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Operating Company, Inc.
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Energy to Serve Your World
NL-10-0335

February 25, 2010

Docket Nos.: 50-424
50-425

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Vogtle Electric Generating Plant - Units 1 & 2
Request for Additional Information Regarding
VEGP-ISI-ALT-04, Version 2, Alternative in Accordance
With 10 CFR 50.55a(a)(3)(i)

Ladies and Gentlemen:

On April 23, 2009, Southern Nuclear Company (SNC) submitted relief request VEGP-ISI-RR-01 which requests relief from performing strand testing on Vogtle Unit 2 containment tendons, applicable for the 3rd inservice inspection interval.

Per a teleconference on July 24, 2009, the NRC staff acknowledged RR-L-2 submitted by SNC on April 5, 1999 and approved by the NRC on June 16, 2000 which approved an SNC request to align containment tendon schedules for Unit 1 and Unit 2 for the second inspection interval. The staff requested SNC submit a similar request for the 3rd inspection interval.

On July 29, 2009, SNC received a request for additional information (RAI) letter, which contained three (3) questions. On September 9, 2009, SNC submitted responses to the July 29, 2009 RAI letter. This response contained VEGP-ISI-ALT-04, Version 1, which proposed an administrative Structural Integrity Test (SIT) date to allow SNC to align the testing schedules for IWL-2500 examinations required by IWL-2410(a) and IWL-2420(a), similar to RR-L-2.

Per a teleconference on October 9, 2009 and confirmed by letter dated October 19, 2009, the NRC staff requested that SNC provide supplemental information in accordance with the LIC-109 process. On October 26, 2009, SNC submitted responses to this request for supplemental information to September 9, 2009 RAI letter. This response contained VEGP-ISI-ALT-04, Version 2.

On February 5, 2010, SNC received a request for additional information regarding VEGP-ISI-ALT-04, Version 2. This letter contained four (4) questions.

Enclosure 1 contains the SNC response to this latest request for additional information.

Enclosure 2 contains VEGP-ISI-ALT-04, Version 3, proposed alternative in accordance with 10 CFR 50.55a(a)(3)(i). VEGP-ISI-ALT-04 requests approval to align Unit 1 and 2 Class CC testing schedules. The proposed alternative contained in VEGP-ISI-ALT-04 would apply to the 3rd inservice inspection interval and all subsequent inspection intervals for the remainder of plant operating life.

SNC requests approval by May 1, 2010 to support testing scheduled for summer 2010.

This letter contains no NRC commitments. If you have any questions, please advise.

Respectfully submitted,



M. J. Ajluni
Manager - Nuclear Licensing

MJA/TAH/phr

Enclosures: 1. Response to Request for Additional Information
2. VEGP-ISI-ALT-04, Version 3

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. T. E. Tynan, Vice President – Vogtle
Ms. P. M. Marino, Vice President – Engineering
RType: CVC7000

U. S. Nuclear Regulatory Commission
Mr. L. A. Reyes, Regional Administrator
Ms. D. N. Wright, NRR Project Manager – Vogtle
Mr. M. Cain, Senior Resident Inspector – Vogtle

**Request for Additional Information Regarding
VEGP-ISI-ALT-04, Version 2, Alternative in Accordance
With 10 CFR 50.55a(a)(3)(i)**

Enclosure 1

Response to Request for Additional Information

Vogtle Electric Generating Plant – Unit 1 & 2
Request for Additional Information Regarding VEGP-ISI-ALT-04, Version 2,
Alternative in Accordance With 10 CFR 50.55a(a)(3)(i)
Enclosure 1

NRC staff has requested SNC provide additional information regarding:

1. The fourth paragraph under the “Proposed Alternative and Basis for Use” section of Relief Request (RR) VEGP-ISI-ALT-04, Version 2, in Enclosure 2 of the letter dated October 26, 2009, states that:

“Table 1 indicates that: (1) Subsection IWL, Table IWL-2500-1, Category LA, Item L1.11 will be performed on a 5 year frequency, (2) Subsection IWL, Table IWL-2500-1, Category L-B Items will be performed on a 10 year frequency, and (3) Subsection IWL, Table IWL-2500-1, Category L-B, Items L2.30, L2.40 and L2.50 will be performed on a 5 year frequency as required by the Code.”

(a) Neither Item (1) of the RR paragraph quoted above, nor Table 1 of the RR referenced therein provides the examination schedule for Item No. L1.12, “Suspect Areas,” of Examination Category L-A, Concrete, in Table IWL-2500-1. The information as provided in Table 1 of the RR would imply that Item No. L1.12 examinations (when applicable) would be performed on a 10 year interval, which is not consistent with the maximum frequency indicated in the Code in Section IWL-2410. The NRC staff notes that the examination schedule in IWL-2410 covers all examinations (general visual and detailed visual) of concrete surfaces in accordance with IWL-2510. Please state explicitly and consistently (in the body of the RR and in Table 1 of the RR), the proposed minimum examination schedule for Item L1.12 (when applicable) in Table IWL-2500-1.

(b) Items (2) and (3) as stated in the RR paragraph, quoted above, are not mutually exclusive and present a contradiction with each other. Please state explicitly in the above Item (2) description, the item numbers of Examination Category L-B of Table IWL-2500-1 that would be examined on a 10 year frequency, so that it will be consistent with the information provided in Table 1 of the RR.

SNC Response to item 1(a):

SNC agrees with the NRC comment that the examinations defined in Table IWL-2500-1, Category L-A, Item L1.12 are required every 5-years. SNC has revised the referenced paragraph in VEGP-ISI-ALT-04 as shown in SNC response to NRC question (b) below. SNC has also revised VEGP-ISI-ALT-04, Table 1, to include reference to Item L1.12 in the 3rd and 5th columns indicating examination every 5-years. VEGP-ISI-ALT-04, Version 3, containing these changes is included as Enclosure 2.

SNC Response to item 1(b):

SNC understands the NRC comment and has revised the referenced paragraph in VEGP-ISI-ALT-04 as shown below.

“Table 1 indicates that: (1) Subsection IWL, Table IWL-2500-1, Category LA, ITEM L1.10 (which includes Item L1.11 and L1.12) will be performed on a 5 year frequency, (2) Subsection IWL, Table IWL-2500-1, Category L-B, Items L2.30, L2.40 and L2.50 will be

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Enclosure 1

performed on a 5 year frequency, and (3) Subsection IWL, Table IWL-2500-1, Category L-B, Items L2.10, L2.20 (as modified by VEGP-ISI-RR-01 for Unit 2) will be performed on a 10 year frequency.”

2. The first paragraph under the “Proposed Alternative and Basis for Use,” section of RR VEGP-ISI-ALT-04, Version 2, in Enclosure 2 of the letter dated October 26, 2009, states, in part, that: “The last complete IWL-2500 examinations were performed in 2000 for Unit 1 and 2005 for Unit 2 and only the IWL-2524 and IWL-2525 examinations were performed in 2000 for Unit 2 and 2005 for Unit 1.” Further, SNC’s response to Supplemental Information No. 3 in Enclosure 1 states, “Based on the language contained in IWL-2421 (b) and NRC approval of Farley RR-57 and 58 provided in March 28, 2006, the testing schedule contained in VEGP-ISI-ALT-04, Version 1 indicated Vogtle would perform IWL-2500-1 Category L-A concrete inspections on a ten year frequency. After further review of industry standards, SNC will perform the IWL-2500-1 Category L-A concrete inspections on a five year frequency, as required by IWL-2410(b).”

The first statement above seems to indicate that Vogtle, Units 1 and 2, have been performing the inservice examination of containment concrete surfaces, in Table IWL-2500-1, Examination Category L-A, on a 10-year frequency, rather than the 5-year examination frequency specified in IWL-2410 “Concrete.” The second statement above seems to indicate that the above IWL examination frequency issue for containment concrete surfaces could also apply to the Farley Nuclear Plant. The issue seems to have arisen due to a misinterpretation and/or misunderstanding of the Code provision in IWL-2421(b) that is applicable only to Unbonded Post-Tensioning Systems for sites with multiple units

(a) Please confirm if, in the past, the licensee has been implementing the Table IWL-2500-1, Examination Category L-A examination of containment concrete surfaces on a 10-year frequency, for Vogtle, Units 1 and 2. If so, what action is being taken to correct the IWL examination schedule for containment concrete surfaces, such that it is in compliance with IWL-2410?

(b) Please confirm if the above IWL examination frequency issue for containment concrete surfaces based on a 10-year frequency also applies to Farley? If so, what action is being taken to correct the IWL examination schedule for containment concrete surfaces for Farley, such that it is in compliance with IWL-2410?

SNC Response to item 2(a):

SNC confirms that the previous IWL required concrete examinations have been performed every 5 years in accordance with the code requirements. The information provided below shows the examinations performed since expedited implementation of IWL was required by 10 CFR 50.55a.:

VEGP-1	VEGP-2
2000	2000

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Enclosure 1

2005

2005

Scheduled in 2010

Scheduled in 2010

SNC Response to item 2(b):

IWL-2500-1, Category L-A, Item L1.10 (which includes L1.11 and L1.12) examinations have been performed on a 5-year frequency and are currently scheduled on a 5-year frequency at Farley Nuclear Plant; therefore, no code or regulatory compliance issues exist.

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Enclosure 2

VEGP-ISI-ALT-04, Version 3

**SOUTHERN NUCLEAR OPERATING COMPANY
VEGP-ISI-ALT-04, VERSION 3.0
PROPOSED ALTERNATIVE IN ACCORDANCE WITH 10 CFR 50.55a(a)(3)(i)**

Plant Site-Unit:	Vogtle Electric Generating Plant -Units 1 and 2
Interval-Interval Dates:	3 rd ISI Interval, May 31, 2007 through May 30, 2017
Requested Date for Approval and Basis:	Approval is requested by May 1, 2010
ASME Code Components Affected:	The exterior portion of the VEGP-1 and 2 Containment Buildings fabricated from concrete and their post-tensioning systems (ASME Section XI, Table IWL-2500-1, Category L-A and L-B).
Applicable Code Edition and Addenda:	ASME Section XI, 2001 Edition through the 2003 Addenda
Applicable Code Requirements:	<p>IWL-2410(a) states: "Concrete shall be examined in accordance with IWL-2510 at 1, 3, and 5 years following the completion of the containment Structural Integrity Test CC-6000 and every 5 years thereafter."</p> <p>IWL-2421(b) states: "When the conditions of IWL-2421(a) are met, the inspection dates and examination requirements may be as follows.</p> <p>(1) For the containment with the first Structural Integrity Test, all examinations required by IWL-2500 shall be performed at 1, 3, and 10 years and every 10 years thereafter. Only the examinations required by IWL-2524 and IWL-2525 need be performed at 5 and 15 years and every 10 years thereafter.</p> <p>(2) For each subsequent containment constructed at the site, all examinations required by IWL-2500 shall be performed at 1, 5, and 15 years and every 10 years thereafter. Only the examinations required by IWL-2524 and IWL-2525 need be performed at 3 and 10 years and every 10 years thereafter."</p>
Reason for Request:	<p>The Unit 1 Structural Integrity Test (SIT) was completed on August 23, 1986 and the Unit 2 SIT was completed on November 14, 1988. Based on these dates, IWL-2421(b)(1) and (2) would require all IWL-2500 exams for Unit 1 in 2016 (SIT + 30-years) and Unit 2 in 2013 (SIT + 25-years). Therefore, this alternative is being proposed to allow VEGP to align the schedule for IWL-2510 and IWL-2520 examinations for both units.</p> <p>10CFR50.55a was revised in 1996 requiring containment examinations in accordance with ASME Section XI, Subsection IWE and IWL. With this rule change, the VEGP Technical Specifications were amended to reference containment examinations in accordance with IWE and IWL. Since IWL-2420 requires examinations based upon SIT date, SNC proposes an alternative equivalent to that of previous Technical Specification amendments which have been superseded by the ASME Section XI Code.</p>

**SOUTHERN NUCLEAR OPERATING COMPANY
VEGP-ISI-ALT-04, VERSION 3.0
PROPOSED ALTERNATIVE IN ACCORDANCE WITH 10 CFR 50.55a(a)(3)(i)**

Proposed Alternative and Basis for Use:	<p>The last complete IWL-2500 examinations were performed in 2000 for Unit 1 and 2005 for Unit 2 and only the IWL-2524 and IWL-2525 examinations were performed in 2000 for Unit 2 and 2005 for Unit 1. Therefore, SNC proposes an examination frequency equivalent to the requirements of the referenced ASME Section XI Code on a slightly altered schedule by "re-baselining" the IWL-2500 examinations in 2010 for both VEGP units. "Re-baselining" results in the examination schedule shown in the table on page 3 below.</p> <p>VEGP Unit 1 and Unit 2 containments utilize the same pre-stressing system, are essentially identical in design (except Unit 2 tendons were not designed to allow detensioning) and are similarly exposed to the same environmental conditions. The post tensioning operations for VEGP-1 was completed on April 26, 1986 and VEGP-2 on December 31, 1986. Therefore, the VEGP units meet the criteria of IWL-2421(a) allowing for examinations per IWL-2421(b).</p> <p>SNC is proposing to establish a "re-baselining" date for scheduling the 3rd ISI Interval and subsequent ISI Interval Subsection IWL examinations. This "re-baselining" date has no impact on the code required examination frequencies for either unit but will allow VEGP to schedule both unit's tendon and strand testing during the same time period. Being able to perform tendon and strand testing on both units during the same time period decreases the cost for mobilization of contractor personnel, increases the efficiency of equipment and personnel resources, allows for more standardization and application of lessons learned between units and still provides an acceptable level of quality and safety for the containment structures.</p> <p>Table 1 indicates that: (1) Subsection IWL, Table IWL-2500-1, Category LA, Item L1.10 (which includes Item L1.11 and L1.12) will be performed on a 5 year frequency, (2) Subsection IWL, Table IWL-2500-1, Category L-B, Items L2.30, L2.40 and L2.50 will be performed on a 5 year frequency, and (3) Subsection IWL, Table IWL-2500-1, Category L-B, Items L2.10, L2.20 (as modified by VEGP-ISI-RR-01 for Unit 2) will be performed on a 10 year frequency.</p> <p>Based on the tendon lift off schedule being approved by a previous Technical Specification amendment and the proposed examination frequency being equivalent to that required by the code, this alternative should be granted under 10 CFR 50.55a(a)(3)(i) because the proposed alternative continues to provide an acceptable level of quality and safety.</p>
Alternative Duration:	3 rd ISI Interval, beginning May 31, 2007 and all subsequent ISI intervals.
Precedents:	Farley Alternative RR-58 approved via NRC SER dated March 28, 2006.
References:	VEGP Technical Specifications SR 3.6.1.2 and 5.5.6 (prior to Amendments 147 (Unit 1) and 127 (Unit 2), dated 12/12/06) previously implemented the alternative examination schedule for lift off testing.
Status:	Awaiting NRC approval.

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Table 1 - Proposed IWL Examination Schedule

Re-Baselining Date of 08/01/2010 for Application of Future IWL Examinations ⁽¹⁾					
Unit 1	All Table IWL-2500-1, Cat. L-A & L-B 08/01/10 ⁽¹⁾	Only Table IWL-2500-1, Cat. L-A, Item L1.10 (which includes Item L1.11 and L1.12) + Cat. L-B, Item L2.30, L2.40 and L2.50 08/01/15 ⁽¹⁾	All Table IWL-2500-1, Cat. L-A & L-B 08/01/20 ⁽¹⁾	Only Table IWL-2500-1, Cat. L-A, Item L1.10 (which includes Item L1.11 and L1.12) + Cat. L-B, Item L2.30, L2.40 and L2.50 08/01/25 ⁽¹⁾	All Table IWL-2500-1, Cat. L-A & L-B 08/01/30 ⁽¹⁾
Unit 2	All Table IWL-2500-1, Cat. L-A & L-B as modified by VEGP-ISI-RR-01 08/01/10 ⁽¹⁾	Only Table IWL-2500-1, Cat. L-A, Item L1.10 (which includes Item L1.11 and L1.12) + Cat. L-B, Item L2.30, L2.40 and L2.50 08/01/15 ⁽¹⁾	All Table IWL-2500-1, Cat. L-A & L-B as modified by VEGP-ISI-RR-01 08/01/20 ⁽¹⁾	Only Table IWL-2500-1, Cat. L-A, Item L1.10 (which includes Item L1.11 and L1.12)+ Cat. L-B, Item L2.30, L2.40 and L2.50 08/01/25 ⁽¹⁾	All Table IWL-2500-1, Cat. L-A & L-B as modified by VEGP-ISI-RR-01 08/01/30 ⁽¹⁾

Foot notes:

(1) ± 1 year means that examinations shall commence no earlier than 1 year prior to the specified date and shall be completed no more than 1 year after specified date (as allowed by IWL-2410(c) and IWL-2420(c)).