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IE Bulletin 80-06

Mr. Boyce H. Grier, Director Office of Inspection & Enforcement Region I US Nuclear Regulatory Commission 631 Park Avenue King of Prussia, PA 19406

Dear Mr. Grier:

This is in response to your letter of March 13, 1980, which forwarded IE Bulletin 80-06. The actions requested and our responses are listed sequentially below.

Actions To Be Taken By Licensees

1. Review the drawings for all systems serving saletyrelated functions at the schematic level to determine
whether or not upon the reset of an ESF actuation
signal, all associated safety-related equipment
remains in its emergency mode.

Response

The drawings for all systems serving safety-related functions have been reviewed at the schematic level to determine whether or not upon the reset of an Engineered Safety Feature (ESF) actuation signal, all associated safety-related equipment remains in its emergency mode. The following systems were included in this review:

- a) Reactor Protection System (RPS)
- b) Automatic Depressurization System (ADS)
- c) Primary Containment Isolation System (PCIS)

- d) Safety Related Heating, Ventilating, and Air Conditio ng (HVAC)
- e) Standby Gas Treatment System (SBGTS)
- f) High Pressure Coolant Injection System (HPCI)
- g) Low Pressure Coolant Injection System (LPCI)
- h) Core Spray System
- i) Diesel Generator

For the LPCI, Core Spray, and Diesel Generator systems there were no instances identified where the reset of an initiation signal would cause a piece of equipment to return to its normal mode of operation. For each of the other systems Appendix A lists the equipment which does not remain in its emergency mode after reset of the initiation signal and describes the present or planned controls over this equipment.

2. Verify the actual installed instrumentation and controls at the facility are consistent with the schematics reviewed in Item 1 above by conducting a test to demonstrate that all equipment remains in its emergency mode upon removal of the actuating signal and/or manual resetting of the various isolating or actuation signals. Provide a schedule for the performance of the testing in your response to this Bulletin.

Response

Routine surveillance tests on all of the systems identified in item 1 verify the actual installed instrumentation and controls. During the next scheduled surveillance test for each of these systems, it will be verified that all equipment remains in its emergency mode upon reset of the initiation signal with the exception of the equipment already identified in response to item 1. Testing on both units will be completed according to the following schedule. (Unit 2 is presently in a refueling outage)

System	Unit 2	Unit 3
RPS	Before startup	Next refueling outage
ADS	Before startup	11/80
PCIS	Before startup	8/80
Control Room HVAC	10/80	10/80
SBGTS	Before startup	Same as Unit 2
HPCI	Before startup	8/80
LPCI	Before startup	8/80
Core Spray	Before startup	8/80
Diesel Generator	8/80	8/80

3. If any safety-related equipment does not remain in its emergency mode upon reset of an ESF signal at your facility, describe proposed system modification, design change, or other corrective action planned to resolve the problem.

Response

Appendix A identifies any corrective action planned for safety-related equipment which does not remain in its emergency mode upon reset of an ESF signal. Procedure revisions will be made f the Control Room HVAC, PCIS, and SBGTS systems and will be completed by September 9, 1980.

Very truly yours,

CC: Office of Inspection & Enforcement
US Nuclear Regulatory Commission
Division of Reactor Operations Inspection
Washington, DC 20555

SS.

COUNTY OF PHILADELPHIA

S. L. Daltroff, being first duly sworn, deposes and says:

That he is Vice President of Philadelphia Electric Company; that he has read the foregoing response to IE Bulletin 80-06 and knows the contents thereof; and that the statements and matters set forth therein are true and correct to the best of his knowledge, information and belief.

Subscribed and sworn to before me this II day Jule 1980.

ELIZABETH M. BOYER Notary Public, Phila Co.

My Complission Expires Jan. 30, 1962

APPENDIX A

ENGINEERED SAFETY FEATURE RESET CONTROLS

1. REACTOR PROTECTION SYSTEM (RPS)

The following equipment will not remain in the emergency mode after reset of the initiation signal.

- a) Scram discharge volume valves: CV32A, CV32B, CV33
- b) Scram valves

Discussion:

An existing procedure for scram reset requires verification that conditions are within safe limits before these valves are returned to their normal position by resetting the RPS. In addition, the scram signal cannot be reset as long as the initiating condition exists.

This is in accordance with the G.E. Generic design of the RPS. The safety function, scram, is not compromised by the valves returning to the normal position. The operation of this system is in accordance with the original design and intent of the system.

2. AUTOMATIC DEPRESSURIZATION SYSTEM (ADS)

The following equipment will not remain in the emergency mode after reset of the initiation signal.

a) ADS valves

Discussion:

The existing procedure for resetting the ADS describes the conditions and method for resetting the initiation logic. The operator is directed not to use the reset if the initiating conditions exist. The procedure directs the operator to use the reset following verification that the core is reflooded. This action is required to close the ADS valves and stop the inventory loss. If the initiation signals are still present following reset, the system will reinitiate and the valves will reopen after an approximate 105 second delay. This is a General Electric Company generic design for the ADS and is in accordance with the design intent of the system.

Surveillance test procedures also specify use of the reset feature for operability testing of the ADS system.

3. PRIMARY CONTAINMENT ISOLATION SIGNAL (PCIS)

The following equipment will not remain in the emergency mode after reset of the initiation signal.

- a) Traversing In-core Probe (TIP) nitrogen purge valve.
- b) TIP ball valves.

Discussion: Existing procedures for the PCIS and TIP systems will be revised to clarify the method to be used to reset the TIP valves listed above.

- 4. SAFETY RELATED HEATING, VENTILATING, AND AIR CONDITIONING (HVAC)
 - A. Normal Control Room HVAC

The following equipment will not remain in the emergency mode after reset of the initiation signal.

a) Return air fans/ dampers:

OAV29/PO-00176-1, PO-00176-2 OBV29/PO-00177-1, PO-00177-2

b) Control room fresh air supply fans/dampers:

OAV79/PO-00481-1, PO-00481-2 OBV79/PO-00482-1, PO-00482-2

c) Control Room AC supply fans/dampers:

OAV28/PO-00164-1, PO-00164-2 OBV28/PO-00165-1, PO-00165-2

Discussion:

An existing procedure provides instructions for transfer of the Control Room HVAC from the normal to emergency supply. This procedure will be expanded to provide additional instructions for resetting the fans and dampers identified above.

B. Emergency Control Room HVAC

The following equipment will not remain in the emergency mode after reset of the initiation signal.

a) Emergency vent fans/dampers:

OAV30/PO-00157-1, PO-00157-2 OBV30/PO-00158-1, PO-00158-2

b) Emergency vent filter isolation dampers:

PO-00153-1, PO-00153-2

Discussion:

The discussion for item 4.A, normal Control Room HVAC, also applies to the Emergency Control Room HVAC.

C. Reactor Building/Refuel Floor HVAC

The following equipment will not remain in the emergency mode after reset of the initiation signal.

a) Reactor building/refuel floor isolation dampers:

A0-20452, A0-20453, A0-30452, A0-30453, A0-20461, A0-20462, A0-30461, A0-30462, A0-20457, A0-20458, A0-30457, A0-30458 A0-20463, A0-20464, A0-30467, A0-30468

b) Reactor building/refuel floor vent fans:

2AV14, 2BV14, 2CV14, 3AV14, 3BV14, 3CV14 2A'15, 2BV15, 2CV15, 3AV15, 3BV15, 3CV15, 2AV16, 2BV16, 2CV16, 3AV16, 3BV16, 3CV16, 2AV17, 2BV17, 2CV17, 3AV17, 3BV17, 3CV17, 2AV18, 2BV18, 2CV18, 3AV18, 3BV18, 3CV18

Discussion:

Existing procedures provide instructions on the method to be used and conditions to be checked before re-establishing the normal ventilation systems.

Radiation detectors are installed in the exhaust ducts of both the reactor building and refuel floor ventilation spacems. If the systems are returned to normal and high radiation is detected in either system, then both the reactor building and refuel floor will re-isolate.

5. STANDBY GAS TREATMENT SYSTEM (SBGTS)

The following equipment does not remain in the emergency mode after reset of the initiation signal.

a) SBGTS filter dampers:

A0-00475-1, A0-00475-2, A0-20470-1, A0-20470-2, A0-30470-1, A0-30470-2

b) SBGTS suction dampers:

A0-20469-1, A0-20469-2, A0-30469-1, A0-30469-2, A0-20470-1, A0-20470-2, A0-30470-1, A0-30470-2, A0-20465, A0-20466, A0-30465, A0-30466

c) SBGTS inlet pressure control valves (PO-20477-1, PO-20477-2, PO-30477-1, PO-30477-2) air supply solenoid valves: SV-20479-1, SV-20479-2, SV-30479-1, SV30479-2

Discussion: An existing procedure for the SBGTS will be revised to clarify the method to be used and conditions to be checked before returning the SBGTS to normal.

6. HIGH PRESSURE COOLANT INJECTION (HPCI)

The following equipment will not remain in the emergency mode after reset of the initiation signal.

- a) Gland seal condenser vacuum pump
- b) Auxiliary oil pump

Discussion: An existing procedure for HPCI shutdown after automatic initiation provides specific instructions on when the initiation signal should be reset for the equipment identified above.