

U.S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 50-293/84-24

Docket No. 50-293

License No. DPR-35

Priority --

Category C

Licensee: Boston Edison Company
800 Boylston Street
Boston, Massachusetts

Facility Name: Pilgrim Nuclear Power Station, Unit 1

Inspection At: Plymouth, Massachusetts

Inspection Conducted: August 6-10, 1984

Inspectors: L. Narrow
L. Narrow, Lead Reactor Engineer

8/29/84
date

Approved by: J. P. Durr
J. P. Durr, Chief, Materials and
Processes Section, EPB

9/6/84
date

Inspection Summary: Inspection on August 6-10, 1984, (Report No. 50-293/84-24)

Areas Inspected: Routine unannounced inspection by one region based inspector of the Scram Discharge Volume modifications. The inspection involved 29 hours of direct inspection time on site.

Results: No violations were identified.

DETAILS

1.0 Persons Contacted

Boston Edison Company (BECO)

R. Baresel, Support Engineer, Site Engineering Department
*J. F. Crowder, Compliance Engineer
J. Dwyer, Quality Control Supervisor
*F. N. Famulari, Quality Control Group Leader
J. Godfrey, Quality Control Inspector
*E. T. Graham, Compliance Group Leader
J. Ivens, Senior Engineer, Quality Control
*J. Jerz, Senior Engineer, Nuclear Engineering
*J. D. Keyes, Regulatory Affairs Group Leader
*P. E. Mastrangelo, Acting Station Manager
C. J. Mathis, Nuclear Operations Manager
*D. Mills, Senior Construction Engineer
*R. J. Orkin, Quality Assurance Engineer
*J. P. Roberts, Director, Outage Management
*F. Schellenger, Quality Engineering Group Leader
L. Vallee, Support Engineer, Site Engineering Department

Bechtel Power Corporation (Bechtel)

L. Blakeslee, Project Field Quality Control Engineer
J. Gregg, Production Superintendent
R. W. McCue, Construction Field Engineer
R. R. MacDonald, Lead Field Engineer, Piping and Welding
W. F. Oliver, Project Field Engineer
K. Wustewicz, Lead Electrical QC Engineer

*Attendees at exit meeting

2.0 Scope of Inspection

Modification of the Scram Discharge Volumes (SDV) is in progress in accordance with Plant Design Change (PDC) 82-10. The inspector reviewed the activities of the Site Engineering Office (SEO), the installation contractor, and the licensee's QA/QC organization for these modifications.

PDC 82-10 has been prepared by the BECO Nuclear Engineering Department (NED) based on a design by Stone and Webster Engineering Corporation (SWECO). The work has been assigned to the Construction Management Group (CMG) and is performed by Bechtel, under contract to BECO. QC inspection is included in the Bechtel scope. BECO QA/QC performs surveillance and audits of the SDV modification as a part of the overall Bechtel contract.

3.0 SEO Activities

A small group of engineers, designers and draftsmen has been assigned to the site in order to provide engineering support to the CMP during the present outage. This group interprets engineering requirements, prepares and reviews Field Revision Notices (FRN's) for required changes, and may approve FRN's for minor revisions.

The inspector reviewed PDC 82-10 and selected mechanical drawings; and the following NED procedures:

- No. 3.02, "Preparation, Verification, Approval and Revision of Design Documents for Plant Design Changes/Modifications, and
- No. 3.03, "Field Revision Notice"

Independent verification and approval of design documents, and review and approval of FRN's were discussed with SEO representatives. Selected FRN's were examined by the inspector to verify conformance to Procedure No. 3.03.

No violations were identified.

4.0 Bechtel Activities

Modification of the SDV and QC inspection of the work is performed by Bechtel in accordance with Bechtel work and QC procedures which have been approved by BECO. The inspector reviewed selected work procedures and QC procedures as well as Work Plan and Inspection Records (WP&IR's). The WP&IR is a document which provides a program and sequence for performance of the work and inspection. The WP&IR is prepared by field engineering and reviewed by QC which identifies "Hold" points and inspection points. The WP&IR's with the required installation drawings are distributed to craft supervision for performance of the work. The WP&IR's are used by QC as inspection records with each inspection point initialed upon completion of the inspection.

4.1 Records Review

The inspector reviewed records of welding inspection and a selected group of WP&IR's for mechanical installation, raceway and cable installation, cable terminations, and core drilling/penetrations. WP&IR's No. PSST 302, PSSP 303, PSST 304, PSSP 305 and PSSP 306 covered installation of two supports and three snubbers all of which were supported on a structural frame and all of which referenced the same drawings. It was not clear whether any or all parts of the structural frame were included in the WP&IR's nor whether all of the frame installation had been inspected. Review of the remaining WP&IR's for the SDV identified a similar deficiency with respect to the scope of inspection of WP&IR's for the pipe supports and structural frame for the redundant system.

Prior to completion of the NRC inspection a reinspection of these structural frames was conducted using WP&IR's No. 82-10-24 and 82-10-25 with no deficiencies identified.

The inspector reviewed Work Plan/Procedure (WP/P) No. 1, "Work Plan/Procedure Programs" which provides instructions for preparation of WP&IR's. The instructions do not clearly define a requirement to clearly scope the activity covered by the WP&IR.

This item remains unresolved pending revision of WP/P-1 to provide better definition of the requirements for preparation of WP&IR's; and review of WP&IR's for systems other than the SDV to identify any deficiency in scope of inspection and reinspection if necessary. (293/84-24-01)

The inspector also reviewed qualification and certification records of selected QC personnel.

No violations were identified.

5.0 BECO QA/QC Activities

BECO audits and performs surveillance of Bechtel activities. Audits of site activities are performed annually by the QA Audit Group. Surveillance is performed on a continuing basis by the Operations Quality Control Group.

The inspector reviewed Audit Report No. 83-24 which was conducted in September 1983. Documentation for follow-up and closeout of identified deficiencies are on file in the corporate office but the inspector determined that all items had been closed out as of July 1984.

The inspector reviewed Quality Control Instruction (QCI) No. 7.04, "Surveillance of Bechtel Power Corporation" and selected reports of Surveillance of Bechtel mechanical and electrical activities.

No violations were identified.

6.0 Site Tour

The inspector observed the status and condition of the piping and instrument modifications of the "west" system and the panel installation in the cable spreading room.

No violations were identified.

7.0 Unresolved Items

Unresolved items are matters about which more information is required in order to ascertain whether they are acceptable items, violations or deviations. An unresolved item is contained in paragraph 4.1 of this report.

8.0 Exit Interview

The inspector and Mr. M. McBride, the NRC Resident Inspector, met with licensee representatives, denoted in paragraph 1, at the conclusion of the inspection on August 10, 1984. The inspector summarized the scope and findings of the inspection. At no time during this inspection was written material provided to the licensee by the inspector.