November 6, 2003

Mr. J. B. Beasley, Jr.
Vice President - Farley Project
Southern Nuclear Operating
Company, Inc.
Post Office Box 1295
Birmingham, Alabama 35201-1295

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2 RE: QUALITY ASSURANCE PROGRAM CHANGE (TAC NOS. MB9988 AND MB9989)

Dear Mr. Beasley:

By letter dated July 8, 2003, as supplemented by letter dated August 29, 2003, you identified proposed changes to the Quality Assurance Program (QPA) described in the Joseph M. Farley Nuclear Plant, Units 1 and 2 (FNP), Updated Final Safety Analysis Report (UFSAR), Chapter 17. These changes to the FNP QAP were submitted in accordance with the provisions of Title10 *Code of Federal Regulations* (10 CFR) 50.54(a)(4). Pursuant to 10 CFR 50.54(a)(4), you identified changes in the Q-List of UFSAR, Chapter 17 that constitute as a reduction in commitment and, therefore, requires Nuclear Regulatory Commission (NRC) approval prior to implementation. These changes reduce the level of detail of some commitments in the QAP for Q-List requirements of certain plant equipment. The August 29, 2003, letter provided responses to the NRC staff's request for additional informatin contained in our letter dated August 11, 2003.

We have reviewed and evaluated the information provided by you in your July 8, and August 29, 2003, submittals and we have determined that the proposed alternatives are acceptable. The reductions in commitments continue to satisfy the standards and regulations, and are, therefore, acceptable. Specifically, the NRC staff has determined that the equipment discussed in the enclosed Safety Evaluation did not meet the definition of safety-related, as defined in ANSI N18.7-1972 or the FNP UFSAR Chapter 17.3. Also, you stated in your submittals that any special treatment requirements would not be affected by the proposed changes and that the changes do not affect any other commitments made to the NRC related to the specified equipment. Therefore, the NRC staff finds the proposed changes to remove the specific equipment from the QPA Q-list acceptable.

Sincerely,

/RA/
Frank Rinaldi, Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

Enclosure: As stated

cc w/encl: See next page

November 6, 2003

Mr. J. B. Beasley, Jr.
Vice President - Farley Project
Southern Nuclear Operating
Company, Inc.
Post Office Box 1295
Birmingham, Alabama 35201-1295

SUBJECT: JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2 RE: QUALITY ASSURANCE PROGRAM CHANGE (TAC NOS. MB9988 AND MB9989)

Dear Mr. Beasley:

By letter dated July 8, 2003, as supplemented by letter dated August 29, 2003, you identified proposed changes to the Quality Assurance Program (QPA) described in the Joseph M. Farley Nuclear Plant, Units 1 and 2 (FNP), Updated Final Safety Analysis Report (UFSAR), Chapter 17. These changes to the FNP QAP were submitted in accordance with the provisions of Title10 *Code of Federal Regulations* (10 CFR) 50.54(a)(4). Pursuant to 10 CFR 50.54(a)(4), you identified changes in the Q-List of UFSAR, Chapter 17 that constitute as a reduction in commitment and, therefore, requires Nuclear Regulatory Commission (NRC) approval prior to implementation. These changes reduce the level of detail of some commitments in the QAP for Q-List requirements of certain plant equipment. The August 29, 2003, letter provided responses to the NRC staff's request for additional informatin contained in our letter dated August 11, 2003.

We have reviewed and evaluated the information provided by you in your July 8, and August 29, 2003, submittals and we have determined that the proposed alternatives are acceptable. The reductions in commitments continue to satisfy the standards and regulations, and are, therefore, acceptable. Specifically, the NRC staff has determined that the equipment discussed in the enclosed Safety Evaluation did not meet the definition of safety-related, as defined in ANSI N18.7-1972 or the FNP UFSAR Chapter 17.3. Also, you stated in your submittals that any special treatment requirements would not be affected by the proposed changes and that the changes do not affect any other commitments made to the NRC related to the specified equipment. Therefore, the NRC staff finds the proposed changes to remove the specific equipment from the QPA Q-list acceptable.

Sincerely,
/RA/
Frank Rinaldi, Project Manager, Section 1
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-348 and 50-364

Enclosure: As stated

cc w/encl: See next page
DISTRIBUTION:

PUBLIC	BBonser, RII	Dthatcher	WBeckner
PDII-1 R/F	ACRS	FRinaldi	PPrescott
GHill (4)	OGC	CHawes	JNakoski

ADAMS: ML033100003
DOCUMENT NAME: C:\ORPCheckout\FileNET\ML033100003.wpd

OFFICE	PDII-1/PM	PDII-1/LA	PDII-1/SC
NAME	FRinaldi	CHawes	JNakoski
DATE	10/27/03	10/27/03	10/30/03

OFFICIAL RECORD COPY

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

REVISION TO QUALITY ASSURANCE PROGRAM

SOUTHERN NUCLEAR OPERATING COMPANY, INC.

JOSEPH M. FARLEY NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-348 AND 50-364

1.0 INTRODUCTION

By letter dated July 8, 2003 (Ref. 1), as supplemented by letter dated August 29, 2003 (Ref. 11) Southern Nuclear Operating Company, Inc. requested approval of proposed changes to the Quality Assurance Program (QAP) described in the Farley Nuclear Plant, Units 1 and 2, (FNP) Updated Final Safety Analysis Report (UFSAR), Chapter 17. The changes would remove certain plant equipment from the QAP Q-List. The affected equipment would be classified as nonsafety-related rather than safety-related. Some changes constitute reductions in commitments to Title 10 of the *Code of Federal Regulations* (10 CFR) 50.54(a)(4) that requires Nuclear Regulatory Commission (NRC) staff review and approval. The licensee is making these changes to rectify differences found during the FNP License Renewal 10 CFR 54.4 scoping effort.

The proposed changes are listed below:

1.1 Remove item "17.3.3.A.1.f Irradiation Sample Holder," from the UFSAR Q-List.

1.2 Add the following clarification to the UFSAR Section 17.3.3.A.7d.

> d. Pressurizer spray nozzle **assembly (RCPB** [reactor coolant pressure boundary] **components only; spray head is NNS** [nuclear nonsafety]**)**

1.3 Revise UFSAR Q-List, Section 17.3.3.I to delete items 1-4.

> I. Waste Disposal System
>
> 1. Waste disposal piping system up to and including the first isolation valve on components listed below.
> 2. Waste gas decay tanks
> 3. Waste holdup tank
> 4. Floor drain tank

1.4 Revise UFSAR Q-List Section 17.3.4.K.4 to remove "and fire stops."

2.0 REGULATORY EVALUATION

UFSAR Chapter 17.2, "Operations Quality Assurance Program (OQAP)" states that the OQAP for FNP satisfies the quality assurance requirements of Appendix B of 10 CFR Part 50 as delineated in Regulatory Guide (RG) 1.33, "Quality Assurance Program Requirements (Operation)," dated November 3, 1972.

RG 1.33 requires compliance with American National Standards Institute (ANSI) N18.7-1972, "Administrative Controls for Nuclear Power Plants." Compliance with these requirements constitutes administrative controls for the operation of nuclear power plants in a manner that is consistent with applicable criteria for quality assurance. ANSI N18.7-1972 defines safety-related as those plant features necessary to assure the integrity of the reactor coolant pressure boundary, the capability to shut down the reactor and maintain it in a safely shut down condition, or the capability to prevent or mitigate the consequences of accidents which could result in off-site exposures comparable to the guideline exposures of 10 CFR Part 100.

UFSAR Chapter 17.3, "Joseph M. Farley Nuclear Plant Quality Assurance Q-List," states that the Q-List consists of those systems, structures and components (SSCs) that prevent or mitigate the consequences of postulated accidents that could cause undue risk to the health and safety of the public.

The NRC staff finds that the proposed revisions to the QAP identified in the submittal that would remove the SSCs from the Q-List do not meet the applicable criteria of ANSI N18.7-1972, which defines safety-related plant features as those necessary to assure the integrity of the reactor coolant pressure boundary -- the capability to shut down the reactor and maintain it in a safely shut down condition, or the capability to prevent or mitigate the consequences of accidents which could result in off-site exposures comparable to the guideline exposures of 10 CFR Part 100.

3.0 TECHNICAL EVALUATION

3.1 Irradiation Sample Holder

The licensee requested approval to remove from page 17.3-3, item 17.3.3A.1.f, "Irradiation Sample Holder," from the UFSAR Q-List. The irradiation sample holder was not considered safety-related in Westinghouse WCAP-14577, "License Renewal Evaluation: Aging Management for Reactor Internals," Revision 1, dated October 2000. The NRC staff requested that the Westinghouse Owners Group (WOG) review the internal components against a specific set of intended functions. WCAP-14577, Table 2-2, "Summary of Reactor Internals Subcomponents Requiring Aging Management Review," documented that the irradiation specimen guide did not require an aging management review. Aging management review is described in 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." Part 54.4(a)(1), "Scope," defines safety-related SSCs as those relied upon to remain functional during and following design-basis events to ensure the following functions: (1) the integrity of the reactor coolant pressure boundary, (2) the capability to shut down the reactor and maintain it in a safe shut down condition; or, (3) the capability to prevent or mitigate the consequences of accidents that could result in potential offsite exposures comparable to those referred to in 10 CFR 50.34(a)(1), 10 CFR 50.67(b)(2), or 10 CFR 100.11, as applicable.

This definition is comparable to the definition for safety-related SSCs supplied in ANSI N18.7-1972.

The NRC staff agreed with the conclusion documented in WCAP-14577 that the irradiation sample holder did not require an aging management review. This conclusion was documented in Section 2.1.2 of the Safety Evaluation Report, "Acceptance for Referencing of Generic License Renewal Program Topical Report entitled, 'License Renewal Evaluation: Aging Management for Reactor Internals', WCAP 14577, Revision 1, October 2000," dated February 10, 2001. As part of the evaluation the NRC staff determined whether structures, systems or components within the scope of license renewal had been properly identified. The NRC staff compared the information in the topical report with that for similar pressurized water reactor systems to ensure that the list was complete and accurate. The NRC staff found no omissions in the list of SSCs and, therefore, concluded that there was reasonable assurance that the report had adequately identified vessel internals and associated supporting structures and components within the scope of license renewal subject to aging management review in accordance with 10 CFR Part 54.

In a request for additional information (RAI), dated August 11, 2003, the NRC staff inquired if the bases for the acceptability of this change would impact other design requirements and codes classifications of the component. This included commitments to RG 1.29, "Seismic Design Classification." The licensee responded in their letter dated August 29, 2003, that there were no changes to the irradiation sample holder design requirements associated with the functional evaluation. The original design specifications would be used for purchase of any replacement parts required in the future. The requested change only dealt with the incorrect safety-related functional classification of the irradiation sample holder.

The NRC staff has concluded that the irradiation sample holder did not perform a safety-related function as defined in ANSI N18.7-1972, and FNP UFSAR Sections 17.2 and 17.3. Therefore, elimination of the irradiation sample holder from the Q-List is acceptable.

3.2 Pressurizer Spray Nozzles

The licensee requested approval to clarify page 17.3-4, Section 17.3.3.A.7.d, "Pressurizer spray nozzles," of the UFSAR Q-List by adding "assembly (RCPB components only; spray head is NNS)." The Westinghouse Licensing Renewal Generic Technical Report for Pressurizers, WCAP-14574, "License Renewal Evaluation: Aging Management Evaluation for Pressurizers," dated July 1996, concluded the pressurizer spray nozzle thermal sleeve and safe-end components perform a safety-related function (i.e., form part of the reactor coolant pressure boundary), and the spray head, spray head coupling, and spray head locking bar do not. The FNP specific license renewal scoping evaluation has concluded that the reactor coolant system pressure control function of the pressurizer was not relied on to prevent or mitigate the consequences of design basis events (safety-related); therefore, the passive and long-lived components (e.g., spray head) that perform the pressure control function, but do not perform the reactor pressure boundary function, are nonsafety-related. Additionally, the NRC staff had requested WOG to verify whether any of the applicable plants rely on the pressure control function of the pressurizer to prevent or mitigate the consequences of design-basis events. This additional information from WOG was requested to verify that components such as the spray head, which sprays subcooled water inside the pressurizer to control reactor coolant system pressure, were appropriately excluded from the aging management review. WOG

confirmed that none of the applicable plants rely on the pressure control function of the pressurizer to prevent or mitigate the consequences of design-basis events, and therefore need not be within the scope of license renewal. The NRC staff determined that the safety classification of the component, as defined in 10 CFR Part 54.4, was consistent with the component's stated function.

The NRC staff agrees with the conclusion that was documented in Section 3.1 of the Safety Evaluation Report, "Acceptance for Referencing of Generic License Renewal Program Topical Report Entitle(d), 'License Renewal Evaluation: Aging Management Evaluation for Pressurizers', WCAP 14574, Revision 0, July 1996," dated October 26, 2000. This met the definition of components required to maintain the reactor coolant pressure boundary, as defined by 10 CFR 54.4(a)(1) of the license renewal rule. The NRC staff has determined that the safety classification, as defined in 10 CFR Part 54.4 of the component, is consistent with the component's stated function.

In an RAI, dated August 11, 2003, the NRC staff inquired if the bases for the acceptability of this change would impact other design requirements and codes classifications of the component. For example, UFSAR Table 3.2-1 lists several design requirements, including codes and standards classifications for the entire pressurizer. Table 3.2-1 lists the pressurizer as being classified as meeting the American Society of Mechanical Engineers, Section III and seismic requirements. The licensee responded in a letter dated August 29, 2003, that there were no changes to the design requirements associated with the functional evaluation for the spray head, spray head coupling, or the spray head locking bar. The original design specifications would be used for purchase of any replacement parts required in the future. The requested change only dealt with the incorrect safety-related functional classification of the components.

The NRC staff has concluded that the pressurizer spray nozzle did not perform a safety-related function as defined in ANSI N18.7-1972 and FNP UFSAR Sections 17.2 and 17.3. Therefore, elimination of the pressurizer spray nozzle from the Q-List is acceptable.

3.3 Waste Disposal System

The licensee requested approval to revise page 17.3-7, Section 17.3.3.I, to delete items 1 through 4 of the Q-List in the UFSAR. The licensee has determined that these items (i.e., waste gas decay tanks, waste holdup tank, the floor drain tank, and the attached piping for each of these tanks up to the first isolation valve) are nonsafety-related components.

The components were originally designed and installed as safety-related, but were downgraded to non NNS by Amendment 73 to the UFSAR. Amendment 73 reviews were documented in NUREG-0117, Supplement No. 4, "Safety Evaluation Report related to the Operation of Joseph M. Farly Nuclear Plant Unit 2," dated September 1980. The NNS classification for this equipment is detailed in UFSAR Table 3.2-1. The design codes and standards (including seismic qualification requirements) that apply to the equipment are also identified in UFSAR Table 3.2-1. Amendment 73, in the table of revisions, stated, "Revised Table 3.2-1 to reclassify portions of the liquid and gaseous waste processing system in accordance with NUREG-0491 and RG 1.143, Revision 1, with the exception of the seismic design criteria given in regulatory position C.5. The components, systems, and structures are designed to the seismic design criteria given in UFSAR Section 3.7."

The downgrade of this equipment was based on the provisions presented in RG 1.143, "Design Guidance for Radioactive Waste management System, Structures and Components Installed in Light-Water-Cooled Nuclear Power Plants," Revision 1, dated October 1979. RG 1.143 details design guidance acceptable to the NRC staff related to seismic and quality assurance provisions (including design standards) for radioactive waste management SSCs. RG 1.143 states, "Since the impact of these systems on safety is limited, the extent of control required by Appendix B to 10 CFR Part 50 is similarly limited." Table 1 of RG 1.143 delineates that 10 CFR Part 50, Appendix B criteria are not required on these components. Therefore, the change is consistent with the NRC staff position in RG 1.143. The NRC staff has determined that the safety classification of the component is consistent with the component's stated function.

3.4 Fire Stops

The licensee requested approval to revise page 17.3-12, item 17.3.4.K.4, "Containment electrical penetrations and fire stops." The license has proposed revising the UFSAR Q-List to delete, "and fire stops," from item 17.3.4.K.4. The licensee stated that the fire stops do not perform safety-related functions and, therefore, can be deleted from the Q-List. The applicability of quality assurance requirements to fire protection and other select nonsafety-related activities is addressed in the UFSAR in Section 17.2, page 17.2-4. The licensee recognizes that the safety importance of fire stops and fire protection in general results in the need to apply some quality assurance requirements, commonly referred to as augmented quality. As stated in the UFSAR, the Operations Quality Assurance Program is applied to fire protection items, as described in the Operations Quality Assurance Program Manual.

Standard Review Plan, Section 9.5.1, "Fire Protection Program," and Section 6.a., "Program Changes and Amendments," state that if the licensee has adopted the standard license condition and incorporated the fire protection program in the UFSAR, the licensee may make changes to the approved fire protection program without prior approval of the NRC Commission, only if those changes would not adversely affect the ability to achieve and maintain safe shutdown in the event of a fire. The licensee has stated that the clarification to the UFSAR Q-List does not change the fire stops quality requirements that are in place at FNP. The requested change is only in regard to the incorrect safety-related functional classification of the fire stops.

The NRC staff has determined that deleting fire stops from the UFSAR Q-List is consistent with the regulations. Therefore, there is no change in QA commitments as a result of deleting fire stops from the Q-List. The current level of quality assurance is maintained.

3.5 Conclusion

The NRC staff has determined that the specific equipment discussed in this evaluation does not meet the definition of safety-related, as defined in ANSI N18.7-1972 or the FNP UFSAR, Chapter 17.3. Also, the licensee has stated in its submittal and in the subsequent response to NRC staff RAIs that any special treatment requirements would not be affected by the proposed changes and that the changes do not affect any other commitments made to the NRC related to the specified equipment. Therefore, the NRC staff finds the proposed changes to remove the specific equipment from the quality assurance Q-list acceptable.

4.0 REFERENCES

1. Southern Nuclear Operating Company (J.B. Beasley, Jr.) letter to USNRC filing UFSAR QA Q-List changes, dated July 8, 2003

2. Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)," Revision 2

3. Farley Nuclear Plant Final Safety Analysis Report, Chapter 17.0, "Quality Assurance"

4. Alabama Power Company, (F.L. Clayton, Jr.) letter to USNRC filing amendment 73 to the FSAR, dated July 8, 1980

5. NUREG-0117, Supplement No. 4, "Safety Evaluation Report related to the Operation of Joseph M. Farly Nuclear Plant Unit 2," dated September 1980

6. Regulatory Guide 1.143, "Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water-Cooled Nuclear Power Plants," Revision 1

7. WCAP-14577, "License Renewal Evaluation: Aging Management for Reactor Internals," Revision 1, dated October 2000

8. WCAP-14574, "License Renewal Evaluation: Aging management Evaluation for Pressurizers," dated July 1996

9. NRC letter to R.A. Newton (Westinghouse Owners Group), "Acceptance for Referencing of Generic License Renewal Program Topical Report Entitled, 'License Renewal Evaluation: Aging Management for Reactor Internals', WCAP-14577, Revision 1, October 2000," dated February 10, 2001

10. NRC Safety Evaluation Report on WCAP-14574,"License Renewal Evaluation: Aging management Evaluation for Pressurizers," October 26, 2000

11. Southern Nuclear Operating Company (J.B. Beasley, Jr.) letter to USNRC Response to a Request for Additional Information, dated August 29, 2003

12. USNRC letter to Southern Nuclear Operating Company (J.B. Beasley, Jr.) Request for Additional Information, dated August 11, 2003

Principal Contributor: P. Prescott

Date: November 6, 2003

Joseph M. Farley Nuclear Plant

cc:

Mr. Don E. Grissette
General Manager -
Southern Nuclear Operating Company
Post Office Box 470
Ashford, Alabama 36312

William D. Oldfield
SAER Supervisor
Southern Nuclear Operating Company
P. O. Box 470
Ashford, Alabama 36312

Mr. B. D. McKinney, Licensing Manager
Southern Nuclear Operating Company
Post Office Box 1295
Birmingham, Alabama 35201-1295

Mr. M. Stanford Blanton
Balch and Bingham Law Firm
Post Office Box 306
1710 Sixth Avenue North
Birmingham, Alabama 35201

Mr. J. D. Woodard
Executive Vice President
Southern Nuclear Operating Company
Post Office Box 1295
Birmingham, Alabama 35201

State Health Officer
Alabama Department of Public Health
434 Monroe Street
Montgomery, Alabama 36130-1701

Chairman
Houston County Commission
Post Office Box 6406
Dothan, Alabama 36302

Resident Inspector
U.S. Nuclear Regulatory Commission
7388 N. State Highway 95
Columbia, Alabama 36319