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Docket Nos.: 50-348  
50-364

NL-04-0967

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

Joseph M. Farley Nuclear Plant Units 1 and 2  
Application for License Renewal – Supplemental RAI Information

Ladies and Gentlemen:

This letter provides supplemental and/or revised information for previously submitted Request for Additional Information (RAI) responses in response to NRC Staff requests. This information is provided in the enclosure.

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.

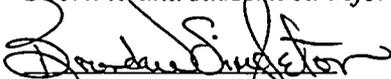
If you have any questions, please contact Charles Pierce at 205-992-7872.

Respectfully submitted,

SOUTHERN NUCLEAR OPERATING COMPANY

  
L. M. Stinson

Sworn to and subscribed before me this 10<sup>th</sup> day of June, 2004.

  
Notary Public

My commission expires: 10/9/2005

LMS/JAM/slb

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Enclosure: Joseph M. Farley Nuclear Plant Units 1 and 2  
Application for License Renewal – Responses to Requests for Revised or  
Supplemental Information

cc: Southern Nuclear Operating Company  
Mr. J. B. Beasley Jr., Executive Vice President  
Mr. D. E. Grissette, General Manager – Plant Farley  
Document Services RTYPE: CFA04.054; LC# 14051

U. S. Nuclear Regulatory Commission  
Ms. T. Y. Liu, License Renewal Project Manager  
Dr. W. D. Travers, Regional Administrator  
Mr. S. E. Peters, NRR Project Manager – Farley  
Mr. C. A. Patterson, Senior Resident Inspector – Farley

Alabama Department of Public Health  
Dr. D. E. Williamson, State Health Officer

**ENCLOSURE**

**Joseph M. Farley Nuclear Plant Units 1 and 2  
Application for License Renewal  
Responses to Requests for Revised or Supplemental Information**

**RAI 2.2-5a (Revised Response)**

Clarify how the components listed below are addressed in the Farley LRA. These components are shown as being within the scope of license renewal on the license renewal boundary drawings. However, they are not listed in the LRA tables (e.g., Table 2.3.3.5 for open-cycle cooling water system components subject to an AMR). These components are passive and long-lived, and serve a pressure boundary intended function. Justify the exclusion of these components from being subject to an AMR in accordance with the requirements of 10 CFR 54.21(a)(1).

- a. Flexible hoses/connections and flexible joints shown at multiple locations in the open-cycle cooling water, closed-cycle cooling water, and emergency diesel generator systems.

**Response**

(This revised response is in reference to the telephone conference of May 24, 2004 between SNC and the NRC staff and supersedes the previous SNC response in letter NL-04-0678 dated April 22, 2004.)

Flexible hoses/connections and flexible joints in the open-cycle cooling water (OCCW) and closed-cycle cooling water (CCW) systems are made of carbon and stainless steel, are in-scope, and are encompassed in the "piping" component type. These components are constructed of the same materials as piping, exposed to the same internal and external environments, experience the same aging affects, and are age managed by the same programs. The "piping" component type is included in Table 2.3.3.5 for OCCW and Table 2.3.3.6 for CCW. The intended function is pressure boundary. The "piping" component type is also included in Table 3.3.2-5 for OCCW and Table 3.3.2-6 for CCW. Materials of construction include both carbon steel and stainless steel.

In the intake/exhaust subsystem of the Emergency Diesel Generator (EDG) system, there are stainless steel expansion joints that are included in the "Ducts and Fittings" component type (see response to RAI 2.3.3.15-3). The other flexible hoses/connections and flexible joints in the EDG system are constructed of elastomers and are in-scope for license renewal but were omitted from the LRA.

The component type "Flexible Connectors" should have been included in LRA Table 2.3.3.15 as follows:

<b>Component Type</b>	<b>Intended Function</b>
Flexible Connectors	Pressure Boundary

Corresponding, LRA Table 3.3.2-15 should have included this component type (Flexible Connectors) as follows:

Component Type <i>GALL Reference</i>	Intended Function	Material	Environment	Aging Effect Requiring Management	Aging Management Programs	NUREG-1801 Volume 2 Item	Table 1 Item	Notes
Flexible Connectors  <i>None</i>	Pressure Boundary	Elastomers	Closed Cooling Water	Change in Material Properties, Cracking, and Loss of Material	External Surfaces Monitoring Program			J
			Air/gas (wetted) [Air Intake Piping Connectors]	Change in Material Properties, Cracking, and Loss of Material	External Surfaces Monitoring Program			J
			Lube Oil	Change in Material Properties, Cracking, and Loss of Material	External Surfaces Monitoring Program			J
			Inside	Change in Material Properties, Cracking, and Loss of Material	External Surfaces Monitoring Program			J

The scope of the External Surfaces Monitoring Program (Section B.5.3.5) will be expanded to include elastomer flexible connectors in the EDG Systems.

### **RAI 2.3.3.7-3 (Revised Response)**

Clarify whether the components of the dryer and/or compressor assemblies are scoped and screened as complex assemblies. Regarding complex assemblies, Table 2.1-2 of NUREG-1800 states that "some structures and components, when combined, are considered a complex assembly. . . . An applicant should establish the boundaries for each assembly by identifying each structure and component that makes up the complex assembly and determining whether or not each structure and component is subject to an AMR." If the dryer and compressor assemblies are treated as complex assemblies, identify the boundaries of the dryer and air compressor assemblies so that the staff may determine whether the subcomponents are within the scope of license renewal and subject to an AMR in accordance with the requirements of 10 CFR 54.4(a) and 10 CFR 54.21(a)(1), respectively.

### **Response**

(This revised response is in reference to the telephone conference of May 24, 2004 between SNC and the NRC staff and supersedes the previous SNC response in letter NL-04-0678 dated April 22, 2004.)

The air compressors are classified as fully active components and are specifically excluded in the text of 10 CFR 54.21(a)(1)(i) from the requirement of an aging management review. NEI 95-10 Revision 3, which is endorsed by the NRC in Regulatory Guide 1.188, states that air compressors do not require an aging management review. The boundary of the air compressors begins from the entrance of the inlet piping to the compressor and ends where the discharge piping joins the air compressors. This is consistent with the guidance in the Standard Review Plan (NUREG-1800) Table 2.1-2 for complex assemblies.

The air dryer assemblies are also complex active assemblies. The air dryer skids contain passive pressure boundary sub-components as shown on boundary drawings D170131L, Sheet 3 (for air dryers N1P19F001A and F001B) and D170131L, Sheet 4 (for N1P18F501A). The passive sub-components are piping, valve bodies, filter casings, the air dryer casing, the purge exhaust mufflers, and the restricting orifices. The sub-components are carbon steel. SNC has conservatively chosen the "Air/Gas (wetted)" as the interior environment for all of the sub-components on the skid. The exterior environment of all the sub-components is "Inside." For the purposes of the LRA, SNC rolled the sub-components up into a single component type, "Air Dryer" (LRA Table 3.3.2-7, page 3.3-63), because the aging management strategy for these passive sub-components could be effectively represented that way.

On D170131L, Sheet 3, the boundary of the air dryer component type begins where 3"HBD-261 enters the dryer skid and ends where 3"HBD-262 leaves the skid (note the demarcation line for SSI and Pall Trinity Scope highlighted in red at the flanged connections).

On D170131L Sheet 4 the boundary of the air dryer component type begins where 3"HBD-433 enters the dryer skid (again, note the demarcation line for Piping Contractor scope and Pall Trinity Scope highlighted in red at the flanged connections) and ends where the line leaves the skid (note the highlighted demarcation line).

**RAI 2.3.3.15-3 (Revised Response)**

License renewal diagram D-506446L shows the following components as within the scope of license renewal. However, these components are not listed in Table 2.3.3-15 as a component type subject to an AMR. These components are passive and long-lived components. Clarify whether these components are included with another component type. If not, explain why they are not included in Table 2.3.3-15 in accordance with the requirements of 10 CFR 54.21(a)(1), or update the corresponding tables to include these components.

- a. Intake silencers QSR43F503A-A, QSR43F503C-A, QSR43F503E-B, QSR43F503B-B, and QSR43F503D-B at locations G10, G9, G7 and G3, respectively
- b. Large and small mufflers (silencers) QSR43F502A-A, QSR43F502E-B, and QSR43F502B-B, QSR43F503C-A, and QSR43F503D-B at locations C10, C6, C4, E9, and E4, respectively
- c. Expansion joints at locations E10, E9, E7, E5, and E3

**Response**

(This revised response is in reference to the telephone conference of May 24, 2004 between SNC and the NRC staff and supersedes the previous SNC response in letter NL-04-0678 dated April 22, 2004.)

The components listed above are included in LRA Table 2.3.3.15. The "Ducts and Fittings" component type is used to model the intake silencers, mufflers, and expansion joints. The expansion joints are constructed of stainless steel. Note that, as described in the response to RAI 2.2-5a, the rubber boot installed on the intake side of the diesel generator was omitted from the table. This flexible connector has a pressure boundary intended function. For more information on the rubber boot, please refer to the response to RAI 2.2-5a.

**RAI B.5.8-1 – Supplemental Response:**

This supplemental response is in reference to the telephone conference of June 7, 2004 between SNC and the NRC staff in regards to the SNC response to RAI B.5.8-1 provided in letter NL-04-0715 dated April 29, 2004. In the telephone conference, the NRC staff requested SNC affirm that the future action commitment list will be revised to include the commitment made in the response to RAI B.5.8-1.

In response to RAI B.5.8-1, SNC stated:

FNP FSAR Supplement Appendix A.2.18, NiCrFe Component Assessment Program, will be revised to add the following text:

FNP will continue to participate in industry initiatives (such as the Westinghouse Owners Group and the EPRI Materials Reliability Program). Susceptibility rankings and program inspection requirements will be consistent with the latest version of the EPRI Materials Reliability Program safety assessment regarding Alloy 82 / 182 pipe butt welds or its successors.

SNC will submit an inspection plan for the NiCrFe Component Assessment Program for NRC review and approval at least 24 months prior to entering the periods of extended operation for the FNP units.

This supplemental response clarifies that the "Farley Nuclear Plant – License Renewal Future Action Commitment" list will be revised accordingly.