

**Southern Nuclear
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May 9, 2007



Energy to Serve Your WorldSM

NL-07-1001

Docket No.: 50-364

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

Joseph M. Farley Nuclear Plant - Unit No. 2
Pressurizer Surge Nozzle Full Structural Weld Overlay
Nondestructive Examination Results - Spring 2007 Outage (2R18)

Ladies and Gentlemen:

Southern Nuclear Operating Company (SNC) completed the Performance Demonstration Initiative (PDI) qualified ultrasonic examination (UT) of the Farley Nuclear Plant (FNP) Unit 2 pressurizer surge nozzle full structural weld overlay (FSWOL) on May 2, 2007. This activity was accomplished in accordance with SNC's alternative ISI-GEN-ALT-06-03, which was approved per NRC safety evaluation report (SER), TAC Nos. MD2794, MD2795, MD2796 and MD2797. Page 18 of the SER includes the following statement:

"the licensee will provide the NRC, within 14 days after the completion of the ultrasonic examination of the weld overlay installations, (1) the examination results of the weld overlays, (2) a discussion of any repairs to the overlay material and/or base metal and the reason for repair, and (3) will perform the subsequent ISI in accordance with Q-4300 of Appendix Q to the ASME Code, Section XI."

Enclosure 1 contains the requested examination and repair information. Enclosure 2 contains the SNC commitment to perform subsequent ISI on the pressurizer surge nozzle FSWOL in accordance with Q-4300 of Appendix Q to the 2004 Edition of Section XI with Addenda through 2005.

This letter contains one NRC commitment. If you have any questions, please advise.

Sincerely,

A handwritten signature in black ink, appearing to read "B. J. George".

B. J. George
Manager, Nuclear Licensing

BJG/JLS/phr

Enclosures: 1. Weld Overlay Examination Results and Repairs - Surge Nozzle
2. Regulatory Commitment List

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cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. J. R. Johnson, Vice President - Farley
Mr. D. H. Jones, Vice President - Engineering
RTYPE: CFA04.054; LC# 14579

U. S. Nuclear Regulatory Commission
Dr. W. D. Travers, Regional Administrator
Ms. K. R. Cotton, NRR Project Manager - Farley
Mr. E. L. Crowe, Senior Resident Inspector - Farley

Enclosure 1

**Joseph M. Farley Nuclear Plant - Unit No. 2
Pressurizer Surge Nozzle Full Structural Weld Overlay**

Weld Overlay Examination Results and Repairs - Surge Nozzle

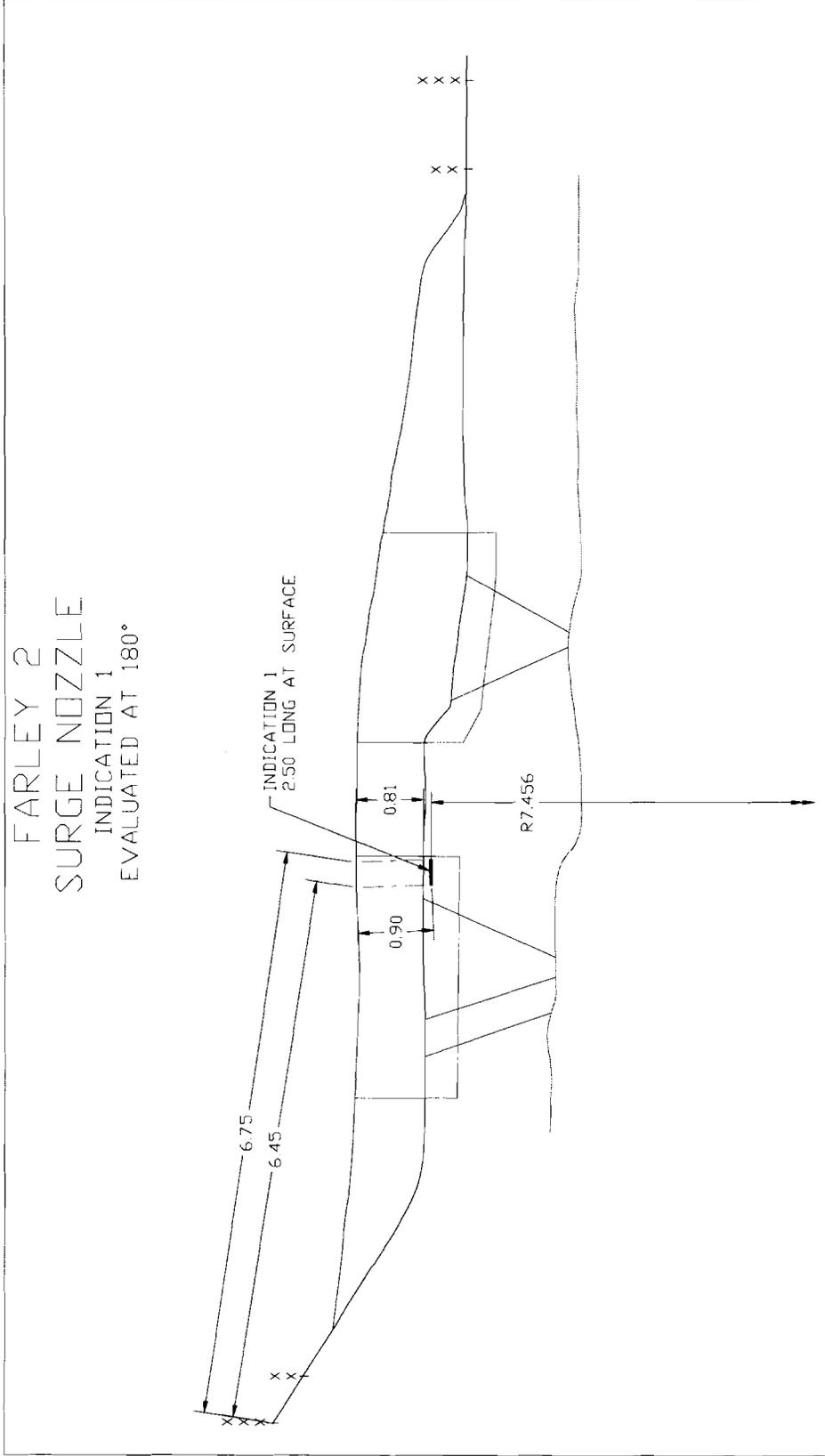
Enclosure 1

Farley Unit No. 2 Weld Overlay Examination Results and Repairs - Surge Nozzle					
PT of Base Metal Results	PT of Mitigation Layer Results/Repairs	PT of Overlay Results/Repairs	PDI UT Exam Results	Post PDI UT Repairs	PDI UT Re-exams
NRI	NRI	NRI	<p>UT exams detected an acceptable lamination near the interface of the overlay and the safe-end. The surface area of the lamination is approximately 0.7 square inches with a maximum dimension of 2.5-inches long measured at the surface of the overlay or 2.23-inches calculated length at the interface location. (See figure for location; all dimensions are shown in inches.)</p> <p>There was no loss of coverage in the overlay material, thus a planar flaw was not postulated. The reduction in coverage of the preservice inspection volume is less than 0.2% and the lamination is sufficiently small such that there is reasonable assurance that a PWSCC indication growing into the upper 25% (of the original dissimilar metal weld) would be detected.</p>	NONE	NONE

NRI – No Recordable Indications

Enclosure 1

Farley Unit No. 2 Figure Showing Lamination



The acceptable laminar indication is shown in the figure above and exists near the interface between the final weld overlay and the safe-end.

Enclosure 2

**Joseph M. Farley Nuclear Plant - Unit No. 2
Pressurizer Surge Nozzle Full Structural Weld Overlay**

Regulatory Commitment List

Enclosure 2

Regulatory Commitment List

The following table identifies those actions committed by Southern Nuclear Operating Company in this document for Farley Nuclear Plant. Any other statements in this submittal are provided for information purposes and are not considered regulatory commitments.

Commitment	Type		Scheduled Completion Date (If Required)
	One-Time Action	Continuing Compliance	
Perform subsequent ISI on the FNP Unit 2 pressurizer surge line FSWOL in accordance with Q-4300 of Appendix Q to the 2004 Edition of Section XI with Addenda through 2005		X	