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

July 3, 2007

MEMORANDUM TO: Shakur Walker, Team Leader
Special Inspection Team

FROM: William D. Travers, Regional Administrator **/RA/**

SUBJECT: SPECIAL INSPECTION TEAM CHARTER

A Special Inspection Team (SIT) has been established for North Anna to inspect and assess the facts surrounding the Unit 2 spurious actuation of the 'B' train of safety injection (SI) and reactor trip. The team composition is as follows:

Team Leader: Shakur Walker, RII

Team Members: Frank Erhardt, RII
James Reece, RII

The objectives of the inspection are to: (1) review the facts surrounding the Unit 2 spurious actuation of the 'B' train of safety injection and reactor trip on June 29, 2007; (2) assess the licensee's response and investigation of the event; (3) identify any generic issues associated with the event; and (4) conduct an independent extent of condition review.

For the period during which you are leading this inspection and documenting the results, you will report directly to me. The guidance in Inspection Procedure 93812, "Special Inspection" and Management Directive 8.3, "NRC Incident Investigation Procedures," applies to your inspection.

If you have any questions regarding the objectives of the enclosed charter, contact Charles A. Casto at (404) 562-4500.

Docket Nos.: 50-338, 50-339
License Nos.: NPF-4, NPF-7

Enclosure: SIT Charter

cc w/encl:
L. Reyes, EDO
S. Campbell, EDO
W. Kane, DEDO

CONTACT: Eugene F. Guthrie, DRP/RII
404-562-4662

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☐ PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE ☐ NON-SENSITIVE

ADAMS: ☐ Yes ACCESSION NUMBER:________________________

| OFFICE | RII:DRS | RII:DRP | RII:DRP | | | |
|---|---|---|---|---|---|---|
| SIGNATURE | **/RA By E. Guthrie for/** | **/RA/** | **/RA By E. Guthrie for/** | | | |
| NAME | JShea | EGuthrie | CCasto | | | |
| DATE | 07/ 03 /2007 | 07/ 02 /2007 | 07/ 02 /2007 | 7/ /2007 | 7/ /2007 | 7/ /2007 |
| E-MAIL COPY? | YES NO | YES NO | YES NO | YES NO | YES NO | YES NO |

OFFICIAL RECORD COPY DOCUMENT NAME: C:\FileNet\ML071840152.wpd

**SPECIAL INSPECTION TEAM (SIT) CHARTER**
**UNIT 2 SPURIOUS SAFETY INJECTION ACTUATION AND REACTOR TRIP**

Basis for the Formation of the SIT -On 06/29/07 at approximately 5:52 p.m., Unit 2 received a spurious 'B' train safety injection (SI). This spurious 'B' train SI resulted in a Unit 2 reactor trip. The single train SI resulted in ECCS flow to the reactor coolant system (RCS). The ‘A’ train of SI was manually initiated per station emergency operating procedures. Subsequently, the ‘A’ train SI was secured and reset however, the 'B' train of SI could not be reset. Continued injection from the ‘B’ train SI resulted in RCS inventory increasing resulting in multiple actuations of the pressurizer power operated relief valves (PORV) to limit RCS system pressure. RCS inventory from the PORVs discharged to the pressurizer relief tank, which overfilled the tank and the rupture disc ruptured. Water from the rupture disc was released to the containment sump. Through local, manual actions the licensee was subsequently successful in securing injection from the ‘B’ train of safety injection, and reactor coolant system pressure and level control was then maintained by normal charging and letdown. During the 'B' train safety injection a main turbine and reactor trip occurred; auxiliary feedwater (AFW) pumps started; a containment phase 'A' isolation occurred, ECCS pump actuation occurred; and emergency diesel generators started.

The cause of the spurious actuation on the 'B' train SI was determined, by the licensee, to be caused by a card failure in the SSPS system. The licensee determined that this card failure caused system voltage to reduce sufficiently to spuriously actuate portions of the ECCS systems.

Objectives of the SIT - The objectives of the inspection are to: (1) review the facts surrounding the Unit 2 spurious actuation of the 'B' train of safety injection and reactor trip on June 29, 2007; (2) assess the licensee’s response and investigation of the event; (3) identify any generic issues associated with the event; and (4) conduct an independent extent of condition review. To accomplish these objectives, the following will be performed:

a. Develop a complete sequence of events related to the event.

b. Verify and assess the correct operation of equipment that actuated during the event.

c. Verify and assess the Licensee’s post trip review and investigations were adequate.

d. Review proper operation and design basis function of the power operated relief valves which cycled during the event on June 29,2007. Verify and assess the licensee’s inspection of the material condition of the power operated relief valves.

e. Identify and evaluate the effectiveness of the immediate actions taken by the licensee in response to this event including use of the emergency operating procedures related to starting the ‘A’ train safety injection and the inability to reset ‘B’ train safety injection.

f. Evaluate the adequacy of the procedures used by the operators to respond to the event.

g. Determine the cause, common cause potential, extent of condition, and corrective actions associated with the Unit 2, SSPS card failure.

h. Determine if there are any generic implications associated with this event. Promptly communicate any potential generic issues to regional management.

i. Review and assess the licensee's testing and evaluation of the maintenance and card replacement activities in the SSPS.

j. Determine and assess the licensee's implementation of the emergency action level recommendations for appropriate emergency classification on Unit 2 during the event on June 29, 2007.

k. Document the inspection findings and conclusions in an inspection report within 30 days of the inspection.