

December 12, 2005

Mr. Jeffrey T. Gasser  
Executive Vice President  
Southern Nuclear Operating  
Company, Inc.  
Post Office Box 1295  
Birmingham, Alabama 35201-1295

SUBJECT: VOGTLE ELECTRIC GENERATING PLANT (VEGP), UNITS 1 AND 2,  
APPROVAL TO USE A PORTION OF A LATER CODE EDITION AND  
ADDENDA FOR THE SECOND 10-YEAR INSERVICE INSPECTION (ISI)  
INTERVAL (TAC NOS. MC6489 AND MC6490)

Dear Mr. Gasser:

By letter dated January 26, 2005, Southern Nuclear Operating Company, Inc. (the licensee), submitted a request to use a portion of a later edition of the American Society of Mechanical Engineers (ASME), *Boiler and Pressure Vessel Code* (Code), Section XI, requirements for VEGP Units 1 and 2. In this letter, the licensee requested the use of the 1995 edition of ASME Code, Section XI, Subarticle IWA-4412, and all the related ASME Code requirements when performing steam generator tube or tubesheet hole plugging by fusion welding at VEGP Units 1 and 2 for the remainder of their respective second 10-year ISI intervals.

The Nuclear Regulatory Commission (NRC) staff finds the proposed alternative acceptable and approves the use of the 1995 edition of ASME Code, Section XI, Subarticle IWA-4412, and all the related ASME Code requirements when performing steam generator tube or tubesheet hole plugging by fusion welding at VEGP Units 1 and 2 for the remainder of their respective second 10-year ISI intervals. The NRC staff's safety evaluation is enclosed.

Sincerely,

/RA/

Evangelos Marinos, Chief  
Plant Licensing Branch II-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-424 and 50-425

Enclosure: Safety Evaluation

cc w/encl: See next page

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

THIRD 10-YEAR INSERVICE INSPECTION INTERVAL

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

VOGTLE ELECTRIC GENERATING PLANT (VEGP), UNITS 1 AND 2

DOCKET NOS. 50-424 AND 50-425

1.0 INTRODUCTION

By letter dated January 26, 2005, Southern Nuclear Operating Company, Inc. (the licensee), submitted a request to use a portion of a later edition of the American Society of Mechanical Engineers (ASME), *Boiler and Pressure Vessel Code* (Code), Section XI, requirements for VEGP Units 1 and 2. The code of record for the second 10-year inservice inspection (ISI) interval at VEGP Units 1 and 2 is the 1989 edition of the ASME Code.

On October 19, 2004, the U.S. Nuclear Regulatory Commission (NRC) issued Regulatory Issue Summary (RIS) 2004-16, "Use of Later Editions and Addenda to ASME Section XI for Repair/Replacement Activities." Prior to the issuance of the RIS, during the spring 2004 maintenance/refueling outage for VEGP Unit 2, VEGP Unit 2 performed fusion welding on steam generator tube plugs in accordance with the 1995 edition of ASME Code, Section XI, Subarticle IWA-4412, "Fusion Welding." The 1995 edition of ASME Code, Section XI, had been incorporated by reference in Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50, Section 50.55a by the NRC. The licensee's position prior to the RIS clarification was that this incorporation constituted prior NRC approval of the use of the 1995 edition, and IWA-4412 provided an acceptable alternative to the requirements of the VEGP Units 1 and 2 code of record (i.e. the 1989 edition of Section XI, Subarticle IWB-4230, "Tube or Tubesheet Hole Plugging by Fusion Welding"). However, even though the use of IWA-4412 provides an acceptable alternative to IWB-4230, the RIS clarification clearly specifies that prior NRC approval is required before using the later code edition. Therefore, in this request, the licensee requested the use of the 1995 edition of ASME Code, Section XI, Subarticle IWA-4412 and all the related ASME Code requirements when performing steam generator tube or tubesheet hole plugging by fusion welding at VEGP Units 1 and 2 for this repair/replacement activity and for the remainder of their respective second 10-year ISI intervals.

2.0 REGULATORY EVALUATION

Pursuant to 10 CFR 50.55a(g)(4), ASME Code Class 1, 2, and 3 components (including supports) shall meet the requirements, except the design and access provisions and the preservice examination requirements, set forth in the ASME Code, Section XI, "Rules for

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Inservice Inspection of Nuclear Power Plant Components,” to the extent practical within the limitations of design, geometry, and materials of construction of the components.

The regulations require that inservice inspection requirements including repair/replacement activities conducted during the first 10-year interval and subsequent intervals comply with the requirements in the latest edition and addenda of Section XI of the ASME Code incorporated by reference in 10 CFR 50.55a(b) twelve months prior to the start of the 120-month interval, subject to the limitations and modifications listed therein. The second 10-year ISI interval for VEGP Units 1 and 2 began on May 30, 1997, and ends on May 29, 2007. The components (including supports) may meet the requirements set forth in subsequent editions and addenda of the ASME Code incorporated by reference in 10 CFR 50.55a(b) subject to the limitations and modifications listed therein and subject to Commission approval.

The ISI and related activities of ASME Code Class 1, 2, and 3 components is to be performed in accordance with Section XI of the ASME Code and applicable edition and addenda as required by 10 CFR 50.55a(g) except where specific written approval has been granted by the Commission pursuant to 10 CFR 50.55a(g)(4)(iv). Section 50.55a(g)(4)(iv) states, “Inservice examination of components and system pressure tests may meet the requirements set forth in subsequent editions and addenda that are incorporated by reference in paragraph (b) of this section, and subject to Commission approval. Portions of editions or addenda may be used provided that all related requirements of the respective editions or addenda are met.”

### 3.0 TECHNICAL EVALUATION

#### Proposed Code Approval Requested

The licensee requested to use the 1995 edition of ASME Code, Section XI, Subarticle IWA-4412 and all the related ASME Code requirements when performing steam generator tube or tubesheet hole plugging by fusion welding at VEGP Units 1 and 2 for the remainder of their respective second 10-year ISI interval. There are no limitations or modifications addressed in 10 CFR 50.55a(b) for this particular ASME Code edition change.

### 4.0 CONCLUSION

The NRC staff concludes that the licensee’s request to use the 1995 edition of ASME Code, Section XI, Subarticle IWA-4412 and all the related ASME Code requirements when performing steam generator tube or tubesheet hole plugging by fusion welding at VEGP Units 1 and 2, in lieu of 1989 edition of the ASME Code, Section XI, Subarticle IWB-4230, for the remainder of their respective second 10-year ISI interval is acceptable without limitation or modification. Therefore, pursuant to 10 CFR 50.55a(g)(4)(iv), the NRC staff approves the use of the ASME Code, Section XI, 1995 edition, Subarticle IWA-4412, and all the related ASME Code requirements when performing steam generator tube or tubesheet hole plugging by fusion welding at VEGP Units 1 and 2 for the second 10-year ISI interval. All other ASME Code, Section XI requirements for which relief was not specifically requested and approved in this request remain applicable, including third-party review by the Authorized Nuclear Inservice Inspector.

Principle Contributor: E. Andruskiewicz

Date: December 12, 2005

Edwin I. Hatch Nuclear Plant, Units 1 & 2

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