



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET SW SUITE 23T85
ATLANTA, GEORGIA 30303-8931**

November 19, 2003

Southern Nuclear Operating Company, Inc.
ATTN: Mr. J. B. Beasley, Jr.
Vice President
P. O. Box 1295
Birmingham, AL 35201-1295

**SUBJECT: NOTIFICATION OF JOSEPH M. FARLEY NUCLEAR PLANT - SAFETY
SYSTEM DESIGN AND PERFORMANCE CAPABILITY INSPECTION - NRC
INSPECTION REPORT 05000348/2004006 AND 05000364/2004006**

Dear Mr. Beasley:

The purpose of this letter is to notify you that the U.S. Nuclear Regulatory Commission (NRC) Region II staff will conduct a safety system design and performance capability inspection at your Joseph M. Farley Nuclear Plant during the weeks of January 26-30, 2004, and February 9-13, 2004. A team of six inspectors will perform this inspection. The inspection team will be led by Mr. McKenzie Thomas, a Senior Reactor Inspector from the NRC Region II Office. This biennial inspection will be conducted in accordance with baseline inspection program Attachment 71111.21, "Safety System Design and Performance Capability."

The inspection will evaluate the capability of installed plant equipment to detect and respond to a steam generator tube rupture event. Procedures which direct the mitigating actions for this event will also be evaluated.

During a telephone conversation on November 19, 2003, Mr. Thomas of my staff, and Mr. Phil Crone of your staff, confirmed arrangements for an information gathering site visit and the two-week onsite inspection. The schedule is as follows:

- Information gathering visit: Week of January 5-9, 2004
- Onsite inspection weeks: January 26-30, 2004 and February 9-13, 2004

The purpose of the information gathering visit is to obtain information and documentation outlined in the enclosure needed to support the inspection. Mr. Walter Rogers, a Region II Senior Reactor Analyst, may accompany Mr. Thomas during the information gathering visit to review probabilistic risk assessment data and identify risk significant components which will be examined during the inspection. Please contact Mr. Thomas prior to preparing copies of the materials listed in the Enclosure. The inspectors will try to minimize your administrative burden by specifically identifying only those documents required for inspection preparation.

During the information gathering visit, the team leader will also discuss the following inspection support administrative details: office space; specific documents requested to be made available to the team in their office space; arrangements for site access; and the availability of knowledgeable plant engineering and licensing personnel to serve as points of contact during the inspection.

SNC, Inc.

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Thank you for your cooperation in this matter. If you have any questions regarding the information requested or the inspection, please contact Mr. Thomas at (404) 562-4673 or me at (404) 562-4605.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Charles R. Ogle, Chief
Engineering Branch 1
Division of Reactor Safety

Docket Nos.: 50-348, 50-364
License Nos.: NPF-2, NPF-8

Enclosure: Information Request for the Safety System Design and
Performance Capability Inspection

cc w/encl.:
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(cc w/encl cont'd - See page 3)

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OFFICE	RII:DRS	RII:DRS	RII:DRP				
SIGNATURE	RA	RA	RA				
NAME	MThomas	JMoorman	BBonser				
DATE	11/19/2003	11/19/2003	11/19/2003	11/ /2003	11/ /2003	11/ /2003	11/ /2003
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO
PUBLIC DOCUMENT	YES NO						

OFFICIAL RECORD COPY

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML033250547.wpd

**INFORMATION REQUEST FOR THE SAFETY SYSTEM DESIGN AND
PERFORMANCE CAPABILITY INSPECTION
STEAM GENERATOR TUBE RUPTURE EVENT**

Note: Electronic media is preferred if readily available. (The preferred file format is searchable “.pdf” files on CDROM. The CDROM should be indexed and hyperlinked to facilitate ease of use. Please provide 6 copies of each CDROM submitted. Information in “lists” should contain enough information to be easily understood by someone who has a knowledge of pressurized water reactor technology.)

1. Design basis documents for the engineered safety features and other systems used to mitigate the steam generator tube rupture (SGTR) event. Design basis documents for the high, intermediate, and low voltage electrical systems that power these components. Design basis documents for pressurizer relief valves, secondary system relief valves, atmospheric dump valves and turbine bypass valves. Include performance history of these valves for the past 10 years.
2. Piping and instrumentation drawings (P&IDs) for the reactor coolant system (RCS), high pressure injection (HPI), safety injection (SI), auxiliary feedwater (AFW), chemical and volume control system, main steam and other systems used to mitigate the SGTR event. (Two paper copies are preferred for these)
3. All procedures used to implement the mitigation strategy for the SGTR event. Include alarm response procedures as well as normal, abnormal, and emergency operating procedures (EOP) as appropriate. Also include the EOP users guide and EOP setpoint document.
4. Procedures used for the operational testing of check valves in the AFW system and portions of the emergency core cooling systems used during mitigation of the SGTR event.
5. Surveillance procedures used to ensure the operability of equipment required by your Technical Specifications that is used during the mitigation of the SGTR event.
6. Summary results of the steam generator (SG) in-service inspection program.
7. List of all temporary modifications and operator work-arounds (for the past 3 years) involving any components required for detection or mitigation of a SGTR event.
8. A list of major modifications completed in the past 5 years to components or systems required for detection or mitigation of a SGTR event.
9. A list of deferred modifications for any components required for detection or mitigation of a SGTR event.
10. System descriptions and operator training modules for the SGTR event and the systems used to mitigate the event.

Enclosure

11. List of operating experience program evaluations of industry, vendor, or NRC generic issues related to a SGTR event.
12. Procedures used to sample the RCS and SGs during a SGTR event.
13. Calibration and functional testing procedures for radiation monitoring instrumentation used to detect a SGTR event (e.g. main steam line, condenser air ejector, steam generator blowdown, etc.).
14. Calculations used to support the set points in EOPs for a SGTR event.
15. Performance history of valves or support equipment used to isolate SGs in the event of a tube rupture.
16. Calibration and functional test procedures for instruments used to monitor RCS pressure, pressurizer level and pressure, SG level and pressure, RCS hot leg and cold leg temperatures, RCS subcooling, feedwater flow, steam flow, core exit temperature, HPI flow, low pressure injection flow, refueling water storage tank level, pressurizer heater status, safety relief valve position indicator, AFW flow, condensate storage tank (CST) level, makeup flow, and letdown flow.
17. Key electrical one-line drawings depicting the high, intermediate, and low voltage alternating current systems and of the direct current power systems that provide power for the pumps, valves, and instrumentation and control circuits associated with the systems that accomplish the SGTR mitigation strategy. (Two paper copies are preferred)
18. Probabilistic risk assessment (PRA) event tree for the SGTR event. A list of PRA identified system dependencies and success criteria for systems used to mitigate a steam generator tube rupture. Provide SGTR cutsets and risk achievement worths for those basic events (only assuming a SGTR initiating event).
19. A brief description of the mitigation strategy for handling the SGTR event, including operator actions and equipment used.
20. System health reports and/or other performance monitoring information for systems used to detect and mitigate the SGTR event and their power supply systems.
21. A list of condition reports and non-routine work requests initiated since 1998 related to: 1) the systems used to detect and mitigate the SGTR event and 2) inservice inspection activities of steam generator tubes.
22. Quality Assurance audits, self-assessments, and third party assessments performed on the systems used to detect and mitigate a SGTR event.
23. Maintenance Rule performance criteria for systems used to detect and mitigate the SGTR event and their electrical power systems. A list of maintenance rule failures of equipment and their power supplies that are used to detect or mitigate the SGTR event.

24. Provide a list of equipment used to mitigate a SGTR that changes state or is manually manipulated during implementation of the SGTR mitigation strategy and the indications used by plant operators to make decisions during the event.
25. Plant Technical Specifications, Bases, and Technical Requirements Manual
26. A current copy of the Updated Final Safety Analysis Report.
27. Procedures that provide implementation guidance for the following programs: Corrective Action Program, Maintenance Rule Program, and Operating Experience Program.