

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-508/85-09
Docket No. 50-508
Construction Permit No. CPPR-154
Licensee: Washington Public Power Supply System (WPPSS)
P. O. Box 1223
Elma, Washington 98541
Facility Name: Washington Nuclear Project 3
Inspection at: WNP-3 Site, Satsop, Washington
Inspection conducted: November 1-3, 1985

Inspector:

W. G. Albert, Reactor Inspector

11/18/85
Date Signed

Approved By:

R. T. Dodds, Chief, Reactor Projects Section 1

11/18/85
Date Signed

Summary:

Inspection on November 1-3, 1985 (Report No. 50-508/85-09)

Areas Inspected: Routine, unannounced inspection by a region based inspector of the containment structural integrity test including a limited site tour. This inspection involved 21 hours onsite by one inspector. Inspection Procedure 63050 was used for guidance.

Results: Of the areas inspected no violations or deviations were identified.

DETAILS

1. Persons Contacted

a. Washington Public Power Supply System (WPPSS)

C. E. Love, Construction Manager
D. R. Coody, Project QA Manager
A. G. Carlyle, QA Engineer
R. Madden, QA Engineer

b. Ebasco Services Inc. (Ebasco)

P. L. Pitman, Acting Quality Program Site Manager
R. H. Wang, Engineering Supervisor, New York
V. P. Gupta, Ebasco Site Services Engineer (ESSE)
R. Orgill, Mechanical Superintendent

c. Chicago Bridge and Iron Company (CBI)

W. F. Walsh, District Welding and QA Manager
P. Van Niel, Project Manager

2. Independent Inspection Effort

A brief tour of the auxiliary building down to the 335' level (lowest) was made in conjunction with the observation of leak testing on the containment.

No violations or deviations were identified.

3. Containment Structural Integrity Test (SIT)

a. Procedures

The following Ebasco and CB&I procedures were examined for conformance to FSAR (Section 3.8.2.7.1) commitments and Section III, Class MC of the ASME code.

- ° Strain Gauge Data Taking (Ebasco)
- ° Inspection of Piping and Component Testing (Ebasco)
- ° Containment Overload Chiller/Dryer Operation (Ebasco)
- ° Containment Vessel Overload Test Coordination (Ebasco)
- ° Vessel Overload Test (CB&I)
- ° Solution Film Test Procedure (CB&I)

b. Work Observation

The inspector examined the work in the annulus between the containment and the shield building during low pressure leak testing of penetration welds by Ebasco.

The actual achievement at test pressure of 115% of design (50.6 psi) was witnessed at 12:56 p.m. on November 3, 1985. At that time the various measuring gauges read:

#1	51.0 psi
#2	50.8 psi
#3	50.6 psi
Remote	50.7 psi
Chart	50.0 psi

The chart was deemed to be the least accurate. However, since the chart is the permanent record, the Authorized Nuclear Inspector (ANI) responsible for the test directed that it be annotated as having achieved the test pressure of 50.6 psi.

The test pressure was held for over one hour, before being reduced to the 44 psi design pressure for further leak checking by soap solutions.

c. Strain Gauge Data

The strain gauge data (twenty gauges) had not been completely reduced at the time the NRC inspector left the site. However, the responsible Ebasco personnel stated that the maximum strains indicated by the data corresponded to stresses of 22 psi in the SA 516 Grade 70 steel.

d. Calibration

The calibration records for the gauges used were verified by the inspector. The CB&I gauges were calibrated by a different source than the Ebasco gauge (No. 3).

No violations or deviations were noted.

3. Exit Interview

The inspector contacted the WNP-3 Quality Assurance Manager by phone at his residence on November 3 (Sunday) to discuss the results of this inspection.