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December 9, 2002

LCV-1608-E

Docket No. 50-425

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

Vogtle Electric Generating Plant – Unit 2  
30-Day Response to NRC Bulletin 2002-01

Ladies and Gentlemen:

Pursuant to Item 2 of Nuclear Regulatory Commission (NRC) Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," dated March 18, 2002, Southern Nuclear Operating Company (SNC) hereby submits the enclosed information which constitutes the required 30-day response for Vogtle Electric Generating Plant (VEGP) Unit 2. Specifically, the enclosure summarizes the results of the VEGP Unit 2 reactor pressure vessel closure head visual examination performed during the ninth maintenance/refueling outage in October 2002. In addition, this information fulfills commitments for VEGP Unit 2 made in SNC's August 29, 2001, response to NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," and SNC's September 5, 2002, response to NRC Bulletin 2002-02, "Reactor Vessel Head and Vessel Head Penetration Nozzle Inspection Programs." This response is provided in accordance with the provisions of 10 CFR 50.54(f).

Mr. Jeffrey T. Gasser states he is Vice President of Southern Nuclear Operating Company and 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.

Please contact this office if there are any questions.

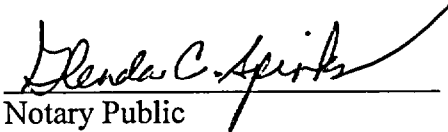
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Sincerely,

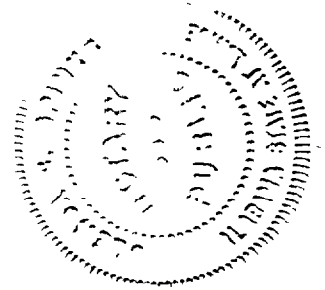


Jeffrey T. Gasser

Sworn to and subscribed before me this 9<sup>th</sup> day of December, 2002.

  
Notary Public

My commission expires: 11/10/06



JTG:BHW/gcs

Enclosure

cc: Southern Nuclear Operating Company  
Mr. G. R. Frederick  
Mr. M. Sheibani  
SNC Document Management - Vogtle

U. S. Nuclear Regulatory Commission  
Mr. L. A. Reyes, Regional Administrator  
Mr. F. Rinaldi, Project Manager, NRR  
Mr. J. Zeiler, Senior Resident Inspector, Vogtle

## **Enclosure**

### **Vogtle Electric Generating Plant – Unit 2 30-Day Response to NRC Bulletin 2002-01**

Provided below is the Vogtle Electric Generating Plant (VEGP) Unit 2 30-day response to Item 2 of NRC Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity." This information also satisfies commitments for VEGP Unit 2 made in SNC's August 29, 2001, response to NRC Bulletin 2001-01, "Circumferential Cracking of Reactor Pressure Vessel Head Penetration Nozzles," and SNC's September 5, 2002, response to NRC Bulletin 2002-02, "Reactor Vessel Head and Vessel Head Penetration Nozzle Inspection Programs."

#### **Required Information**

"...submit to the NRC the following information: the inspection scope (if different than provided in response to Item 1.D.) and results, including the location, size, and nature of any degradation detected,"

#### **SNC Response**

A remote, bare metal visual examination was performed of the RPV closure head beneath the closure head mirror insulation. A full 360° examination was performed on all seventy-nine (79) head penetrations which consisted of seventy-eight (78) four-inch diameter Control Rod Drive Mechanism (CRDM) penetrations and one (1) RPV head vent. The examination was performed using an automated remote examination device. In certain areas, specifically the peripheral and innermost penetrations, a fully automated examination was not possible due to inaccessibility. For these areas, a supplemental manual examination was conducted using a video probe.

SNC Level II and III certified VT-2 visual examination personnel viewed each of the examinations performed. The Level II and III personnel were cognizant of boric acid corrosion problems experienced at other utilities and reviewed examples of boric acid corrosion provided in Electric Power Research Institute (EPRI) report 1006296, Revision 1, "Visual Examination for Leakage of PWR Reactor Head Penetrations," January 30, 2002. The persons performing the examination looked for boric acid residue in the area around the annulus between the penetration stalk and the penetration hole in the RPV closure head. Boric acid in this area could be indicative of a through-wall leak in the Inconel penetration stalk or attachment weld on the underside of the RPV closure head weld. Any boron accumulation on the RPV closure head that could result in corrosion of the head was recorded for evaluation.

The general condition of the RPV closure was very good, with some slight debris and/or foreign objects noted by the examiners. There was no apparent evidence of boric acid residue from active leakage in the vicinity of any of the head penetrations at the interface between the RPV closure head and the penetration stalks. Several locations had small white spots on the penetration stalk above the penetration to the RPV closure head interface, a condition that is not unusual for locations that have been vented or

disassembled in the past. Following the examination, the RPV closure head was washed to remove the noted boric acid residue, debris, and/or foreign objects from the head, to the extent practical.

All documentation associated with this examination is available at the plant site for review upon request.

**Required Information**

“...submit to the NRC the following information: the corrective actions taken and the root cause for the degradation.”

**SNC Response**

As discussed in the response to Bulletin Item 2.A, no degradation of the VEGP Unit 2 RPV closure head was observed during the remote, visual examination that was performed during the ninth maintenance/refueling outage in October 2002. As a result, no corrective actions or root cause investigation are necessary.