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

Edwin I Hatch Nuclear Plant  
Joseph M. Farley Nuclear Plant  
Vogtle Electric Generating Plant

Response to Request for Additional Information Regarding Proposed Change to the  
Quality Assurance Program

Ladies and Gentlemen:

By letter dated December 23, 2004, Southern Nuclear Operating Company (SNC) requested a revision to the Quality Assurance Program for the Edwin I. Hatch Nuclear Plant, Joseph M. Farley Nuclear Plant, and Vogtle Electric Generating Plant. Following discussions with SNC staff on March 28, 2005, the NRC requested additional information by letter dated April 5, 2005. Enclosed are the NRC questions and the SNC responses to those questions.

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

Sincerely,

Jeffrey T. Gasser

JTG/LPH/sdl

- Enclosures:
1. SNC Response to NRC Questions
  2. Referenced FSAR Sections in SNC Response to NRC Question 1
  3. Referenced Chart in SNC Response to NRC Question 2

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cc: Southern Nuclear Operating Company  
Mr. L. M. Stinson, Vice President – Plant Farley  
Mr. H. L. Sumner, Jr., Vice President – Plant Hatch  
Mr. D. E. Grissette, Vice President – Plant Vogtle  
Mr. J. R. Johnson, General Manager – Plant Farley  
Mr. G. R. Frederick, General Manager – Plant Hatch  
Mr. W. F. Kitchens, General Manager – Plant Vogtle  
RType: CFA04.054; CHA02.004; CVC7000; LC# 14254

U. S. Nuclear Regulatory Commission  
Dr. W. D. Travers, Regional Administrator  
Mr. S. E. Peters, NRR Project Manager – Farley  
Mr. C. Gratton, NRR Project Manager – Hatch  
Mr. C. Gratton, NRR Project Manager – Vogtle  
Mr. C. A. Patterson, Senior Resident Inspector – Farley  
Mr. D. S. Simpkins, Senior Resident Inspector – Hatch  
Mr. G. J. McCoy, Senior Resident Inspector – Vogtle

## **ENCLOSURE 1**

### **Response to Request for Additional Information Regarding Proposed Change to the Quality Assurance Program**

#### **SNC RESPONSE TO NRC QUESTIONS**

##### **NRC Question 1**

Administrative Letter (AL) 95-06 establishes the basis for increasing audit intervals to a maximum of 24 months by implementation of a performance-based schedule (schedule adjusted according to objective evaluation of plant functional area performance). AL 95-06 cites exceptions to the allowable use of performance-based audit intervals as (1) those audit intervals defined by regulations, such as for emergency and security plans, and (2) triennial audits of fire protection plans, conducted by outside qualified fire consultants.

Change 3 of the submittal proposes to extend audit intervals to 24 months. However, the submittal does not address a performance-based schedule to support the change. A description of the performance-based scheduling process should be submitted, with a complementary commitment in the QA program description for each site.

##### **SNC Response to NRC Question 1**

Southern Nuclear Operating Company (SNC) implements a performance-based audit scheduling process which supports a maximum audit frequency of 24 months for those audits identified by NRC Administrative Letter (AL) 95-06. This is discussed in the Plant Hatch FSAR, Section 17.2.18.1, the Plant Vogtle FSAR, Section 17.2.18, and the Plant Farley FSAR, Section 17.2.18. Copies of these FSAR sections are attached (Enclosure 2) for convenience.

##### **NRC Question 2**

Change 2 proposes to substitute a standardized list of audits in place of audits currently identified in Section 17.2.18 of the QA program descriptions for Hatch and Vogtle and Table 17.2-2 for Farley Nuclear Plant. The submittal states that audit topics not specifically identified in the standardized list would be covered under the generic category of audits required to meet Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants."

It is not clear that the deleted audit topics fall under the scope of 10 CFR Part 50, Appendix B (e.g., balance-of-plant instrument calibration, radioactive material packages, fuel handling and special nuclear materials, etc.). For each deleted audit topic, identify the Appendix B criteria under which the topic would be covered. For deleted audit topics not falling under the scope of Appendix B, provide a basis for the deletion.

##### **SNC Response to NRC Question 2**

The audit topics which are proposed for deletion from the QA description are listed in the attached chart (Enclosure 3) along with the Appendix B criteria under which the topic will be evaluated. In addition, four audit topics are listed where the audit requirements are governed by unique regulations. Deleted audit topics apply to Plant Hatch and Plant Vogtle only. Plant Farley is not affected because the audit topics listed in the current FSAR are the same as the proposed lists for Plant Hatch and Plant Vogtle.

## **ENCLOSURE 1**

### **Response to Request for Additional Information Regarding Proposed Change to the Quality Assurance Program**

#### **SNC RESPONSE TO NRC QUESTIONS**

The listed audit topics where the "Basis for Audit" is 10 CFR 50, Appendix B, are operational phase activities which are considered by Southern Nuclear to come under the requirements of ANSI N18.7-1976, Section 4.5, Audit Program, with a maximum audit interval of 24 months. These audit topics are consistent with the requirement for auditing the performance of all activities required to meet 10 CFR 50, Appendix B.

The four listed audit topics where the audit requirement is governed by a unique regulation do not need to be listed in the QA description since the applicable regulation provides specific guidance on the audit requirement. Further discussion on each of these audits is as follows:

FFD – the audit of the FFD program will continue to be performed on a nominal annual basis as required by 10 CFR 26. This is currently listed in the Plant Vogtle QA description only.

SNM – the audit of special nuclear material control will continue to be performed as required by the governing regulation 10 CFR 74.31(c)(8).

Industrial Safety – The audit of industrial safety (energy control) will continue to be performed on an annual basis as required by 29CFR1910. This is currently listed in the Plant Vogtle QA description only.

Radioactive Material Packages – The audit of components of packaging that are important to safety is governed by 10 CFR 71.137. This regulation requires audits of the QA program as described by 10 CFR 71, Subpart H. Subpart H is based on the 18 criteria of Appendix B and Southern Nuclear applies the applicable portions of Appendix B in the conduct of the audit. No audit interval is stated in the regulation. Therefore, Southern Nuclear considers the maximum audit interval of 24 months applies. This audit topic is currently listed in the Plant Hatch QA description only.

#### **NRC Question 3**

Regulations establish audit requirements for certain programs, such as the station security plan or emergency response plan. Change 3 of the submittal proposes changes in the audit intervals for the Security Plan, Radiological Environmental Monitoring Program, and the Environmental Protection Plan.

Confirm that audit requirements in the revised QA program descriptions are consistent with these plans and applicable state and federal regulations.

#### **SNC Response to NRC Question 3**

Southern Nuclear offers the following information in confirming that required audit intervals for the Security Plan, Radiological Environmental Monitoring Program, and the Environmental Protection Plan for each plant are consistent with these plans and applicable state and federal regulations.

**ENCLOSURE 1**  
**Response to Request for Additional Information Regarding Proposed Change to the**  
**Quality Assurance Program**

**SNC RESPONSE TO NRC QUESTIONS**

- a. The QA audit interval for the Security Program is being revised to be consistent with the current Southern Nuclear Security Plan. This plan was approved by the NRC on 10/29/04. Section 12 of the plan titled, "Review, Evaluation and Audit of the Security Program", calls for an audit at least every 24 months by individuals independent of both security program management and implementing personnel. The audit requirements in the revised QA program description are therefore, consistent with the approved security plan.
  
- b. Southern Nuclear is not aware of any specific QA audit interval specified in the regulations for the radiological environmental monitoring program (REMP). The Offsite Dose Calculation Manuals for each plant govern the REMP program but do not discuss QA audit requirements. The QA audit of REMP is currently performed on an annual basis under the requirements of 10 CFR 50, Appendix B. Since recent audit results have been satisfactory, Southern Nuclear believes that the application of performance based audit scheduling considerations justifies a maximum extension of the audit interval to 24 months. The audit requirement in the revised QA program description is, therefore, consistent with the ODCM and governing regulation.
  
- c. The Environmental Protection Plans (non-radiological) for each plant do not specify an audit interval. The section in each plan titled, "Review and Audit" states that review and audit of compliance with the Environmental Protection Plan shall be provided. This audit is currently performed on an annual basis and recent audit results have been satisfactory. Lacking any known audit interval requirement, including state NPDES permits, Southern Nuclear believes the application of performance based audit scheduling considerations justifies a maximum extension of this audit interval to 24 months. The audit requirement in the revised QA program description is, therefore, consistent with the Environmental Protection Plan and state regulations.

**ENCLOSURE 2**

**Edwin I. Hatch Nuclear Plant  
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**Referenced FSAR Sections in SNC Response to NRC Question 1**

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process will be described in written procedures and shall evaluate and document the results of the demonstration. Regardless of the methods used for the demonstration, the prospective Lead Auditor shall have participated in at least one nuclear quality assurance audit within the year preceding the individual's effective date of qualification. Upon successful demonstration of the ability to effectively implement the audit process and effectively lead audits, and having met the other provisions of Section 2.3 of ANSI N45.2.23-1978, the individual may be certified as being qualified to lead audits.

A mechanism shall be established for development, review, and approval of audit procedures and checklists. Audit results shall be submitted to appropriate management responsible for the activity being audited. All deficiencies uncovered by audits will be resolved by the organization that performed the activity. In addition, the organization will identify the scope, cause, and effect of the noncompliance. The same organization that performed the original audit shall reaudit to verify satisfactory resolution. Periodic audits of activities shall pay particular attention to areas where noncompliances were previously found.

Supplementary audits will be performed when significant changes have been made to the OQAP, when it is suspected that the

quality of an item is in jeopardy as a result of a noncompliance in the OQAP, when a systematic independent assessment of the OQAP's effectiveness is necessary, or when it is necessary to verify implementation of required corrective action.

Operational QA audits will be conducted by QA, which is an independent organization under the direction of the quality assurance manager, who reports to the executive vice president. The organization is shown on figure 17.2-1. It consists of both onsite and offsite groups. The OQA audit program will be designed to systematically audit all areas within the OQA program. It will include the audit of various activities such as maintenance and inspection actions as they develop and occur during the life of the plant.

The onsite QA staff, as shown in table 17.2-1, will function under the supervision of the QAS to carry out a continuing, comprehensive auditing program which is coordinated with plant activities. The offsite QA staff will not only participate in this audit program, but also will carry out a system of supplementary audits which will be designed to ensure that all areas are audited with adequate frequency and which will verify the effectiveness of auditing conducted by the onsite QA staff. The offsite QA staff will audit quality-related activities of SNC Technical Support, and other offsite groups which provide support to the operation of the FNP. Audit findings will be reported to the nuclear plant general manager for onsite audits and to the vice president-project (Farley). Reaudit of deficient areas will be performed on a timely basis. Audit and reaudit findings will be analyzed and summarized as they accumulate to identify trends and to evaluate the effectiveness of the OQA program. These summaries will be included in periodic reports of QA auditing activities and findings made to the SRB and the vice president-project (Farley).

The QA staff will also conduct audits of SNC safety-related activities.

The vice president-project (Farley) will provide for an independent audit of QA, approximately annually, to verify its satisfactory performance of assigned responsibilities in the OQA program. Both onsite and offsite QA staffs will be audited. The audit results will be reported to the quality assurance manager, the SRB, and the vice president-project (Farley).

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- Design changes and plant modification control.
- Departmental training programs once per 12 months.
- Maintenance programs.
- Fuel handling and special nuclear material control once per 12 months.
- Inservice inspection program.
- Procedure control and review.
- Records management and document control.
- Fire protection program.
- Corrective action programs once per 6 months.
- Radioactive material packages (procurement, maintenance, repair, and use).
- Computer software.

The audit program is regularly reviewed by the QAM to ensure implementation of requirements in the QA manual, chapter 17, and other regulatory documents. Unless otherwise noted, the above areas are scheduled for audit at least once per 24 months to ensure compliance with the criteria of 10 CFR 50, Appendix B, unless more frequent audits are required by one or more of the following conditions:

- When significant changes are made in functional areas of the QA program such as significant reorganization or procedure revisions.
- When there is evidence that the performance or reliability of safety-related items is in jeopardy due to deficiencies or nonconformances in the QA program.
- When a systematic, independent assessment of program effectiveness is necessary.
- When it is necessary to verify implementation of required corrective actions.

### **17.2.18.2 Safety Review Board Audit Cognizance**

In addition to the review function of the SRB, audits of facility activities are performed under the cognizance of the SRB. These audits encompass activities detailed in subsection 13.4B.6.

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- F. The audits include the evaluation of work areas, activities, and processes and the review of documents and records.
- G. The following types of audits shall be performed:
1. Audits to provide a comprehensive independent verification and evaluation of quality-related procedures and activities to ensure that they are adequate and effectively comply with the OQAP requirements. These audits are performed under the direction of the QA manager (QAM).
  2. External audits performed or delegated by the QAM on principal contractors and suppliers performing activities on safety-related structures, systems, and components. These audits include verification and evaluation of their quality assurance program, procedures, and activities to ensure that they are adequate and effectively comply with all aspects of the OQAP and procedure requirements.
- H. Audits are regularly scheduled on the basis of status and safety importance of the activities being performed; they are initiated early enough to ensure effective quality. Audit schedule changes reflecting more frequent audits are required by one or more of the following conditions:
1. When significant changes are made in functional areas of the OQAP, such as significant reorganization or procedure revisions.
  2. When there is evidence that the performance or reliability of safety-related items is in jeopardy due to deficiencies or nonconformances in the OQAP.
  3. When a systematic, independent assessment of OQAP effectiveness is necessary.
  4. When it is necessary to verify implementation of required corrective actions.

The QA audit personnel will receive formal and on-the-job training prior to the initiation of the OQAP as outlined in this chapter. The QA organization under the QAM will implement the quality assurance audit system. Paragraph 17.2.1.3 describes the QA organization.

REV 11 5/03  
REV 10 11/01  
REV 9 5/00  
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**ENCLOSURE 3**

**Edwin I. Hatch Nuclear Plant  
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**Referenced Chart from SNC Response to NRC Question 2**

**Audit Topics Deleted from 17.2 But to be Performed  
In Compliance with 10 CFR 50, App. B, or a Specific Regulation**

Plant Vogtle	Plant Hatch	Basis for Audit	Audit Frequency	APPLICABLE 10 CFR 50, APPENDIX B CRITERIA
Effluent and Env. Monitoring		10 CFR 50, Appendix B	24 Month	I, II, IV, V, VII, XVII, XVIII
FFD		10 CFR 26	12 Month	N/A
SNM	SNM	10 CFR 74.31(c)(8)	24 Month	N/A
Health Physics and Rad Protection	Health Physics and Rad Protection	10 CFR 50, Appendix B	24 Month	I, II, IV, V, VI, VII, VIII, X, XII, XIV, XV, XVI, XVII, XVIII
Industrial Safety (energy control)		29 CFR 1910.269(d)(v)(D)	12 Month	N/A
Admin Controls and Reporting Requirements	Admin Controls and Reporting Requirements	10 CFR 50, Appendix B	24 Month	I, II, V, VI, XVI, XVII, XVIII
Fuel Handling	Fuel Handling	10 CFR 50, Appendix B	24 Month	I, II, V, VI, VIII, IX, X, XIV, XV, XVI, XVII, XVIII
Plant Chemistry	Plant Chemistry	10 CFR 50, Appendix B	24 Month	I, II, IV, V, VI, VII, XII, XV, XVI, XVII, XVIII
Materials Controls	Materials Control	10 CFR 50, Appendix B	24 Month	I, II, V, VII, VIII, X, XIII, XV
Surveillance Program	Surveillance Program	10 CFR 50, Appendix B	24 Month	I, II, V, VI, X, XIV, XVII
Quality Control	Quality Control	10 CFR 50, Appendix B	24 Month	I, II, V, VI, X, XIV, XVII
Test Equipment Cal. & Control	Measuring and Test Equipment Cal & Control	10 CFR 50, Appendix B	24 Month	I, II, V, VI, XII, XIV, XVI, XVII, XVIII
BOP Instrument Calibration	Balance of Plant Instrument Calibration	10 CFR 50, Appendix B	24 Month	I, II, V, VI, VIII, XII, XIV, XV, XVI, XVII, XVIII
Computer Codes	Computer Software	10 CFR 50, Appendix B	24 Month	I, II, III, IV, V, VI, XI, XVII, XVIII
Design Changes	Design Changes and Plant Modification Control	10 CFR 50, Appendix B	24 Month	I, II, III, IV, V, VI, XI, XVII, XVIII
Maintenance Programs	Maintenance Programs	10 CFR 50, Appendix B	24 Month	I, II, V, VI, VII, VIII, IS, X, XI, XII, XIV, XV, XVI, XVII, XVIII
Inservice Inspection Program	Inservice Inspection Program	10 CFR 50, Appendix B	24 Month	I, II, IV, V, VI, VII, VIII, IX, X, XI, XV, XVI, XVII, XVIII
	Radioactive Waste Control	10 CFR 50, Appendix B	24 Month	I, II, IV, V, VI, VII, VIII, X, XII, XIV, XV, XVI, XVII, XVIII
	Procedure Control and Review	10 CFR 50, Appendix B	24 Month	I, II, V, VI
	Records Management and Document Control	10 CFR 50, Appendix B	24 Month	I, II, VI, XVII
	Radioactive Material Packages	10 CFR 71.137 10 CFR 50, Appendix B	24 Month	I, III, V, VI, X, XIV, XV, XVI, XVII, XVIII