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SOUTHERN COMPANY
Energy to Serve Your World℠

October 8, 2008

NL-08-1560

Docket Nos.: 50-321
50-366

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

Edwin I. Hatch Nuclear Plant – Units 1 and 2
Request for Additional Information
Request for Structural Overlay

Ladies and Gentlemen:

By a facsimile dated September 2, 2008 Southern Nuclear Operating Company (SNC) received an NRC Request for Additional Information (RAI) concerning structural weld overlays on Plant Hatch Units 1 and 2.

The SNC response to the NRC RAI is provided in Enclosure 1. This letter contains no NRC commitments. If you have any questions, please contact Ray Baker at 205-992-7367.

Sincerely,

Mark J Ajluni

M. J. Ajluni
Manager, Nuclear Licensing

MJA/PAH/daj

Enclosure: 1. Edwin I. Hatch Nuclear Plant Units 1 and 2
Docket Nos. 50-321and 50-366
Request for Additional Information
Request for Structural Overlay

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

U. S. Nuclear Regulatory Commission
Mr. L. A. Reyes, Regional Administrator
Mr. R. E. Martin, NRR Project Manager – Hatch
Mr. J. A. Hickey, Senior Resident Inspector – Hatch

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Enclosure 1

Enclosure 1

Edwin I. Hatch Nuclear Plant Units 1 and 2
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The Nuclear Regulatory Commission (NRC) staff has reviewed the Southern Nuclear Operating Company (SNC, the licensee) request dated June 11, 2008, for application of a dissimilar metal weld full structural overlays at the Edwin I. Hatch Plant, Units 1 and 2, and has determined that additional information is necessary to complete the review of the request for relief. Based on the staff's review, please provide a response which addresses the following request for additional information (RAI) question.

NRC Question

Question: The first paragraph of the Enclosure on page 4 of 38 states, "When components subject to being overlaid contain levels of trace chemicals (e.g., sulfur) that could cause unacceptable indications in the Alloy 52/152 weld, an initial layer of low carbon (0.035% max.) austenitic stainless steel and/or an austenitic nickel alloy may be applied as a buffer between the base metal and the Alloy 52/152 overlay." Austenitic stainless steel filler metals cannot be used to weld on high nickel alloys due to the potential for cracking. How does the licensee intend on avoiding this cracking.

SNC Response

Response: This paragraph is revised to read. "When stainless steel components subject to being overlaid contain levels of trace chemicals (e.g., sulfur) that would likely cause unacceptable indications in the Alloy 52/152 weld, an initial layer of low carbon (0.035% max.) austenitic stainless steel alloy may be applied to the stainless steel base metal as a buffer between the base metal and the Alloy 52/152 overlay. The intersection between the stainless steel component and the high nickel alloy will be determined and controls will be in place to prohibit the deposition of austenitic stainless steel filler metal on high nickel alloys. Additionally, austenitic nickel alloy may be used to complete all or portions of the first non-credited layer to facilitate the installation of the subsequent credited layers."