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Director
Nuclear Licensing

May 5, 1988

U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Document Control Desk

Gentlemen:

SUBJECT: Grand Gulf Nuclear Station
Unit 1
Docket No. 50-416
License No. NPF-29
Report No. 50-416/88-03
dated April 5, 1988
(MAEC-88/0J72)
AECM-88/0096

System Energy Resources, Inc. hereby submits its response to violation
50-416/88-03-01.

Yours truly,

M. L. Crawford
for J.G. Cesare

ODK:rg
Attachment

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Notice of Violation

Technical Specification 6.8.1 requires that written procedures be established, implemented and maintained covering surveillance activities of safety related equipment and applicable procedures recommended in Regulatory Guide (RG) 1.33. RG 1.33 recommends administrative procedures covering procedural adherence. Surveillance Procedure 06-EL-1E12-M-0001, paragraph 5.3.1 states to jumper terminals 9 to 10 on the ground overcurrent relay on breaker 152-1606. Administrative Procedure 01-S-07-1, Control of Work on Plant Equipment and Facilities, paragraph 6.3, provides for work accomplishment per the Shift Superintendent's verbal directions during critical events and requires immediate subsequent initiation of a Maintenance Work Order for documentation of work accomplished.

Contrary to the above:

1. On March 17, 1988 to prevent auto-start of the B residual heat removal pump, a technician jumpered terminals 9 to 10 on the ground overcurrent relay on breaker 152-1609 instead of breaker 152-1606, specified by the procedure, resulting in the auto-start of the pump.
2. On February 27, 1988 following a hydrogen ignition in the condenser offgas system, the Shift Superintendent directed the installation of equipment necessary to put a nitrogen blanket on the offgas system charcoal adsorbers. As of March 10, 1988, no documentation of work accomplished had been initiated.

I. Admission or Denial of the Alleged Violation

System Energy Resources, Inc. (SERI) admits to the alleged violation. This violation had no effect on the health and safety of the public.

II. The Reason for the Violation if Admitted

1. On March 17, 1988 during the monthly functional test of the Residual Heat Removal (RHR) pump B start time delay relay, an electrician tripped the lockout relay for RHR pump C instead of the RHR pump B. Contributing factors which led to this incident are described below:
 - a. The surveillance procedure did not require independent verification of the lockout relay trip.
 - b. The instructions for testing RHR pumps A and B are contained in one procedure. The numeric designators for the breakers for RHR pumps A and B are given sequentially in the procedure instructions.
 - c. The electrician worked from the instruction section of the procedure and did not take the actual data sheets to the breaker. The data sheets are separated by RHR train and provide information which is clearer and more easily understood.

- d. The similarity in the RHR B and C pump designators contributed to the subsequent tripping of the wrong lockout relay. RHR trains B and C are powered from the same divisional bus. The associated pump breakers are located close together and the Division 2 coded labeling for the breakers is similar (i.e., E12-C002B-B and E12-C002C-B).

This incident was documented in Licensee Event Report Number 88-11.

2. The nitrogen purge installation was not documented via a Maintenance Work Order (MWO) based on an administrative decision by plant management because of actions detailed below. There existed no adequate procedural guidance detailing proper documentation of a deviation from plant procedures. At the time of the event, the only method for documenting this activity was the MWO process.
 - a. Direct management involvement provided initial guidance and control over the evolution until more formal direction was issued on February 29, 1988.
 - b. From February 29 through March 2, the evolution was controlled via the issuance of night orders which detailed special monitoring requirements and nitrogen purging of the charcoal beds.
 - c. A standing order was issued on March 3 to Operations shift personnel detailing how the off-gas system and the nitrogen purge were to be controlled. The standing order also documented the off-gas system configuration until appropriate procedure changes could be prepared.
 - d. Subsequent to the above action, a temporary procedural directive was approved and issued on March 3 to control restoring the off-gas system to operation while purging the charcoal beds with nitrogen and documenting the installation of the nitrogen purge system used to purge the charcoal beds.

III. The Corrective Steps Which Have Been Taken And The Results Achieved

1. The following corrective actions were or are being taken in response to item 1 of this violation:
 - a. The monthly functional test procedure has been changed to require independent verification of the breaker lockout relay trip. The surveillance program already requires independent verification to ensure that safety related equipment is properly returned to service if functional testing cannot be performed. The need and extent of verification for all surveillance steps that block or de-activate safety equipment is also being evaluated. This evaluation will be completed by June 30, 1988.

- b. The monthly functional test procedure instructions have also been changed to clearly separate the instruction steps to be performed for RHR A and those to be performed for RHR B. The feasibility and benefits of separating similar surveillance instructions are being evaluated. This evaluation will be completed by June 30, 1988.
 - c. Large labels were placed on the breaker cubicles clearly identifying the pump breakers as "RHR A", "RHR B" and "RHR C". A review of 4160 volt ESF switchgear cubicles determined that other similar components were adequately labeled and easily discernable.
 - d. Maintenance electricians, Instrument and Control technicians, and Operations personnel were briefed on the incident by their respective superintendents. The briefings were completed prior to the subsequent surveillance on RHR B which was successfully performed on April 13, 1988.
2. The following corrective action was taken in response to item 2 of this violation:
 - a. An MWO was initiated after the fact to document the connection of the nitrogen supply to the off-gas system.

IV. The Corrective Steps Which Will Be Taken To Avoid Further Violation

1. SERI considers the actions taken in Section III. 1, items a thru e, adequate to preclude further violation described in item 1 of this violation.
2. In order to preclude a future violation, a change to plant administrative procedure 01-S-02-1, Description and Use of the GGNS Operations Manual, has been made. This change will provide clearer guidance on the use of MWOs and other approved methods when the necessity to deviate from procedures under emergency conditions (critical events) arises.

V. Date When Full Compliance Will Be Achieved

1. Full compliance will be achieved for Section III, Item 1 by June 30, 1988.
2. Full compliance has been achieved for Item 2 of Sections III and IV.