

David H. Jones
Vice President
Engineering

**Southern Nuclear
Operating Company, Inc.**
40 Inverness Center Parkway
Birmingham, Alabama 35242

Tel 205.992.5984
Fax 205.992.0341



April 18, 2008

Docket No.: 50-424

NL-08-0611

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

**Vogtle Electric Generating Plant Unit 1
Pressurizer Nozzle Full Structural Weld Overlay Evaluation and
Nondestructive Examination Results, Spring 2008 Outage (1R14)**

Ladies and Gentlemen:

Southern Nuclear Operating Company (SNC) completed the last performance demonstration initiative (PDI) qualified ultrasonic examination (UT) of Vogtle Electric Generating Plant (VEGP) Unit 1 pressurizer nozzle full structural weld overlays (FSWOLs) on April 10, 2008. This activity was accomplished in accordance with SNC's alternative ISI-GEN-ALT-07-01, Version 2.0, which was approved per NRC safety evaluation report (SER) dated March 10, 2008 (TAC Nos. MD6307 AND MD6308). The first paragraph under the first commitment in section 4.4.1, "Licensee's Commitments," of the SER states:

"The licensee will provide to the NRC, prior to entering Mode 4, the stress analysis report which will include results showing that the requirements of Subarticles NB-3200 and NB-3600 of the ASME Code, Section III are satisfied. The stress analysis will also include results showing that the requirements of IWB-3000 of the ASME Code, Section XI, are satisfied. The results will show that the postulated crack including its growth in the nozzles do not adversely affect the integrity of the overlaid welds."

VEGP Unit 1 is scheduled to enter Mode 4 on Saturday, April 19, 2008. The VEGP Unit 1 pressurizer nozzle FSWOL evaluation requested by the SER is provided in Enclosure 1.

The second paragraph under the first commitment in section 4.4.1, "Licensee's Commitments," of the SER states:

"The licensee will provide to the NRC, within 14 days after the completion of the ultrasonic examination of the weld overlay installations, (a) the examination results of the weld overlays, and (b) a discussion of any repairs to the overlay material and/or base metal and the reason for repair."

SNC is providing the requested examination and repair information in Enclosure 2.

The second commitment in section 4.4.1, "Licensee's Commitments," of the SER states:

"The licensee will provide to the NRC, within 90 calendar days of the completion of the refueling outage, the IWB-3640 evaluation performed for any assumed flaw in any uninspectable volume in the weld overlay beneath a laminar flaw, if that assumed flaw failed to meet the preservice acceptance criteria of Table IWB-3514-2."

SNC did not find an uninspectable volume in the weld overlay beneath a laminar flaw; therefore, an IWB-3640 evaluation was not performed.

All commitments addressed in Section 4.4.1, "Licensing Commitments," of the SER have been completed for VEGP Unit 1.

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

Sincerely,



D. H. Jones
Vice President – Engineering

DHJ/DRG/daj

Enclosures: 1. Vogtle Unit 1 Full Structural Weld Overlay Evaluation
2. Vogtle Unit 1 Weld Overlay Examination Results and Repairs Table

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

U. S. Nuclear Regulatory Commission
Mr. V. M. McCree, Acting Regional Administrator
Mr. R. A. Jervy, NRR Project Manager – Vogtle
Mr. G. J. McCoy, Senior Resident Inspector – Vogtle

**Vogtle Electric Generating Plant Unit 1
Pressurizer Nozzle Full Structural Weld Overlay Evaluation and
Nondestructive Examination Results, Spring 2008 Outage (1R14)**

Enclosure 2

Vogtle Unit 1 Weld Overlay Examination Results and Repairs Table

Vogle Unit 1 Weld Overlay Examination Results and Repairs

Nozzle	PT of Base Metal Results/Repairs	PT of Mitigation Layer Results/Repairs	PT of Overlay Results/Repairs	PDI UT Exam Results	Post PDI UT Repairs	PDI UT Re-exams
N-1 SAFETY	Three linear indications approximately 0.1-inch long each were observed. The indications were removed and a new PT was performed with no unacceptable indications.	Three acceptable indications were observed. After light buffing, these areas were re-examined with no indications.	Two rounded indications were observed (the first one had a dimension of 0.34 by 0.16-inches while the second was 0.12 by 0.06-inches). The indications were removed and a new PT was performed with no unacceptable indications.	NRI	NONE	NA
N-2 SAFETY	Two groups of indications were observed with the longest dimension approximately 0.1-inch. The indications were removed and a new PT was performed with no unacceptable indications.	No unacceptable indications.	No unacceptable indications.	NRI	NONE	NA
N-3 SAFETY	Two linear indications approximately 0.1-inch long each were observed. The indications were removed and a new PT was performed with no unacceptable indications.	No unacceptable indications.	Two linear indications were observed: a 0.3-inch indication at the overlay weld toe (pipe-side) and a 0.13-inch indication on the pipe. The indications were removed and a new PT was performed with no unacceptable indications.	NRI	NONE	NA

Vogle Unit 1 Weld Overlay Examination Results and Repairs

Nozzle	PT of Base Metal Results/Repairs	PT of Mitigation Layer Results/Repairs	PT of Overlay Results/Repairs	PDI UT Exam Results	Post PDI UT Repairs	PDI UT Re-exams
N-4 RELIEF	One linear indication 0.125-inches long was observed. The indication was removed and a new PT was performed with no unacceptable indications.	No unacceptable indications.	Two acceptable indications, one unacceptable linear indication 0.35-inches long, and two unacceptable rounded indications were observed. The first rounded indication had a dimension of 0.20-inches and the second was 0.5 by 0.3-inches. The indications were removed and a new PT was performed with no unacceptable indications.	NRI	NONE	NA
N-5 SPRAY	No unacceptable indications.	No unacceptable indications.	No unacceptable indications.	NRI	NONE	NA
N-6 SURGE	Six linear indications that varied from about 0.095-inches to 0.156-inches long. The indications were removed and a new PT was performed with no unacceptable indications.	No unacceptable indications.	No unacceptable indications.	NRI	NONE	NA

NRI – No Recordable Indications