



Duquesne Light

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February 6, 1984

United States Nuclear Regulatory Commission
Office of Inspection and Enforcement
Attn: Dr. Thomas E. Murley, Regional Administrator
Region 1
631 Park Avenue
King of Prussia, PA 19406

Reference: Beaver Valley Power Station, Unit No. DPR-66
Docket No. 50-334, License No. DPR-66
Enforcement Conference 83-27

Gentlemen:

In response to your letter of January 6, 1984, and in accordance with 10 CFR 2.201, the attached reply addresses Notice of Violation which was included with the referenced report. This was a report of Enforcement Conference 83-27 held on October 11, 1983 to review the circumstances associated with violations identified in Inspection Reports 83-19 and 82-23. As a result, both events have been categorized in the aggregate as a Severity Level III violation.

As requested, this response addresses the corrective actions taken or planned, as discussed at the enforcement conference, and the current status of each action. We share your concern about the events that occurred and feel that the management attention and the corrective actions taken as a result will preclude recurrence of similar events.

If you have any questions concerning this response, please contact my office.

Very truly yours,

J. J. Carey
Vice President, Nuclear

Attachment

cc: Mr. W. M. Troskoski, Resident Inspector
U. S. Nuclear Regulatory Commission
Beaver Valley Power Station
Shippingport, PA 15077

U. S. Nuclear Regulatory Commission
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DUQUESNE LIGHT COMPANY
Beaver Valley Power Station
Unit No. 1

Reply to Notice of Violation
Enforcement Conference 83-27
Letter dated January 6, 1984

VIOLATIONS A & B (Severity Level III; Supplement I)

Description of Violations (83-27-01)

- A. Technical Specification 1.4 and Table 1.1 defines operations modes, and specifically defines Mode 6 (Refueling) as a condition existing when the reactor vessel head is unbolted or removed with fuel in the vessel. In this mode the average reactor coolant temperature is required to be less than or equal to 140F.

Contrary to the above, on September 5, 1983, while the reactor was in a re-fueling mode since the vessel head was unbolted, the average reactor coolant temperature exceeded 140F and reached a maximum of 180F.

- B. Technical Specification 6.8.1 requires, in part, written procedures be established, implemented, and maintained covering the applicable procedures referenced in Appendix "A" of Regulatory Guide 1.33, November, 1972. Section 3 of Appendix A specifies the need for procedures for activities involving startup, operation, or shutdown of safety-related systems. Section 1 of Appendix A specifies the need for procedures for equipment control, shift and relief turn-overs, and log entries.

OM Chapter 1.30.3, River Water Systems - Normal Systems Arrangement, and OM Chapter 1.30.4M, Standby Reactor Plant River Water Pump Startup, specify the operational steps necessary to put the 1C river water pump, an Engineered Safeguards Feature (ESF), in standby service whenever the 1A or 1B pump (also ESF components) is taken out of service, including electrical connection to the appropriate emergency bus (1AE or 1DF).

Station Administrative Procedures, Chapter 4, Plant Operations Group, and BVPS OM Chapter 1.48, Conduct of Operations, requires certain administrative controls be implemented when working on ESF systems or components.

Contrary to the above, on September 22, 1983, the 1C river water pump was not put into standby service by electrical connection to the 1AE emergency bus after the 1A river water pump was declared inoperable. The failure to follow certain administrative controls, as specified in Chapter 4 of the Station Administrative Procedures (SAP) and BVPS OM Chapter 1.48, contributed to this violation, as evidenced below.

B. (Continued)

1. Section VI.P of the SAP requires an Emergency Safeguards Equipment Checklist to be prepared prior to removing an ESF system or component from service when in Modes 1 thru 4.

However, an Emergency Safeguards Equipment Checklist was not prepared prior to removing 1A river water pump, an ESF component, from service on September 22, 1983, while in Mode 3.

2. Section 5.E.2 of OM 1.48 requires when an ESF system or component is removed from service, the Systems Level Status Board, ESF Valve Status Boards, and Station Equipment Status Board be updated to reflect current system alignment when in Modes 1 thru 4. Similarly, Section VI.P.2 of SAP requires control room prints to be updated.

However, when the 1A river water pump was removed from service on September 22, 1983 when in Mode 3, the Systems Level Status Board, ESF Valve Board, Station Equipment Status Board, and control room prints were not updated to reflect the current system alignment.

3. Section 6.B of OM 1.48 requires changes in plant status to be logged in the Shift Operating Report and the Nuclear Control Operator's Log.

However, when plant status was changed on September 22, 1983 because of removal of the 1A river water pump and as a consequence one river water subsystem from service, this change was not logged in the Shift Operating Report nor in the Nuclear Control Operator's Log.

4. Section IV.A of the SAP requires operations personnel, during shift turnover and relief activities, to review logs and control room instrumentation to determine the current status of systems and equipment important to safe operation.

However, on the 4:00 p.m. shift turnover and relief on September 22, 1983, operations personnel did not adequately review logs and control room instrumentation to determine current status of systems and equipment important to safe operation in that they did not recognize that a second river water subsystem was not in service.

B. (Continued)

5. Operating Surveillance Test 1.48.3, Control Board Checklist requires the Shift Technical Advisor to perform an independent verification of the status of key safety related components during the shift turnover while in Modes 1 thru 3.

However, the Shift Technical Advisor, during an independent verification of the status of key safety related components during shift turnover while in Mode 3 on September 22, 1983, failed to note the abnormal condition of two river water pumps in the Pull-To-Lock position although this was specifically included on the Control Board Checklist.

Corrective Actions Taken and Current Status

At the enforcement conference, corrective actions implemented, in progress or planned to prevent recurrence were discussed. The following is a listing of the action items discussed and their current status.

Action Item 1: Revision of the procedure for CCRS cooling load reduction and return to service in performing the OSTs for the ESF trains of the Phase B Containment Isolation System.

Response: OSTs 1.1.5 and 1.1.6 have been revised to include an instruction stating that all equipment removed or isolated shall be tabulated and then restored to its required pretest alignment following completion of the test. The step made special reference to restoring the RHR valves. This item is considered complete.

Action Item 2: Review of the alignment requirements for valve lineups in all surveillance testing required on an 18 month frequency.

Response: A review was made of all 18 month Operations Surveillance Tests by a senior licensed operations supervisor to correct any existing deficiencies in valve lineup or test performance that could potentially effect the startup, operation or shutdown of safety related equipment. Any deficiency was corrected by an operating manual change notice. The startup procedure and shutdown procedure were amended to provide additional assistance to reactor operators on an increasing RHR temperature condition and key parameters to monitor.

This action is complete with the exception of the 18 month surveillance tests for the emergency diesel generators (OST 1.36.3 and 1.36.4). These two tests will be complete with the rewriting by March 15, 1984 and procedures complete prior to the next scheduled tests.

Action Item 3: Review of the details of these events with all operators and their incorporation into licensed operator retraining programs.

Response: Each operating shift reviewed the details of each incident. The Station Operating Supervisor subsequently conducted a discussion at module one retraining (LP-LRT-VIII-52) of the event and changes in the conduct of operations to preclude any future incidents. This item is complete.

Action Item 4: Measures being taken to more clearly define and communicate job responsibilities for operations personnel.

Response: An Operations Personnel Responsibility Review Program was instituted due to the subject incidents. The Station Operating Supervisor conducted interviews with licensed supervisors stressing their responsibilities. Operator responsibilities were also discussed with the operators by the Station Operating Supervisor and shift operating supervisors.

In the future, all new operating supervisor, and operators will be interviewed to discuss their responsibilities prior to assuming shift duties. This item is complete.

Action Item 5: Review of the procedures for racking swing pump circuit breakers on buses.

Response: Due directly to the river water pump incident, changes in the procedures for use of the swing pumps were made. Operating Surveillance Tests for the Reactor Plant River Water Pumps, Charging Pumps, and Component Cooling Water Pumps were reviewed to verify an operable pump was placed in service if the pump under test failed to meet acceptance criteria. This action is complete.

Action Item 6: Procedural changes to better handle the interface between control room and field operators.

Response: A change was incorporated in Operating Manual 48 Section 8 on formality of communication - a repeat back call back method. Another change was incorporated in Operating Manual 55A to discretely define responsibility when interfacing with control room operators during operation surveillance tests. This action is complete.

Action Item 7: Prioritize shift turnover checklists and initiate the use of specific checklists for control room operators during Modes 5 and 6.

Response: The shift turnover area of operations activity was evaluated and appropriate changes reflected in the turnover procedure:

The turnover checklists were resequenced with the ESF status board/mimic board reviews conducted after the control board walkdown.

The Nuclear Control Operator turnover checklist was changed to reflect chart operation and to review the key parameter four-hour log readings developed for all modes, including Modes 5 and 6. The existing STA performed control board walkdown procedure is also performed by a control board operator(s) to provide a verification of the status of key safety related components with all deviations to be acknowledged by the shift supervisor.

The Shift Operating Foreman turnover checklist was expanded to include review of the Nuclear Control Operator narrative log to assure all significant items performed on shift are listed and to discuss evolutions in progress or planned for the oncoming shift.

The Shift Supervisor's checklist was changed to include discussion of any special operating order or temporary operating procedure which had been issued.

A Special Operating Order was issued to perform an additional STA control board walkdown at midshift and will be continued until the Station Operating Supervisor determines the revised turnover checklists are effectively implemented.

This item is complete.

Action Item 8: Extent of disciplinary actions for control room personnel involved in the above two events.

Response: Two Nuclear Control Operators, one Shift Operating Foreman and one Shift Technical Advisor were suspended without pay as a result of their actions related to the River Water Pump incident.

A total of five letters of reprimand were issued by the Station Superintendent to other personnel with indirect involvement in the River Water Pump incident on September 22nd. This action is complete.

Action Item 9: Review and critique of the effectiveness of all corrective actions by the operations supervisor.

Response: After completion of operations personnel responsibility review, the Station Operating Supervisor directly observed each shift for 2 days to verify all instituted changes were being followed. This action is complete.