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Nuclear Licensing Director

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NL-11-0007

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50-364 50-425

U. S. Nuclear Regulatory Commission
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Joseph M. Farley Nuclear Plant, Units 1 and 2
Alvin W. Vogtle Electric Generating Plant, Units 1 and 2
Application for Technical Specification Improvement to Extend the Inspection
Interval for Reactor Coolant Pump Flywheels Using the
Consolidated Line Item Improvement Process

Ladies and Gentlemen:

Pursuant to 10 CFR 50.90, Southern Nuclear Operating Company (SNC) hereby requests amendments to the Technical Specifications (TS) for Joseph M. Farley Nuclear Plant (FNP), Units 1 and 2 and Alvin W. Vogtle Electric Generating Plant (VEGP), Units 1 and 2.

The proposed amendment will extend the Reactor Coolant Pump (RCP) motor flywheel examination frequency from the currently approved 10 year examination frequency to an interval not to exceed 20 years. The changes are consistent with Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-421-A, "Revision to RCP Flywheel Inspection Program (WCAP-15666)." The availability of this TS improvement was announced in the Federal Register on October 22, 2003 as part of the Consolidated Line Item Improvement Process (CLIIP).

Enclosure 1 provides a description of the proposed change and the requested confirmation of applicability. Enclosure 2 provides the existing FNP, Units 1 and 2 TS pages marked up to show the proposed change. Enclosure 3 provides revised, clean-typed pages for FNP Units 1 and 2 TS. Enclosure 4 provides the existing VEGP, Units 1 and 2 TS pages marked up to show the proposed change. Enclosure 5 provides revised, clean VEGP Units 1 and 2 TS pages.

SNC requests approval of the proposed license amendments by June 1, 2012, with implementation of the amendment within 90 days of issuance of the amendment.

In accordance with 10 CFR 50.91, a copy of this application with enclosures is being provided to the designated Alabama and Georgia State Officials.

Mr. M. J. Ajluni states he is Director of Nuclear Licensing for Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company, and to the best of his knowledge and belief, the facts set forth in this letter are true.

This letter contains no NRC commitments.

If you have any questions, please contact Jack Stringfellow at (205) 992-7037.

Respectfully submitted,


M. J. Ajluni
Nuclear Licensing Director

Sworn to and subscribed before me this 12th day of January, 2012.


Notary Public

My commission expires: 11-2-2013

MJA/GAL/lac

Enclosures:

1. Description and Assessment
2. Proposed FNP Units 1 and 2 Technical Specification Change
3. Revised FNP Units 1 and 2 Technical Specification Page
4. Proposed VEGP Units 1 and 2 Technical Specification Change
5. Revised VEGP Units 1 and 2 Technical Specification Page

cc: Southern Nuclear Operating Company
Mr. S. E. Kuczynski, Chairman, President & CEO
Mr. D. G. Bost, Executive Vice President and Chief Nuclear Officer
Mr. T. A. Lynch, Vice President – Farley
Mr. T. E. Tynan, Vice President – Vogtle
Mr. B. J. Adams, Vice President – Fleet Operations
Ms. P. M. Marino, Vice President – Engineering
Mr. B. L. Ivey, Vice President – Regulatory Affairs
RType: CFA04.054; CVC7000

U. S. Nuclear Regulatory Commission
Mr. V. M. McCree, Regional Administrator
Mr. R. E. Martin, NRR Project Manager – Farley
Mr. E. L. Crowe, Senior Resident Inspector – Farley
Mr. P. G. Boyle, NRR Senior Project Manager – Vogtle
Mr. L. M. Cain, Senior Resident Inspector – Vogtle

Alabama Department of Public Health
Dr. D. E. Williamson, State Health Officer

State of Georgia
Mark Williams, Commissioner - Department of Natural Resources

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Enclosure 1

Description and Assessment

**Joseph M. Farley Nuclear Plant, Units 1 and 2
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Enclosure 1

Description and Assessment

1.0 Introduction

The proposed License amendment changes Technical Specification (TS) 5.5.7, "Reactor Coolant Pump Flywheel Inspection Program." The changes are consistent with Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-421-A, "Revision to RCP Flywheel Inspection Program (WCAP-15666)." The availability of this TS improvement was announced in the Federal Register on October 22, 2003, as part of the consolidated line item improvement process (CLIP).

2.0 Description of Proposed Amendment

Consistent with the NRC-approved TSTF-421-A, the proposed TS change includes the following revision to TS 5.5.7:

The examination frequency for the RCP flywheels is changed from at least once per 10 years to 20 year intervals.

3.0 Background

The background for this application is adequately addressed by the NRC Notice of Availability published on October 22, 2004 (68 FR 60422), NRC Notice for Comment published on June 24, 2003 (68 FR 37590), TSTF-421-A, WCAP 15666, "Extension of Reactor Coolant Pump Motor Flywheel Examination," and the related NRC safety evaluation (SE) dated May 5, 2003.

4.0 Regulatory Requirements and Guidance

The applicable regulatory requirements and guidance associated with this application are adequately addressed by the NRC Notice of Availability published on October 22, 2003 (68 FR 60422), NRC Notice for Comment published on June 24, 2003 (68 FR 37590), TSTF-421-A, WCAP-15666, and the related NRC SE.

5.0 Technical Analysis

Southern Nuclear Operating Company (SNC) has reviewed the model SE published on June 24, 2003 (68 FR 37590), and verified its applicability as part of the CLIP. This verification included a review of the NRC staff's model SE, as well as the information provided to support TSTF-421 (including WCAP-15666 and the related SE dated May 5, 2003). SNC has concluded that the justifications presented in the TSTF proposal and the model SE prepared by the NRC staff are applicable to Farley Nuclear Plant (FNP), Units 1 and 2, and Vogtle Electric Generating Plant (VEGP), Units 1 and 2, and justify this amendment for the incorporation of the changes to the FNP and VEGP TS.

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Enclosure 1

Description and Assessment

6.0 Regulatory Analysis

A description of this proposed change and its relationship to applicable regulatory requirements and guidance was provided in the NRC notices related to the CLIP, TSTF-421-A, topical report WCAP-15666, and the associated SE.

7.0 No Significant Hazards Consideration

SNC has reviewed the proposed No Significant Hazards Consideration determination, published on June 24, 2003 (68 FR 37590), as part of the CLIP. SNC has concluded that the proposed determination presented in the notice is applicable to FNP and VEGP and the determination is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

8.0 Environmental Evaluation

SNC has reviewed the Environmental Evaluation included in the model SE, published on June 24, 2003 (68 FR 37590), as part of the CLIP. SNC has concluded that the staff's findings presented in that evaluation are applicable to FNP and VEGP and the evaluation is hereby incorporated by reference for this application.

9.0 Precedent

This application is being made in accordance with the CLIP referenced in Section 1.0. SNC is not proposing variations or deviations from the TS changes described in TSTF-421-A or the NRC staff's model SE, published on June 24, 2003 (68 FR 37590).

10.0 References

1. Federal Register Notice: Notice of Availability of Model Application Concerning Technical Specification Improvement Regarding Extension of Reactor Coolant Pump Motor Flywheel Examination for Westinghouse Plants Using the Consolidated Line Item Improvement Process, published October 22, 2003, (68 FR 60422)
2. Federal Register Notice: Notice of Opportunity to Comment on Model Application Concerning Technical Specification Improvement Regarding Extension of Reactor Coolant Pump Motor Flywheel Examination for Westinghouse Plants Using the Consolidated Line Item Improvement Process, published on June 24, 2003 (68 FR 37590)

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Enclosure 1

Description and Assessment

3. Industry/Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-421, "Revision to RCP Flywheel 2001 Inspection Program (WCAP-15666)," Revision 0, November 2001
4. WCAP-15666, "Extension of Reactor Coolant Pump Motor Flywheel Examination," July 2001
5. NRC letter dated May 5, 2004, from H. Berkow to R. Bryan (WOG) transmitting Safety Evaluation of WCAP-15666

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Enclosure 2

Proposed FNP Units 1 and 2 Technical Specification Change

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
- j. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

5.5.5 Component Cyclic or Transient Limit

This program provides controls to track the FSAR, Table 5.2-2a, cyclic and transient occurrences to ensure that components are maintained within the design limits.

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5.5.6 Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in pre-stressed 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 Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with Section XI, Subsection IWL of the ASME Boiler and Pressure Vessel Code and applicable addenda as required by 10 CFR 50.55a, except where an alternative, exemption or relief has been authorized by the NRC. The first performance of the IWL requirements for containment sample tendon force measurements and tendon wire and strand sample examinations will be performed by the end of 2006.

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

5.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel at least once per 10 years by conducting either:

- a. An in-place ultrasonic examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius: or
- b. A surface examination (magnetic particle and/or liquid penetrant) of exposed surfaces of the disassembled flywheel.

(continued)

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Enclosure 3

Revised FNP Units 1 and 2 Technical Specification Page

5.5 Programs and Manuals

5.5.4 Radioactive Effluent Controls Program (continued)

- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
- j. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

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

5.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel at least once per 20 years by conducting either:

- a. An in-place ultrasonic examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius: or
- b. A surface examination (magnetic particle and/or liquid penetrant) of exposed surfaces of the disassembled flywheel.

(continued)

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Enclosure 4

Proposed VEGP Units 1 and 2 Technical Specification Change

5.5 Programs and Manuals

5.5.6 Prestressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in prestressed 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 Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with ASME Boiler and Pressure Vessel Code Section XI, Subsection IWL and applicable addenda as required by 10 CFR 50.55a except where an exemption, relief, or alternative has been authorized by the NRC.

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

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5.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel at least once per 40 years by conducting either:

- a. An in-place ultrasonic examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius; or
- b. A surface examination (magnetic particle and/or liquid penetrant) of exposed surfaces of the disassembled flywheel.

The provisions of SR 3.0.3 are applicable to the Reactor Coolant Pump Flywheel Inspection Program.

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Enclosure 5

Revised VEGP Units 1 and 2 Technical Specification Page

5.5 Programs and Manuals

5.5.6 Prestressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in prestressed 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 Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with ASME Boiler and Pressure Vessel Code Section XI, Subsection IWL and applicable addenda as required by 10 CFR 50.55a except where an exemption, relief, or alternative has been authorized by the NRC.

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

5.5.7 Reactor Coolant Pump Flywheel Inspection Program

This program shall provide for the inspection of each reactor coolant pump flywheel at least once per 20 years by conducting either:

- a. An in-place ultrasonic examination over the volume from the inner bore of the flywheel to the circle of one-half the outer radius; or
- b. A surface examination (magnetic particle and/or liquid penetrant) of exposed surfaces of the disassembled flywheel.

The provisions of SR 3.0.3 are applicable to the Reactor Coolant Pump Flywheel Inspection Program.

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