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JOSEPH W. GALLAGHER
MANAGER
ELECTRIC PRODUCTION DEPARTMENT

May 22, 1981

Docket Nos. 50-277
50-278

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:

In a telephone conversation with Messrs. D. Verrelli and P. Bender of the NRC and D. Hacket of E.G. & G. on March 4, 1981, several items were discussed which had been previously transmitted to us via telecopy. These items concerned our June 11, 1980 response to IE Bulletin 80-06, "Engineered Safety Feature (ESF) Reset Controls". We were asked to respond formally to the items in the telecopy. The actions requested and our responses are listed sequentially below.

Actions to Be Taken:

1. With regard to the Primary Containment Isolation System (PCIS):

   a. Clarify and describe why you are not modifying those components you have identified as not remaining in their emergency mode upon reset of the ESF actuation signal.

   b. Describe and clarify the requirements of your existing procedures, including the revisions implemented in response to this Bulletin that are used to reset the TIP valves.

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Response

The Traversing In-Core Probe (TIP) nitrogen purge valves and TIP ball valves have been modified as of December, 1980, so they will remain in their emergency mode upon reset of the ESF actuation signal. In a letter dated October 31, 1980, from S. L. Daltroff, Philadelphia Electric Company, to D. G. Eisenhut, NRC, we indicated that the engineering necessary to implement a modification to the TIP valves had been initiated based on our review for IE Bulletin 80-06. The TIP valve modifications are complete and appropriate procedure changes have been made.

2. With regard to the Control Room Safety-Related Heating, Ventilating, and Air Conditioning (HVAC):

   a) Clarify and describe why you are not modifying those components you have identified as not remaining in their emergency mode upon reset of the ESF actuation signal.

   b) Describe and clarify the requirement of your existing procedures, including the revisions implemented in response to this Bulletin that are used to reset the fans and dampers for normal and emergency control room HVAC.

Response

With regard to the Control Room HVAC, we believe that our procedural controls are adequate to ensure that the components will remain in their emergency mode. Procedure E-7, Control Room Air Supply High Radiation, describes the steps to be followed by the operator when he receives a high or high-high radiation alarm.

Procedure E-7 was revised in response to this Bulletin to include specific instructions to place the Control Room fans in the "OFF" position before resetting the radiation trip. In addition, this procedure requires that the HP Group perform a Radiation and Airborne Activity survey before resetting the radiation trip. If the initiation signal was reset incorrectly and radiation was still present, the system would re-isolate as soon as the radiation detectors sensed the airborne activity.

3. With regard to the Standby Gas Treatment System (SBGTS):

   a) Clarify and describe why you are not modifying those components you have identified as not remaining in their emergency mode upon reset of the ESF actuation signal.

b) Describe and clarify the requirements of your existing procedures, including the revisions implemented in response to this Bulletin that are used to return the SBGTS to normal operating mode.

Response

We believe that the valves and dampers associated with the SBGTS do not need to be modified for the following reasons.

1) Procedures identify the steps to take before resetting the isolation signal. General Procedure GP-8, Primary Containment Isolation, and Procedure S.10.5.c, Shutdown of the Standby Gas Treatment System Following "AUTO" Initiation Caused by Group 3 Isolation, specify the actions to be taken by the operator before returning the system to normal. Part of Procedure S.10.5.C includes a check off list to verify that SBGTS valves are in the correct lineup. Procedure GP-8 was revised in response to this Bulletin to provide a list of the valve control switches that should be placed in the "OPEN" position before resetting the initiation signal.

2) The isolation signal cannot be reset if the initiating condition is still present. Initiating conditions are reactor low water level (0"), high drywell pressure (2 psig), reactor building high radiation (16 mr/hr), or refueling floor high radiation (16 mr/hr). If any of these conditions still existed when an incorrect attempt was made to reset the Group III isolation, it would not reset.

3) In the event that the isolation signal was no longer present and the isolation logic was reset incorrectly, the system would re-isolate as soon as one of the limits identified in item 2 was exceeded.

4) With regard to the Reactor Building/Refueling Floor HVAC:

a) Clarify and describe why you are not modifying those components you have identified as not remaining in their emergency mode upon reset of the ESF actuation signal.

b) Describe and clarify the requirements of your existing procedures that are used to re-establish the normal ventilation modes.

Response

Steps 2 and 3 of the preceeding discussion on the SBGTS also apply to the Reactor Building/Refueling Floor HVAC. General

Procedure GP-8, Primary Containment Isolation, specifies the Reactor Building/Refueling Floor isolation valves that will close and the fans that will trip. A check off list is used to verify the position of the control switches for these valves and fans before shutting down the SBGTS and returning the Reactor Building/Refueling Floor ventilation to normal.

5) With regard to the High Pressure Coolant Injection (HPCI)

a) Clarify and describe why you are not modifying those components you have identified as not remaining in their emergency mode upon reset of the ESF actuation signal.

b) Describe and clarify the requirements of your existing procedures that are used to reset the initiation signals for the pumps identified in your response.

Response

With regard to the High Pressure Coolant Injection (HPCI) system, we identified the auxiliary oil pump and the gland seal condenser blower as not remaining in their emergency mode upon reset of the ESF actuation signal. We believe that our existing procedural controls are adequate to ensure proper operation of this equipment and that modifications are not necessary.

Procedure S.3.3.B, HPCI Shutdown From Automatic-Initiation, specifies the steps to take to shut down the HPCI turbine. Part of this procedure details the steps to take if the system initiation signals no longer exist. The applicable parts of this procedure are:

1. Place auxiliary oil pump control switch in the "START" position.
2. Place gland seal condenser blower control switch in "RUN".
3. Depress and hold the "REMOTE TRIP" pushbutton and fully close MO-14 steam supply before releasing the turbine trip pushbutton.
4. Depress the HPCI system initiation reset pushbutton.
5. Run the gland seal condenser blower in manual for approximately 15 minutes after system has been shutdown to exhaust gases remaining in the gland seal condenser.
6. Place auxiliary oil pump in "AUTO" after turbine has stopped.

Steps 1 and 2 ensure that the auxiliary oil pump and the gland seal condenser blower will continue to run after the HPCI system

initiation signal is reset in step 4. It should be noted that the HPCI system cannot be interrupted by attempting to reset the initiation signal prematurely. HPCI will continue to run until Step 3 is completed; e.g., the HPCI turbine must be tripped and the steam supply valve completely closed before the HPCI initiation can be reset.

The auxiliary oil pump is only required during startup and shutdown of the HPCI turbine. A shaft-driven oil pump supplies oil during HPCI operation. If the HPCI initiation signal was reset before placing the auxiliary oil pump in the "START" position, the auxiliary oil pump would not run during HPCI shutdown, however, the shaft-driven pump would still supply oil, although at a reduced pressure.

The gland seal condenser blower is run for approximately fifteen minutes after the HPCI system has been shut down to exhaust gases in the gland seal condenser. The blower is run this additional time as a good operating practice, however, if it was not run there would be no adverse consequences because the SBGTS would be drawing suction through the gland seal condenser removing any remaining gases.

In the course of our review to respond to the above items, we identified several fans and dampers which were omitted from our original response and two fans which should not have been included. The control Room HVAC toilet exhaust fan (00V-33) and the SBGTS fan (0BV-20) and dampers (AO-00476-1&2, PO-00010-1 & 2) should be added to our original submittal. The Reactor Building/Refuel Floor vent fans (2CV18, 3CV18) should be deleted.

Should you have any further questions, please do not hesitate to contact us.

Very truly yours,

J. W. Gallagher

COMMONWEALTH OF PENNSYLVANIA :

ss.

COUNTY OF PHILADELPHIA :

J. W. Gallagher, being first duly sworn, deposes and says:

That Manager of the Electric Production Department of Philadelphia Electric Company, the Applicant herein; 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.

J. W. Gallagher

Subscribed and sworn to
before me this 27th day
of May, 1981

Elizabeth H. Boyer

Notary Public

ELIZABETH H. BOYER
Notary Public, Phila., Phila. Co.
My Commission Expires Jan. 30, 1982