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SOUTHERN COMPANY
Energy to Serve Your World

Docket Nos.: 50-348 50-424
50-364 50-425

NL-07-0626

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

Joseph M. Farley Nuclear Plant
Vogtle Electric Generating Plant
Additional Information Regarding the Proposed Alternative for
Application of Pressurizer Nozzle Full-Structural Weld Overlays – Revision 2.0

Ladies and Gentlemen:

Southern Nuclear Operating Company (SNC) is in the process of implementing full structural weld overlays of the pressurizer nozzle dissimilar metal welds at Vogtle Electric Generating Plant (VEGP) Unit 2. These weld overlays are being applied per the requirements of ISI-GEN-ALT-06-03, Rev. 2 which limits the maximum interpass temperature to 350° F. During the application of the weld overlay on the pressurizer surge nozzle the maximum interpass temperature, measured by contact pyrometer for each weld bead, has not exceeded 140° F.

Since the temperature measurements show that the surge nozzle has remained significantly below the 350° F interpass temperature limit, SNC will measure the interpass temperature at a frequency of at least every fifth bead deposition. This measurement technique will apply to both Joseph M. Farley Nuclear Plant (FNP) and VEGP surge nozzle interpass temperature measurements. After the third layer is completed, there is sufficient weld thickness where the heat of welding will not affect the low-alloy steel base material; therefore, interpass temperature measurements will not be necessary.

For the smaller diameter safety, relief, and spray nozzles, SNC will continue to monitor the interpass temperature for every weld pass for the first three layers. For additional layers, the frequency of measuring interpass temperature will only be reduced when the temperature is at least 100° F below the 350° F limit, and trend data supports a reduced monitoring frequency.

SNC intends to implement the above described preheat and interpass temperature measurement method for all weld overlays performed under alternative ISI-GEN-ALT-06-03, Rev. 2.

Trending of the interpass temperatures has shown that the difference between the observed temperatures and the maximum allowable temperature is large and considerable margin exists. Based on this trending, there is reasonable assurance that the temperature of any bead will not approach the maximum allowable temperature and thus, this alternative will continue to provide an acceptable level of quality and safety. Therefore, pursuant to 10 CFR 50.55a(a)(3)(i), SNC hereby requests NRC approval to change the frequency of the interpass temperature measurements.

In order to support the application of the pressurizer weld overlays on VEGP Unit 2 during the ongoing refueling outage, SNC requests approval of this alternative by March 20, 2007.

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

Sincerely,

T. E. Tynan
Vice President - Vogtle

TET/LPH/sdc

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. J. R. Johnson, Vice President – Farley
Mr. L. M. Stinson, Vice President Fleet Operations Support
RType: CFA04.054; CVC7000; LC#14557

U. S. Nuclear Regulatory Commission
Dr. W. D. Travers, Regional Administrator
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Mr. B. K. Singal, NRR Project Manager – Vogtle
Mr. E. L. Crowe, Senior Resident Inspector – Farley
Mr. G. J. McCoy, Senior Resident Inspector – Vogtle