).

The SG tube ISI requirements for the CR-3 OTSGs are specified in TS 5.6.2.10 OTSG Tube Surveillance Program. The requirements in this TS currently specify an inspection of a three percent random sample of tubes at an interval of at least 12 calendar months not to exceed 24 months. An examination of additional tubes is required if the number of tubes identified as degraded or defective exceeds percent values defined in the TS. A decrease in the maximum allowable primary-to-secondary leak rate to 150 gallons per minute (gpm) through any one SG was approved in Amendment No. 154 to the CR-3 TS to remain in effect until the Refuel 11 outage.

3.0 STAFF ASSESSMENT

The NRC staff has completed its evaluation of the proposed changes in the primary-to-secondary leak rate limits and the SG tube ISI requirements. The following outlines scope and the conclusions of the staff's assessment.

3.1 Primary-to-Secondary Leak Rate Limit

Amendment 154 to the CR-3 TS included a reduction to the maximum allowable primary-to-secondary leak rate from 1 gpm (1440 gpd) through all SG tubes to 150 gpd through any one OTSG. The leak rate limit was reduced in the amendment for one cycle of operation in order to support the licensee's proposed alternate tube repair criteria to disposition indications of IGA in the first span. The revised limit of 150 gpd was consistent with defense-in-depth measures established in other voltage-based SG tube repair criteria. The licensee's amendment request dated March 28, 1997, proposed to make permanent the TS leak rate limit of 150 gpd established in Amendment 154.

A permanent reduction in the leak rate limit specified in TS 3.4.12.d will require the licensee to take actions required by the TS at an earlier stage (i.e., lower leak rate) to reduce the measured primary-to-secondary leakage. Primary-to-secondary leakage may be an indication of a significantly degraded tube. Under steam line break conditions, leakage through defective tubes in the affected SG could result in a direct release of primary coolant inventory. The lower leak rate should reduce the total leakage during postulated accident conditions resulting from degraded tubing, and thus minimizing the potential for offsite dose consequences due to the release of the SG secondary side inventory during the event. On this basis, the NRC staff concludes that the licensee's proposal to establish a 150 gpd limit in TS 3.4.12.d is acceptable.

3.2 Reporting Requirements

Staff guidance for the implementation of a voltage-based SG tube repair criteria for Westinghouse model SGs in Generic Letter (GL) 95-05 recommends establishing inspection reporting requirements to the NRC. Specifically, licensees are required to notify the NRC prior to returning the SGs to service of conditions that could warrant a staff assessment of the tube inspection results. In addition, licensees are required to submit a more comprehensive operational and condition monitoring assessment within 90-days after startup. These reporting requirements are necessary to enable the staff to assess whether a licensee can continue to implement a voltage-based repair criteria.

The NRC approved inspection reporting requirements for CR-3 in effect until the Refuel 11 outage. These requirements were established on an interim basis considering the staff position outlined in GL 95-05. The methodology proposed by the licensee to address degradation in the first tube span of a number of tubes within the "B" OTSG will utilize the depth-based repair limits rather than employ a voltage-based method as in the two prior inspections. The licensee has requested for future cycles approval of the previously approved reporting requirements established for the implementation of the interim tube repair criteria for the prior inspection. The staff finds this change to TS 5.7.2 acceptable in that it will provide the NRC with the results of future inspections.

In the next inspection of the CR-3 SG tubes, the licensee proposes to estimate the depth of pit-like IGA degradation based on data obtained with bobbin coil probes. Tubes with indications of depths less than the Plugging/Sleeving Limit specified in the TS would be permitted to remain in service. Sizing the depth of IGA degradation from eddy current inspection data is a unique application of eddy current technology and is different from the approach used by other utilities. The general practice employed by other PWR licensees is to plug all indications of IGA degradation confirmed by rotating pancake coil (RPC) probes regardless of the depth estimate provided the bobbin coil probe. This plug on detection approach is considered to be a more conservative methodology for inspections in that some tubes may be removed from service with degradation less than the plugging or repair limit. Although the licensee has qualified the eddy current inspection technique for depth sizing, the staff believes that the long range progress of the dispositioning tubes with pit-like IGA degradation as defective or degraded based on bobbin coil eddy current data should be monitored through reporting requirements in a

manner consistent with alternate SG repair criteria approved by the NRC (e.g., GL 95-05). Therefore, the staff has concluded that the licensee's proposal to modify TS 5.7.2, Special Reports, is appropriate and acceptable.

3.3 Classification of Inspection Results

The CR-3 TS specify a minimum number of tubes selected at random that must be examined with a bobbin coil probe at each ISI. In addition to the random inspections, TS 5.6.2.10.2 also requires the examination of specified areas that may have a greater potential for tube degradation. Based on the outcome of these inspections, the scope of the inspections may be expanded to include additional tubes. For example, if one or more tubes are declared defective, then the inspection is classified as either C-2 or C-3. Both of these classifications may require the licensee to complete additional random tube inspections. The purpose of the expanded inspection scope is to account for the increased likelihood that tubes not inspected may also contain similar degradation as identified in tubes selected in the initial sample. Therefore, expanding the inspection scope minimizes the potential of leaving degraded or defective tubes in service that were not included in the initial sample inspection.

A number of tubes in the "B" OTSG at CR-3 contain pit-like IGA indications in the first span of tubing. The morphology of this degradation has been confirmed by eddy current examinations and destructive examinations of tubes removed containing these indications. The licensee has concluded based on an evaluation of ISI results completed in the previous plant outages dating back to the early 1980's that the growth of these indications has ceased. The staff has concluded that the pit-like IGA indications have not exhibited any significant progression in recent inspections. However, it also notes that the potential exists for additional degradation growth in the future. By letter dated October 1, 1997, the licensee submitted a proposed TS change to address the potential future growth and dispositioning of these IGAs.

The licensee proposed to amend the CR-3 TS to require an examination with bobbin coil and RPC probes during each ISI of the first span of tubing for all tubes identified in the "B" OTSG with pit-like IGA degradation. The licensee has identified all tubes in the "B" OTSG with these indications. The identification of tubes with pit-like IGA degradation was completed based on a review of the past inspection results for all tubes within the affected SG. The licensee would not count the inspection of the first span of these tubes toward meeting the random sample requirements specified in the TS. Random bobbin coil inspections of tubes not included in the special interest area will enable the detection of additional pit-like IGA indications in other tubes should the degradation mode become active again. Indications of degradation detected during the inspections of the first span tube areas would not be included in the determination of the inspection results classification unless modes of degradation other than pit-like IGA are identified.

The licensee's proposed approach to treat the tubes affected by pit-like IGA as a special interest area include more restrictive inspection requirements than those imposed by the minimum sample inspections. In addition, because each tube affected by this mode of degradation will be inspected during each

ISI, additional degradation growth should be detected based on changes in the eddy current signal response. The licensee would remove from service those tubes with pit-like IGA indications with depths measured greater than 40 percent through-wall or that appear to be growing. On these bases, the staff has concluded that it is appropriate to address the pit-like IGA degradation in the "B" OTSG as a special area and thus, exempt the results from the examination of these tubes in the overall classification of the inspection. Therefore, the staff has determined that the proposed addition of TS 5.6.2.10.2.e is acceptable.

4.0 CONCLUSION

The licensee submitted a proposed changes to the CR-3 TS to modify the primary-to-secondary leak rate limits and the SG tube ISI requirements. The primary-to-secondary leak rate limit is established in TS 3.4.12.c as 150 gpd through any one SG. In addition, the modifications and additions to the ISI requirements in TS 5.6.2.10 will enable the licensee to disposition pit-like IGA degradation identified in the first span in a limited population of tubes within the "B" OTSG without requiring an inspection of additional tubes not affected by this mode of degradation. The staff concludes that these proposed changes are acceptable.

The licensee's amendment request included a proposal to remove the cycle-specific applicability of the SG tube ISI reporting requirements in TS 5.7.2.c, Special Reports that were established on an interim basis prior to the previous inspections. The staff has concluded that the changes to TS 3.4.12.d and TS 5.6.2.10 along with the licensee's proposed methodology for dispositioning pit-like IGA degradation in the "B" OTSG are consistent with other alternate SG tube repair criteria approved by the NRC. These often include reporting requirements to inform the NRC of the results from future inspections. On this basis, the staff has concluded that the licensee's proposal to establish the reporting requirements in TS 5.7.2.c for future cycles is acceptable.

5.0 STATE CONSULTATION

Based upon written notice of the proposed amendment, the Florida State official had no comments.

6.0 ENVIRONMENTAL CONSIDERATIONS

The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes the surveillance requirements. The NRC staff has determined that the amendments involve 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 amendments involve no significant hazards consideration, and there has been no public comment on such finding (62 FR 30632). The amendments also change record keeping or reporting requirements. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9) and (c)(10). Pursuant

to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

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.

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