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Docket No.: 50-348

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

Joseph M. Farley Nuclear Plant – Unit 1  
Supplement to Reported Results of Reactor Pressure Vessel Head Inspections  
Required by Order EA-03-009

Ladies and Gentlemen:

Southern Nuclear Operating Company (SNC) performed inspections on the Farley Nuclear Plant (FNP) Unit 1 reactor pressure vessel (RPV) head during the spring 2003 refueling outage, reporting the results in a letter dated June 30, 2003. These inspections were performed in accordance with the applicable requirements of Order EA-03-009, issued February 11, 2003, with SNC-requested relaxations approved by an NRC letter dated April 25, 2003.

One of the approved relaxations pertained to Item IV.C.(1)(a) of the Order, which required bare metal visual (BMV) examination of 100% of the RPV head surface (including 360° around each RPV head penetration nozzle). SNC's March 3, 2003 letter answering the Order requested relaxation of this requirement because a small portion of the RPV head surface for SNC's plants is inaccessible for BMV exam due to interference by the support structure for the control rod drive mechanism ventilation shroud and/or the associated reflective metal insulation (RMI). In requesting relaxation, SNC noted that the inaccessible area was <1% of the head surface, that 360° visual examination around each nozzle was unaffected by the inaccessible area, and that the head surface immediately upslope and downslope of the inaccessible area would be examined for evidence of boric acid leakage under the RMI or shroud support structure. SNC's proposed alternative to the IV.C.(1)(a) requirement was to conduct "a bare metal visual examination of the RPV head surface to the extent accessible." This proposed alternative was approved by the April 25, 2003 NRC letter and accompanying safety evaluation, which recited that the BMV exam would cover >99% of the RPV head surface. This expected extent of coverage was reiterated in SNC's June 30, 2003 letter regarding the results of the spring 2003 FNP Unit 1 RPV head inspections, which reported that examination of the RPV head in accordance with the relaxed IV.C.(1)(a) requirement was achieved.

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A recent calculation of the RPV head area inaccessible to BMV examination for both FNP units has, however, disclosed that SNC's original estimate of <1% was in error for Unit 1. SNC has calculated that the inaccessible area for FNP Unit 1 amounts to <4% (instead of <1%) of the RPV head surface, based on the gross external head surface subject to examination (i.e., the external head surface including the flange without subtracting the areas occupied by nozzles, lifting lugs, bolt holes, etc.). Therefore, the BMV examination coverage achieved for FNP Unit 1 was >96% (instead of >99%) of the RPV head surface.

This error in the inaccessible area percentage value for FNP Unit 1 contained in the cited correspondence had no safety significance and did not affect SNC's compliance with Order EA-03-009, as relaxed. The spring 2003 BMV examination of the FNP Unit 1 RPV head fulfilled the requirements of item IV.C.(1)(a) of Order EA-03-009, as relaxed.

In support of its determination that this examination fulfilled the requirements of the Order, as relaxed, SNC notes that:

- 1) The difference in the percentage of RPV head area calculated to have been examined as compared to the originally estimated percentage (>96% vs. >99%) is not material to the basis upon which the requested relaxation to item IV.C.(1)(a) of the Order was approved. This is exemplified by item IV.C.(5)(a) in the First Revised Order EA-03-009, issued February 20, 2004, which allows BMV exam coverage of  $\geq 95\%$  for RPV heads with the surface obscured by support structure interferences downslope from the outermost head penetration, provided the areas upslope and downslope of the interferences are included.
- 2) The approved alternative to item IV.C.(1)(a), i.e. "a bare metal visual examination of the RPV head surface to the extent accessible" was successfully performed during the spring 2003 FNP Unit 1 RPV head inspection. BMV examination of the RPV head surface to the extent accessible was achieved, including 360° around each penetration nozzle and those areas immediately upslope and downslope from the interference created by the shroud support structure and associated RMI.

This letter therefore serves only to correct the error in SNC's March 3, 2003 and June 30, 2003 letters regarding the percentage value for the Unit 1 RPV head surface area inaccessible for BMV examination. The correct value for Unit 1 is <4% (rather than <1%).

In summary, the error described above in estimation of the BMV exam inaccessible area percentage value for FNP Unit 1 had no safety significance and did not affect SNC's compliance with the initial version of Order EA-03-009, with approved relaxation, as applicable at the time of the spring 2003 inspection. Moreover, the examination coverage achieved during that inspection exceeded the  $\geq 95\%$  criterion subsequently established by item IV.C.(5)(a) of the First Revised Order EA-03-009.

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

Mr. L. M. Stinson states he is a Vice President of Southern Nuclear Operating Company, is authorized to execute this oath on behalf of Southern Nuclear Operating Company and to the best of his knowledge and belief, the facts set forth in this letter are true.

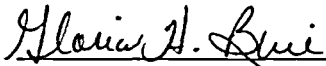
Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY



L. M. Stinson

Sworn to and subscribed before me this 8<sup>th</sup> day of April, 2004.

*Gloria H. Bue*  
Notary Public

My commission expires: 6-7-05

LMS/DWD/sdl

cc: Southern Nuclear Operating Company  
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Mr. D. E. Grissette, General Manager – Plant Farley  
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U. S. Nuclear Regulatory Commission  
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