



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II**

**SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET SW SUITE 23T85  
ATLANTA, GEORGIA 30303-8931**

**December 19, 2000**

Tennessee Valley Authority  
ATTN: Mr. J. A. Scalice  
Chief Nuclear Officer and  
Executive Vice President  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

**SUBJECT: SAFETY SYSTEM DESIGN AND PERFORMANCE CAPABILITY INSPECTION  
NRC INSPECTION REPORT NOS. 50-259, 260, 296/2001-06**

Dear Mr. Scalice:

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 Browns Ferry facility during February - March, 2001. A team of five inspectors will perform the inspection. The inspection team will be lead by Mr. J. Lenahan, a senior reactor inspector from the NRC Region II Office. The inspection will be conducted in accordance with baseline Inspection Procedure 71111.21, Safety System Design and Performance Capability.

The inspection objective will be to evaluate the capability of the emergency diesel generators and support systems, as well as other related systems, to perform the functions required to mitigate a loss of offsite power (LOOP)/station blackout (SBO) event.

During a telephone conversation on December 14, 2000, Mr. J. Lenahan of my staff, and Mr. J. Davenport 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 22, 2001
- Onsite inspection: February 19 - 23 and March 5 - 9, 2001

The purpose of the information gathering visit is to obtain information and documentation outlined in the enclosure needed to support the inspection. Please contact Mr. Lenahan 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 reactor site access; and the availability of knowledgeable plant engineering and licensing organization personnel to serve as points of contact during the inspection.

Thank you for your cooperation in this matter. If you have any questions regarding the information requested or the inspection, please contact me at (404) 562-4510, or Mr. Lenahan at (404) 562-4625.

Sincerely,

**/RA/**

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

Docket Nos. 50-259, 50-260, 50-296  
License Nos. DPR-33, DPR-52, DPR-68

Enclosure: Information Request for the Safety System Design and  
Performance Capability Inspection Loss of Offsite Power Events

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

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3

(cc w/encl cont'd)

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4

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**INFORMATION REQUEST FOR THE SAFETY SYSTEM DESIGN AND  
PERFORMANCE CAPABILITY INSPECTION:**

**LOSS OF OFFSITE POWER (LOOP)/STATION BLACKOUT (SBO) EVENTS**

Note: Electronic media is preferred if readily available (i.e., on computer disc).

- Site specific administrative procedures related to standard operation, abnormal operation, and emergency operation of the emergency diesel generators (EDGs), including support systems, and other related systems during a loss of offsite power and/or a station blackout. Other related systems include, but may not be limited to the station transformers, 4160V buses, station vital and dedicated diesel batteries, ventilation, starting air, and jacket water support systems.
- Design criteria (i.e., design basis documents) for the EDGs, in addition to support systems and interfaces for the EDGs, 4160V electrical systems, and station batteries.
- EDG Technical Specification requirements and a list of associated surveillance test/calibration procedures for the EDG and related systems.
- Copies of applicable sections of the UFSAR for the EDGs, and other related systems and copies of applicable sections of changes to the UFSAR for which have yet to be docketed.
- EDGs and other related systems piping and instrumentation drawings; one-line diagrams; electrical schematics, and wiring and logic diagrams (i.e., logic of voltage relays and load sequencing for LOOP).
- A list of engineering calculations (Electrical, Instrumentation and Controls and Mechanical/Nuclear) applicable to the EDGs, and other related systems.
- List of calculations related to meeting 10 CFR 50.63 Station Blackout rule.
- Strategy for handling LOOP/SBO events.
- A list of plant modifications to the EDGs, and other related systems implemented since 1991.
- List of current open temporary modifications and operator work arounds involving operation of the EDGs and the other related systems.
- List of Problem Evaluation Reports (PERs) initiated since 1991 affecting the EDGs and other related systems.

Enclosure

- System Health Report and Performance Trends for the EDGs and other related systems.
- Maintenance Rule Performance criteria for the EDGs and other related systems (including records for EDG station blackout target reliability).
- Summary of corrective maintenance activities, including the maintenance rule event log, performed on the EDGs and other related systems in the past 12 months.
- An index of drawings for the EDGs and other related systems.
- Self-assessment performed on EDGs and other related systems in the last 24 months.
- System description and operator training modules for the EDGs and other related systems.
- EDG nameplate data for engine and generators.
- List of Operating Experience Program evaluations of industry, vendor, or NRC generic issues related to the EDGs for the past 3 years.
- List of valves required to change position for a LOOP/SBO event.
- PRA Fault Tree Data for the 4160V buses, vital AC, EDGs, and the station vital and designated diesel batteries.
- PRA/Risk Achievement Worth (RAW) listing for the EDGs, and related support systems.
- Grid Stability Study.