

February 23, 2000 3F0200-03

U.S. Nuclear Regulatory Commission

Attn: Document Control Desk Washington, DC 20555-0001

Subject:

License Amendment Request #248, Revision 1

Containment Tendon Surveillance Program (TAC No. MA4966)

Reference:

FPC to NRC letter, 3F0299-01, dated February 19, 1999, "License Amendment

Request #248, Revision 0, Containment Tendon Surveillance Program"

Dear Sir:

Florida Power Corporation (FPC) hereby submits a revision to License Amendment Request (LAR) #248 provided to the NRC in the referenced letter. LAR #248, Revision 0, proposed changes to the Improved Technical Specifications (ITS) for surveillance of the Crystal River Unit 3 (CR-3) containment tendons. LAR #248, Revision 0, deleted ITS Section 5.6.2.7, "Containment Tendon Surveillance Program," and in its place established inspection of ASME Code Class MC and CC components in accordance with the ASME Section XI Inservice Inspection Program, ITS 5.6.2.8. This increases the scope of the Inservice Inspection Program to include the tendons, the containment liner, and concrete containment.

The purpose of LAR #248, Revision 1, is to correct the current reference to the Containment Tendon Surveillance Program in ITS Surveillance Requirement (SR) 3.6.1.2 and associated Bases with a reference to the Containment Inspection Program. Revision 1 also revises ITS 5.7.2.b to establish the reporting requirements for conditions found during the containment and tendon inspection performed in accordance with ITS 5.6.2.8.

The technical bases provided in LAR #248, Revision 0, as described in the referenced letter, continue to support the ITS changes proposed in LAR #248, Revision 1. The No Significant Hazards Consideration as noticed in the Federal Register (64 FR 56530-56531) remains unchanged. The proposed ITS pages provided herein supersede those provided in LAR #248, Revision 0.

The proposed changes were discussed with the NRC during a teleconference held on January 12, 2000. FPC originally requested approval of LAR #248, Revision 0, by March 1, 2000. However, FPC's needs can be supported if approval is granted by September 1, 2000. This schedule will allow sufficient time to implement the revised CR-3 Containment Inspection Program prior to the next refueling outage.

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This letter establishes no new regulatory commitments. If you have any questions regarding this submittal, please contact Mr. Sid Powell, Manager, Nuclear Licensing at (352) 563-4883.

Sincerely,

J.J. Holden

Vice President and Site Director

JJH/lvc

xc: Regional Administrator, Region II

NRR Project Manager Senior Resident Inspector

Attachments:

- A. Summary of Changes, Description of Changes, Reason for Request, and Evaluation of Request
- B. Proposed ITS Change Pages Strikethrough/Highlight
- C. Proposed ITS Change Pages Revision Bars

STATE OF FLORIDA

COUNTY OF CITRUS

John J. Holden states that he is the Vice President and Site Director for Florida Power Corporation; that he is authorized on the part of said company to sign and file with the Nuclear Regulatory Commission the information attached hereto; and that all such statements made and matters set forth therein are true and correct to the best of his knowledge, information, and belief.

Vice President and Site Director

Sworn to and subscribed before me this 23d day of February, 2000, by John J. Holden.



LISA A. MORRIS Notary Public, State of Florida My Comm. Exp. Oct. 25, 2003 Comm. No. CC 879691

Signature of Notary Public

State of Florida

LISA A MORRIS

(Print, type, or stamp Commissioned

Name of Notary Public)

Personally Produced Known OR- Identification

FLORIDA POWER CORPORATION CRYSTAL RIVER UNIT 3 DOCKET NUMBER 50-302/LICENSE NUMBER DPR-72

ATTACHMENT A

LICENSE AMENDMENT REQUEST #248 REVISION 1

Summary of Changes,
Description of Changes,
Reason for Request, and
Evaluation of Request

LICENSE AMENDMENT REQUEST (LAR) #248, REVISION 1 CONTAINMENT TENDON SURVEILLANCE PROGRAM

LICENSE DOCUMENT INVOLVED: Improved Technical Specifications (ITS)

PORTIONS: ITS Sections 3.6.1, B 3.6.1, 5.6.2.7, 5.6.2.8, and 5.7.2.b

SUMMARY OF CHANGES:

License Amendment Request (LAR) #248, Revision 1, corrects the current reference to the Containment Tendon Surveillance Program in ITS Surveillance Requirement (SR) 3.6.1.2 and associated Bases with a reference to the proposed Containment Inspection Program. Revision 1 also revises ITS 5.7.2.b to establish the reporting requirements for conditions found during the containment and tendon inspection performed in accordance with ITS 5.6.2.8.

The proposed ITS pages supersede those provided in Revision 0 of this LAR, FPC to NRC letter, 3F0299-01, dated February 19, 1999, "License Amendment Request #248, Revision 0, Containment Tendon Surveillance Program."

DESCRIPTION OF CHANGES:

ITS Section 3.6.1 and B 3.6.1

Replace the reference in SR 3.6.1.2, Page 3.6-2, to the Containment Tendon Surveillance Program, with a reference to the Containment Inspection Program defined in ITS 5.6.2.8.

Replace the reference in B 3.6.1.2, Page B 3.6-4, to the Containment Tendon Surveillance Program, with a reference to the Containment Inspection Program. Delete the reference to NRC Regulatory Guide 1.35, Revision 3, and edit the text to read as follows:

This SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Inspection Program. Testing and Frequency are in accordance with Subsections IWE and IWL of the 1992 ASME Code and 10 CFR 50.55a.

Abnormal degradation shall be determined by engineering evaluation. In the event abnormal degradation is detected, a Special Report shall be submitted in accordance with ITS 5.7.2.b. The impact of large-scale tendon degradation should also be evaluated with respect to Containment OPERABILITY. In this context, containment structural integrity is analogous to containment OPERABILITY.

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Revise the references on page B 3.6-5 to delete Regulatory Guide 1.35, Rev. 3, 1990 and add the 1992 Edition of the ASME Boiler and Pressure Vessel Code, Section XI, Subsections IWE and IWL.

ITS 5.7.2.b

Revise ITS 5.7.2.b to read as follows:

Any abnormal degradation of the containment structure found during the inspection performed in accordance with ITS 5.6.2.8 shall be reported to the NRC within 30 days of the current surveillance completion. The abnormal degradation shall be defined as findings such as delamination of the dome concrete, widespread corrosion of the liner plate, corrosion of prestressing elements (wires, strands, bars) or anchorage components extending to more than two tendons and group tendons force trends not meeting the requirements of 10CFR50.55a(b)(2)(ix)(B). The report shall include the description of degradation, operability determination, root cause determination and the corrective actions.

REASON FOR REQUEST:

Revision 0 did not remove references to the Containment Tendon Surveillance Program in Surveillance Requirement 3.6.1.2 and associated Bases. Revision 1 corrects those references. Revision 0 deleted the reporting requirements in ITS 5.7.2.b for conditions found during the containment and tendon inspection. Revision 1 proposes a revision to the current reporting requirements in ITS 5.7.2.b. The proposed changes were discussed with the NRC during a teleconference held on January 12, 2000.

EVALUATION OF REQUEST:

The proposed change to SR 3.6.1 and associated Bases recognizes that the reference to the Containment Tendon Surveillance Program should be changed to reference the Containment Inspection Program defined in ITS 5.6.2.8. The Tendon Surveillance Program will be replaced by the Containment Inspection Program for MC and CC components, which will be included in ITS Section 5.6.2.8.

The proposed change to revise ITS Section 5.7.2.b clarifies the conditions and timeframe for reporting abnormal inspection findings to the NRC. This clarification is consistent with the 1992 Edition of the ASME, Section XI, Subsections IWE and IWL and 10 CFR 50.55a.

The technical bases for this LAR, as described in the referenced letter, continue to support the ITS changes proposed in this revision. The No Significant Hazards Consideration Evaluation as described in the referenced letter and noticed in the Federal Register (64 FR 56530-56531) bounds this revision. In addition, there is no change to the Environmental Impact Evaluation previously provided in the reference.

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ATTACHMENT B

LICENSE AMENDMENT REQUEST #248 REVISION 1

Proposed ITS Change Pages - Strikethrough/Highlight

Strikethrough Text (Deleted)/Highlighted Text (Added)

SURVEILLANCE REQUIREMENTS

		SURVEILLANCE	FREQUENCY
SR	3.6.1.1	Perform required visual examinations and leakage rate testing except for containment air lock testing, in accordance with the Containment Leakage Rate Testing Program.	
		The maximum allowable leakage rate, $L_{\rm a}$, is 0.25% of containment air weight per day at the calculated peak containment pressure, $P_{\rm a}$.	In accordance with the Containment Leakage Rate Testing Program.
SR	3.6.1.2	Verify containment structural integrity in accordance with the Containment Tendon Surveillance Program ITS 5.6.2.8.	In accordance with the Containment Tendon Surveillance Inspection Program

5.6 Procedures, Programs and Manuals

5.6.2.6 Post Accident Sampling (continued)

Provisions for maintenance of sampling and analysis equipment.

5.6.2.7 Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Containment Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Regulatory Guide 1.35, Revision 3, 1990.

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Containment Tendon Surveillance Program inspection frequencies.

Not Used

5.6.2.8 Inservice Inspection Program

This program provides controls for inservice inspection of ASME Code Class 1, 2, and 3, MC, and CC components, including applicable supports. The program shall include the following:

- a. Provisions that inservice inspection of ASME Code Class 1, 2, and 3, MC, and CC components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a;
- b. The provisions of SR 3.0.2 are applicable to the frequencies for performing inservice inspection activities;
- c. Inservice inspection of each reactor coolant pump flywheel shall be performed at least once every ten years. The inservice inspection shall be either an ultrasonic examination of the volume from the inner bore of the flywheel to the circle of one-half the outer radius or a surface examination for exposed surfaces of the disassembled flywheels. The recommendations delineated in Regulatory Guide 1.14, Positions 3, 4 and 5 of Section C.4.b shall apply.
- d. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any TS.

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 found during the tests required by the Containment Tendon Surveillance Program inspection performed in accordance with ITS 5.6.2.8 shall be reported to the NRC within 30 days of the current surveillance completion. The abnormal degradation shall be defined as findings such as delamination of the dome concrete, widespread corrosion of the liner plate, corrosion of prestressing elements (wires, strands, bars) or anchorage components extending to more than two tendons and group tendons force trends not meeting the requirements of 10CFR50.55a(b)(2)(ix)(B). The report shall include a the description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, degradation, operability determination, root cause determination and the corrective actions 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 repaired;
 - Crack-like indications and assessment of growth for indications in the first span;
 - 3. Results of in-situ pressure testing, if performed; and
 - 4. Number of tubes and axially oriented TEC indications left in-service, the projected accident leakage, and an assessment of growth for TEC indications.
- d. Results of OTSG tube inspections that fall into Category C-3 shall be reported to the NRC in accordance with 10CFR50.72.
- e. The complete results of the OTSG tube inservice inspection shall be submitted to the NRC within 90 days after breaker closure following restart. 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
 - Identification of tubes plugged or repaired and specification of the repair methodology implemented for each tube.

BASES

ACTIONS

B.1 and B.2 (continued)

status, the plant must be placed in at least MODE 3 within 6 hours and in MODE 5 within 36 hours. The allowed Completion Times are reasonable, based on operating experience, to reach the required plant conditions from full power conditions in an orderly manner and without challenging plant systems.

SURVEILLANCE REQUIREMENTS

SR 3.6.1.1

Maintaining the containment OPERABLE requires compliance with the visual examinations and leakage rate test requirements of the Containment Leakage Rate Testing Program. Failure to meet air lock and purge valve with resilient seal leakage limits for SR 3.6.2.1 and 3.6.3.6 does not constitute a failure of this Surveillance unless the contribution from these penetrations causes overall Type A, B, and C leakage to exceed limits. SR Frequencies are as required by the Containment Leakage Rate Testing Program. Thus, SR 3.0.2 (which allows Frequency extensions) does not apply. These periodic testing requirements verify that the containment leakage rate does not exceed the leakage rate assumed in the safety analysis.

SR 3.6.1.2

This SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Inspection Tendon Surveillance Program. Testing and Frequency are consistent in accordance with the recommendations of NRC Regulatory Guide 1.35, Revision 3 Subsections IWE and IWL of the 1992 ASME Code and 10CFR 50.55a.

Abnormal degradation shall be determined by engineering evaluation. The guidance in Regulatory Guide 1.35 should be followed: In the event abnormal degradation of the containment tendons is detected,. This includes testing additional tendons and submitting a Special Report shall be submitted in accordance with to the NRC (Refer to Specification ITS 5.7.2.b). The impact of large-scale tendon degradation should also be evaluated with respect to Containment OPERABILITY. In this context, containment structural integrity is analogous to containment OPERABILITY.

BASES (continued)

REFERENCES

- 1. 10 CFR 50, Appendix J, Option B
- 2. FSAR, Sections 14.2.2
- 3. FSAR, 5.2.1.1
- 4. Regulatory Guide 1.35, Rev. 3, 19901992 Edition of the ASME Boiler and Pressure Vessel Code, Section XI, Subsections IWE and IWL.
- 5. 10 CFR 100.
- 6. NEI 94-01, Revision 0, "Industry Guideline for Implementing Performance-Based Option of 10 CFR 50, Appendix J"
- 7. ANSI/ANS-56.8 1994, "American National Standard for Containment System Leakage Testing Requirement"

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ATTACHMENT C

LICENSE AMENDMENT REQUEST #248 REVISION 1

Proposed ITS Change Pages - Revision Bars

The changes herein include

Proposed changes from LAR #248, Revision 0 and Revision 1

SURVEILLANCE REQUIREMENTS

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SR	3.6.1.1	Perform required visual examinations and leakage rate testing except for containment air lock testing, in accordance with the Containment Leakage Rate Testing Program.	
		The maximum allowable leakage rate, L_a , is 0.25% of containment air weight per day at the calculated peak containment pressure, P_a .	In accordance with the Containment Leakage Rate Testing Program.
SR	3.6.1.2	Verify containment structural integrity in accordance with ITS 5.6.2.8.	In accordance with the Containment Inspection Program

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5.6.2.6 Post Accident Sampling (continued)

c. Provisions for maintenance of sampling and analysis equipment.

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This SR ensures that the structural integrity of the containment will be maintained in accordance with the provisions of the Containment Inspection Program. Testing and Frequency are in accordance with Subsections IWE and IWL of the 1992 ASME Code and 10CFR 50.55a.

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