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SOUTHERN COMPANY

April 27, 2011

Docket Nos.: 50-321
50-366

NL-11-0692

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

Edwin I. Hatch Nuclear Plant, Units 1 and 2
Discrepancies Identified Between
Alternative ISI-ALT-08-02 and the NRC Safety Evaluation

Ladies and Gentlemen:

By letters to the Nuclear Regulatory Commission (NRC) dated June 11, 2008 and October 8, 2008, Southern Nuclear Operating Company (SNC) submitted a request for alternative ISI-ALT-08-02, Version 1.0, to use weld overlay repairs as an alternative to the ASME Code repair requirements for the specified dissimilar metal welds. The NRC approved this request by Safety Evaluation dated June 24, 2009 (ML090340017).

During preparation for an overlay to be applied during the 2R21 Spring 2011 outage, discrepancies were noted between the wording in submitted alternative ISI-ALT-08-02, Version 1.0 and the NRC's Safety Evaluation. The submitted alternative ISI-ALT-08-02, Version 1.0, defines that the test coupon be equal to or *less* than the thickness of the item to be welded, while the NRC Safety Evaluation defines that the test coupon will be equal to or *greater* than the thickness of the item to be welded.

SNC has determined that the wording for the previously submitted alternative ISI-ALT-08-02, Version 1.0 is correct. This alternative will be used for an overlay to be applied during the ongoing Hatch Unit 2 outage. SNC requests that the NRC generate a correction letter confirming the error in the previously issued NRC Safety Evaluation and provide revised pages as applicable.

This letter contains no NRC commitments. If you have any questions, please contact Jack Stringfellow at (205) 992-7037.

Respectfully submitted,

M. J. Ajluni
Nuclear Licensing Director

MJA/LPH/lac

Enclosure: Hatch Nuclear Plant – Units 1 and 2, ISI-ALT-08-02, Version 1.0, Discrepancies

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. D. R. Madison, Vice President – Hatch
Ms. P. M. Marino, Vice President – Engineering
RTYPE: CHA02.004

U. S. Nuclear Regulatory Commission
Mr. V.M. McCree, Regional Administrator
Mr. P. G. Boyle, NRR Project Manager
Mr. E. D. Morris, Senior Resident Inspector – Hatch

Edwin I. Hatch Nuclear Plant, Units 1 and 2
Discrepancies Identified Between
Alternative ISI-ALT-08-02 and the NRC Safety Evaluation

Enclosure

Hatch Nuclear Plant – Units 1 and 2, ISI-ALT-08-02, Version 1.0,
Discrepancies

Enclosure

Hatch Nuclear Plant – Units 1 and 2, ISI-ALT-08-02, Version 1.0,
Discrepancies

Plant Site-Unit: Hatch Nuclear Plant Units 1 and 2 (HNP-1 and 2).

Interval Dates: 4th ISI Interval extending from January 1, 2006 through December 31, 2015.

By letters to the Nuclear Regulatory Commission (NRC) dated June 11, 2008 and October 8, 2008, Southern Nuclear Operating Company (SNC) submitted a request for alternative ISI-ALT-08-02, Version 1.0 to use weld overlay repairs as an alternative to the ASME Code repair requirements for the specified dissimilar metal welds. The NRC approved this request by Safety Evaluation dated June 24, 2009 (ML090340017).

Reason for this Request: During preparation for an overlay to be applied during the 2R21 Spring 2011 outage, discrepancies were noted between the wording in the submitted alternative ISI-ALT-08-02 and the wording in the NRC's Safety Evaluation. As shown below, ISI-ALT-08-02 defines that the test coupon be equal to or *less* than the thickness of the item to be welded, while the NRC Safety Evaluation defines that the test coupon will be equal to or *greater* than the thickness of the item to be welded.

Discrepancies: SNC's alternative ISI-ALT-08-02, Appendix I, Section 3.0(e)(3) states, "Measurement of the maximum interpass temperature on a test coupon that is equal to or *less* than the thickness of the item to be welded."

NRC Safety Evaluation, Section 3.6.3, 3rd paragraph, last sentence, states, "The test coupon will be made using maximum heat input of the welding procedure to be used in production and the thickness of the test coupon will be equal to or *greater* than the thickness of the item to be welded."

NRC Safety Evaluation, Section 3.7.3, 4th paragraph, 6th sentence states, "The test coupon will be made using maximum heat input of the welding procedure to be used in production and the thickness of the test coupon shall be equal to or *greater* than the thickness of the item to be welded."

Supporting Documentation: ISI-ALT-08-02 was based on Code Case N-638-1 which was the latest NRC approved version at the time SNC submitted the request. Code Case N-638-1 did not address test coupon thickness. Additionally, guidance from later versions of Code Case N-638 was used to develop the submittal, since temper bead welding techniques were in an evolutionary state. The first of these later versions approved by the NRC was Code Case N-638-4, which is listed in Regulatory Guide 1.147, Revision 16, dated October 2010. SNC has reviewed Code Case N-638-4 to determine the current approved requirements regarding the test coupon thickness. Code Case N-638-4 determined that a test coupon is to be equal to or *less* than the thickness of the item to be welded, which agrees with the SNC submittals dated June 11, 2008 and October 8, 2008.

Request: SNC requests that the NRC generate a correction letter confirming the error in the previously issued NRC Safety Evaluation and provide revised pages as applicable.