



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION II

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

May 31, 2000

Virginia Electric and Power Company
ATTN: Mr. D. A. Christian
Senior Vice President - Nuclear
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

**SUBJECT: SAFETY SYSTEM DESIGN AND PERFORMANCE CAPABILITY INSPECTION
NRC INSPECTION REPORT NOS. 50-280, 281/00-07**

Dear Mr. Christian:

The purpose of this letter is to announce a safety system design and performance capability inspection at your Surry facility which is scheduled for July 24 - 28 and August 7 - 11, 2000. The inspection will be conducted using Inspection Procedure 71111.21, "Safety System Design and Performance Capability," and will be performed under the new reactor regulatory oversight program. A team of five inspectors will perform the inspection. The designated team leader, Malcolm T. Widmann, discussed the inspection plan with your staff on May 24, 2000 by phone.

The inspection objective will be to evaluate the capability of the emergency diesel generators (including their support systems), the station blackout diesel, auxiliary feedwater system, and secondary power operated relief valves and other related systems to perform the functions required to mitigate a loss of offsite power/station blackout. The team will require the information outlined in the enclosure for the emergency diesel generators and other related systems to review in preparation for the inspection. Please contact Mr. Widmann prior to preparing the requested information. This information will be needed by July 10, 2000, in order to support the inspection effort. Mr. Widmann will visit the Surry Station during the week of July 10, 2000, to initially review and collect the requested materials.

Thank you for your cooperation in this matter. If you have any questions regarding this inspection, please contact Mr. Girard at (404) 562-4644 or Mr. Widmann at (803) 345-5683.

Sincerely,

/RA/

Edward H. Girard, Acting Chief
Engineering Branch
Division of Reactor Safety

Docket Nos.: 50-280, 50-281
License Nos.: DPR-32, DPR-37

Enclosure: (See page 2)

Enclosure: Information Requested for Emergency Diesel Generators and Related Support Systems

cc w/encl:

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SIGNATURE	WIDMANN	HAGG					
NAME	M Widmann	R Haag					
DATE	5/25/00	5/25/00	6/ /00	6/ /00		6/ /0	6/ /0
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: C:\sur2000-07ssdi-ltr0.wpd

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

Enclosure

LOSS OF OFFSITE POWER (LOOP)/STATION BLACKOUT EVENTS

- Site specific administrative procedures related to standard operation, abnormal operation, and emergency operation of the EDGs (including support systems), SBO EDG (i.e., AAC EDG), 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 reserve station transformers, 4160V buses; station vital and dedicated diesel batteries; ventilation, starting air, jacket water support systems, AFW system and TDAFW pump, and secondary side PORVs.
- Design criteria (i.e., design basis documents) for the EDGs, in addition to support systems and interfaces for the EDGs, 4160V electrical systems, batteries, AFW, and secondary PORVs.
- EDG Technical Specification requirements and a list of associated surveillance test/calibration procedures for the EDG, SBO EDG, TDAFW, secondary PORVs and related systems.
- Copies of applicable sections of the UFSAR for the EDGs, SBO EDG, TDAFW, secondary PORVs and other related systems and copies of applicable sections of changes to the UFSAR for which have yet to be docketed.
- EDGs, SBO EDG, AFW, secondary PORVs and other related systems piping and instrumentation drawings; one-line diagrams; electrical schematics (specific breakers incl. 15J8, 15j3, etc.); 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, SBO EDG, AFW, secondary PORVs and other related systems.
- List of calculation related to meeting 10 CFR 50.63 SBO rule.
- Strategy for handling LOOP/SBO events.
- A list of plant modifications to the EDGs, SBO EDG, TDAFW pump, secondary PORVs and other related systems implemented since 1995.
- List of current open temporary modifications and operator work arounds involving operation of the EDGs, SBO EDG, TDAFW pump, secondary PORVs and the other related systems.
- List of Deficiency Reports (DR)/Plant Issues (PI) initiated since 1995 affecting the vital AAC, EDGs, SBO EDG, TDAFW, secondary PORVs and other related systems.
- System Health Report and Performance Trends for the EDGs, SBO EDG, AFW, secondary PORVs and other related systems.

Enclosure

- Maintenance Rule Performance criteria for the EDGs, SBO EDG, AFW, secondary PORVs 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, SBO EDG, TDAFW pump, secondary PORVs and other related systems in the past 12 months.
- An index of drawings for the EDGs, SBO EDG, AFW system, secondary PORVs and other related systems.
- Self-assessment performed on EDGs, SBO EDG, AFW, secondary PORVs and other related systems in the last 24 months.
- System description and operator training modules for the EDGs, SBO EDG, AFW, secondary PORVs and other related systems.
- PRA Fault Tree Data for the 4160V buses, vital AC, EDGs, SBO EDG, TDAFW pump, secondary PORVs, and the station vital and designated diesel batteries.
- PRA/Risk Achievement Worth(RAW) listing for the EDGs, SBO EDG, AFW system, secondary PORVs and related support systems.
- Grid Stability Study.
- EOPs, AOPs, ARPs for SBO/Loss of Offsite Power events.
- Self Assessments performed within the last 12 months for the EDGs, SBO EDG, AFW system, secondary PORVs and related support systems.