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Energy to Serve Your WorldSM

June 11, 2002

Docket Nos.: 50-348
50-364

NEL-02-0125

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

Joseph M. Farley Nuclear Plant
Supplemental Information to
15-Day Response to NRC Bulletin 2002-01
Reactor Pressure Vessel Head Degradation and
Reactor Coolant Pressure Boundary Integrity

Ladies and Gentlemen:

By our letter number NEL-02-0068, dated March 29, 2002, Southern Nuclear Operating Company (SNC) provided the 15-day response required for Nuclear Regulatory Commission (NRC) Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," dated March 18, 2002. Subsequently, the NRC staff requested additional information to facilitate review of our response; this information was provided during a conference call with the staff on May 29, 2002.

Enclosed with this letter are transcriptions of the staff's questions along with SNC's written responses. This letter contains no new NRC commitments. If you have any questions, please advise.

Mr. D. N. Morey states he is Vice President of Southern Nuclear Operating Company and 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

A handwritten signature in cursive script that reads "Dave Morey".

Dave Morey

Sworn to and subscribed before me this 11 day of June, 2002.

A handwritten signature in cursive script, likely belonging to the notary public, written over a horizontal line.

Notary Public

NOTARY PUBLIC STATE OF ALABAMA AT LARGE
MY COMMISSION EXPIRES: June 10, 2004
BONDED THRU NOTARY PUBLIC UNDERWRITERS

My commission expires:

A095

DWD/sdl: Bulletin 2002-01 15-day supplemental info.doc

Enclosure

cc: Southern Nuclear Operating Company
Mr. D. E. Grissette, General Manager - Farley

U. S. Nuclear Regulatory Commission, Washington, D. C.
Mr. F. Rinaldi, NRR Project Manager - Farley

U. S. Nuclear Regulatory Commission, Region II
Mr. L. A. Reyes, Regional Administrator
Mr. T. P. Johnson, Senior Resident Inspector - Farley

**Supplemental Information to
15-Day Response to NRC Bulletin 2002-01
Reactor Pressure Vessel Head Degradation and
Reactor Coolant Pressure Boundary Integrity**

Provided below is supplemental information to the Farley Nuclear Plant (FNP) 15-day response to Nuclear Regulatory Commission (NRC) Bulletin 2002-01, "Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity," dated March 18, 2002. The NRC questions are in bold text, followed by answers containing additional information as discussed in a May 29, 2002 conference call with the staff.

NRC Question 1

With regard to any deposits that were left on the reactor vessel head, describe the extent of any significant deposits (i.e., deposits that prevent seeing the bare metal of the head for an area greater than 1 in²).

SNC Response

As defined above, SNC does not believe any significant boric acid deposits exist. Videotapes of the FNP Unit 1 and Unit 2 reactor vessel head inspections were reviewed again in light of the Davis-Besse experience to confirm SNC's previous assessment that the head surfaces showed no evidence of any wastage or corrosion beyond minor surface staining on Unit 1. The surface staining on Unit 1 has been attributed to a Conoseal leak that was repaired in 1997. The texture of the bare metal head surface was visible through the stains and small amounts of dry crystalline boric acid residue which were observed.

The Unit 1 inspection was an effective visual that covered 100% of each head penetration. The Unit 2 inspection was a best effort inspection that looked at each head penetration but did not achieve 100% coverage of all penetrations.

NRC Question 2

Discuss your plans for submitting the Unit 1 inspection scope.

SNC Response

The scope of the next Unit 1 inspection, planned for the Unit 1 Spring 2003 refueling outage (1R18), is still under discussion and will be contingent upon the results of the upcoming Unit 2 Fall 2002 refueling outage (2R15) and emergent industry experience. As required by Bulletin 2002-01 within 30 days of the completion of the Unit 2 inspection SNC will submit the Unit 2 results. Our plans for Unit 1 will be submitted at that time.

NRC Question 3

Your 15 day response to Bulletin 2002-01 stated that you are in the process of performing finite element calculations to qualify your visual examination. Clarify whether or not you plan to perform the ultrasonic examinations of all penetration nozzles during the next outage, even if the visual examination is qualified based on the finite element analysis.

**Supplemental Information to
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SNC plans to perform ultrasonic testing (UT) examinations on all penetration nozzles during the next refueling outage (i.e. the upcoming Unit 2 Fall 2002 refueling outage 2R15), regardless of whether or not the planned 100% bare metal visual inspection of the head surface is qualified based on the finite element analysis of the nozzle-to-head interference fit.

NRC Question 4

Your 15 day response to Bulletin 2002-01 stated that the 2001 Unit 2 inspections “did not achieve a full 100% inspection of the bare metal head surface, but it was sufficient to ensure that conditions did not exist which could lead to wastage similar to that experienced at Davis Besse.” Clarify the scope of the 2001 Unit 2 inspection.

SNC Response

The scope of the 2001 Unit 2 inspection was previously described in detail in SNC’s May 16, 2002 letter responding to NRC Bulletin 2002-01, “Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity.” The more detailed description from that letter is reproduced below.

A visual inspection was performed on the FNP Unit 2 RPV head during the February 2001 refueling outage. The objective of this inspection, which was conducted by Westinghouse Nuclear Services and Brooks Associates, was to look for evidence of boric acid residue indicative of potential leakage from the CRDM penetrations. The inspection area focused on the annulus between the penetration stalk and the penetration hole for the CRDM penetrations. This inspection was performed without removing the insulation, using a length of conduit to guide a fiberscope to each CRDM penetration. No leakage was apparent from any of the CRDM penetrations at the interface between the vessel head and the penetration stalk based on the inspection experience of the personnel that performed the inspection. Although full 360⁰ coverage inspection was not possible at every penetration, based on the absence of significant boron crystallization and the satisfactory condition of the bare metal of the RPV head and the general area around the penetrations it was concluded that no leakage existed.