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December 12, 2005

Docket No.: 50-425

NL-05-2162

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

Vogtle Electric Generating Plant  
Results of Inspections Required by NRC Bulletin 2004-01 and  
First Revised NRC Order EA-03-009

Ladies and Gentlemen:

On February 20, 2004, the NRC issued the First Revised NRC Order EA-03-009 to establish interim inspection requirements for reactor pressure vessel (RPV) heads at pressurized water reactors. On March 8, 2004, Southern Nuclear Operating Company (SNC) submitted an answer to the revised order which included a request for relaxation of the Order pursuant to the provisions of Paragraph IV.F. SNC was granted relaxation of the Order by NRC SER dated September 13, 2005. SNC completed visual inspections to identify potential boric acid leaks from pressure-retaining components above the RPV head as required by paragraph IV.D of the Order during the recent fall 2005 refueling outage (2R11) at Unit 2 of the Vogtle Electric Generating Plant (VEGP-2). This report provides the results of the inspection as required by Paragraph IV.E of the Order. This letter also reports the results of inspection of Alloy 82/182/600 materials used in the fabrication of pressurizer nozzle penetrations as requested by NRC Bulletin 2004-01.

**Examinations Required by the First Revised NRC Order EA-03-009, Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors:**

As required by paragraph IV.A of the Order, SNC calculated the Effective Degradation Year (EDY) value at the start of 2R11 for VEGP-2. The current EDY value is 2.81 years which places VEGP-2 into the Low (EDY <8) category for susceptibility to primary water stress corrosion cracking (PWSCC) established by Paragraph IV.B. The susceptibility category determines the required examinations and timing of those examinations. As reported by SNC's June 28, 2004 letter, SNC completed a bare metal visual (BMV) examination of >95% of the RPV top head surface including 360° around each RPV head penetration nozzle during the spring 2004 refueling outage (2R10) at VEGP-2. This examination satisfied the requirements of Paragraph IV.C.(3) of the Order consistent with SNC's request for relaxation. The relaxation request proposed to achieve substantial compliance with the 100% BMV examination requirement of Paragraph IV.C.(5)(a) by conducting a BMV examination of the RPV to the extent accessible. The inspection requirement of Paragraph IV.D was required to be performed on the RPV top head during 2R11.

Inspection Results:

Boron residue was observed on core exit thermal nozzle assembly at penetration 77 during the visual inspections of components above the RPV top head. The area containing the boric acid residue was cleaned and reinspected with no leakage observed.

Documentation:

The examination was documented by a written report and photographs.

**Examinations Required by Bulletin 2004-01, Inspection of Alloy 82/182/600 Materials Used in the Fabrication of Pressurizer Nozzle Penetrations and Steam Space Connections at Pressurized Water Reactors:**

A BMV examination was performed on four 6" Safety/Relief Nozzles (Numbers 21201-V6-002-W17, 18, 19, and 20) and one 4" Spray Nozzle (Number 21201-V6-002-W21).

Inspection Results:

No evidence of material wastage or of leaking or cracked nozzles was found by BMV examinations.

Documentation:

The examinations performed were documented by a written report.

Mr. D. E. Grissette states he is a Vice President of 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 advise.

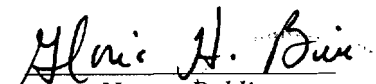
Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



Don E. Grissette

Sworn to and subscribed before me this 12<sup>th</sup> day of December, 2005.



Gloria H. Bine  
Notary Public

My commission expires: 05/06/08

DEG/DRG/daj

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cc: Southern Nuclear Operating Company  
Mr. J. T. Gasser, Executive Vice President  
Mr. T. E. Tynan, General Manager – Plant Vogtle  
RType: CVC7000

U. S. Nuclear Regulatory Commission  
Dr. W. D. Travers, Regional Administrator  
Mr. C. Gratton, NRR Project Manager – Vogtle  
Mr. G. J. McCoy, Senior Resident Inspector – Vogtle

State of Georgia  
Mr. L. C. Barrett, Commissioner – Department of Natural Resources