

U.S. NUCLEAR REGULATORY COMMISSION
Region I

Report No. 50-334/88-10

Docket No. 50-334

License No. DPR-66

Licensee: Duquesne Light Company
One Oxford Center
301 Grant Street
Pittsburgh, Pennsylvania 15279

Facility Name: Beaver Valley Power Station, Unit 1

Inspection At: Shippingport, Pennsylvania

Inspector: David F. Limroth, Project Engineer
Reactor Projects Section No. 3A

Approved By:

Lowell E. Tripp

Lowell E. Tripp, Chief
Reactor Projects Section No. 3A
Division of Reactor Projects

5/25/88

Date

Inspection Summary: Inspection Conducted on February 22-26, 1988 (Report No. 50-334/88-10)

Areas Inspected: Routine inspection by a region-based Project Engineer of licensee actions on previous inspection findings, configuration management, inadequate core cooling system installation, startup testing following refueling, determination of reactor shutdown margin and plant cleanliness.

Results: No violations or unresolved items were identified. One NRC open item was reviewed; however, licensee action has been inadequate to close the item.

DETAILS

1. Persons Contacted

Interviews and discussions were conducted with various members of licensee management and staff as necessary to support inspection activities.

2. Follow-Up on Outstanding Items (Module No. 92/01)

At the request of the resident inspector, an outstanding item (OI) was reviewed with cognizant licensee personnel.

Open Inspector Follow Item (IFI) 334/85-02-04 - Unexplained voltage shifts of RCCA F-10 RPI system during power operation. On two occasions in January, 1985, operators noted a deviation between control rod RPI indication and the associated group demand counter indication. Troubleshooting indicated that the deviation was caused by a shift in RPI primary voltage for the rod in question. Although the licensee was to determine the cause of the voltage shift, no results of that determination were available during the inspection. This item remains open pending licensee investigation of the voltage shifts.

3. Configuration Management (Module No. 71707)

The inspector performed a complete walkdown of accessible portions of selected engineered safety feature systems and determined actual configuration of components and controls. Control room drawings, status boards and system valve and electrical controls checklists required by licensee administrative controls to be maintained current, were reviewed to verify that actual system configuration was accurately represented. Actual valve position was compared with remote indication where provided; position of valves which were inaccessible were verified by remote indication where provided. Power was verified available to remotely controlled valves. Clearances (tag-outs) associated with the selected systems were similarly reviewed to assess the system's operability with respect to the pending mode change in conjunction with the completion of the refueling outage.

The following systems were inspected:

- Chemical and Volume Control System
- Auxiliary Feedwater System
- Quench Spray System

No unacceptable conditions were noted.

During the course of reviewing the clearance associated with the replacement of No. 4A seal injection filter, it was noted that the filter vent valve, 1CH-305 had not been tagged open in accordance with Operating Manual (OM) A.B.6.d when the isolation valves were shut and tagged on January 26, 1988. Subsequently, on February 2, 1988, the clearance was authorized to be removed including removal of the tag and shutting of the vent valve in question. During the removal of tags, it was noted by licensee personnel that the vent had not been tagged, apparently in violation of Operating Manual A.B.6, Note and Site Administrative Procedures, Chapter 41, which requires that, when vent or drain valves on any radioactive system are to be opened for any reason, the valves must have a clearance tag posted on it as well as on any boundary isolation valves whose operation could effect the volume of water being drained. Further interviews with licensee personnel indicated that the vent valve had never been opened. Therefore, technically, no procedural violation occurred. Personnel interviewed were aware of the requirement that the vent valve is required to be tagged open were the filter to be changed out. The inspector had no further questions on this matter.

4. Inadequate Core Cooling System Installation

The inspector reviewed the installation of modification 668, Inadequate Core Cooling Instrumentation System in order to assure that deficiencies resulting from installation were being satisfactorily tracked to completion, that procedural revisions necessitated by the modification had been implemented or were on schedule to be completed in time to support system operation, and that personnel had been provided training on the new instrumentation.

No deficiencies were noted.

5. Startup Testing Following Refueling (Module 72700)

The inspector reviewed the results of tests associated with the reactor RTD cross calibration program, BVT (Beaver Valley Test) 1.1-1.3.1, Narrow Range RTD Cross Calibration, to verify conformance with licensee procedures, that results met acceptance criteria, and that deficiencies were expeditiously resolved. The licensee employs a licensee developed computer program to perform cross calibration calculations.

The inspector reviewed this program and related software to insure that administrative controls comparable to control of these documents were employed to assure that only the current approved version of the program is employed. Calculation results were spot-checked manually; no errors were found. The inspector also reviewed the input of independent checks performed by the reactor plant vendor; no discrepancies were noted. The inspector verified that these RTDs which did not meet acceptance criteria were electrically removed from the system.

No discrepancies were noted.

6. Determination of Reactor Shutdown Margin (Module No. 61707)

The inspector reviewed licensee records to determine that adequate shutdown margin had been maintained during the prior six month period. This inspection included review of the licensee's procedure for shutdown margin determination for technical adequacy, review of records to verify that shutdown margin calculations had been performed in compliance with technical specification frequency, that the most recent critical conditions had been accurately recorded prior to shutdown, that calculations to assess reactivity changes had been currently performed, and that the results of shutdown margin calculations met the conditions prescribed by technical specifications.

No discrepancies were noted.

7. Plant Cleanliness (Module No. 71707)

The inspector conducted a comprehensive tour of accessible portions of the controlled areas inspecting for overall cleanliness/housekeeping items. Large quantities of low level radioactive waste awaiting shipment remained in the primary auxiliary building; however, access to safety-related systems/components was not significantly affected. The floor area in the vicinity of the spent fuel cooling system was contaminated by significant accumulation of crystallized boric acid. These concerns were brought to the attention of senior management as items to receive increased attention.

No items of immediate safety-related impact were noted.

8. Exit Interview (Module No. 30702)

A meeting was held with facility management at the conclusion of this inspection to discuss the inspection scope and to summarize inspection findings.