

ORGANIZATION: BECHTEL POWER CORPORATION
LOS ANGELES POWER DIVISION
NORWALK, CALIFORNIA

REPORT NO.: 99900521/82-02	INSPECTION DATE(S) 6/7-11/82	INSPECTION ON-SITE HOURS: 31
CORRESPONDENCE ADDRESS: Bechtel Power Corporation Los Angeles Power Division ATTN: Mr. J. V. Morowski Vice President and General Manager P. O. Box 60680, Terminal Annex Los Angeles, CA 90060		
ORGANIZATIONAL CONTACT: Mr. R. L. Patterson, QA Manager TELEPHONE NUMBER: (213) 864-6011, Ext. 2061		
PRINCIPAL PRODUCT: Architect Engineering Services		
NUCLEAR INDUSTRY ACTIVITY: The Los Angeles Power Division of the Bechtel Power Corporation is the architect engineer for nine domestic reactor units. Fifty percent of the total personnel (approximately 7,700) are assigned to activities in connection with these units and two modification/repair/service type contracts.		
ASSIGNED INSPECTOR:	<u>J. R. Costello</u> J. R. Costello, Reactor Systems Section (RSS)	<u>7/9/82</u> Date
OTHER INSPECTOR(S):		
APPROVED BY:	<u>C. J. Hale</u> C. J. Hale, Chief, RSS	<u>7/15/82</u> Date
INSPECTION BASES AND SCOPE:		
A. <u>BASES</u> : 10 CFR Part 50, Appendix B and PVNGS PSAR, Chapter 17.		
B. <u>SCOPE</u> : This inspection was conducted to assess the effectiveness of Bechtel's QA program in the area of design corrective action, design verification follow-ups, and the status of previous inspection findings.		
PLANT SITE APPLICABILITY: The contents of this report relate to the following docket: 50-361, 50-362, 50-424, 50-425, 50-528, 50-529, and 50-530.		

8208160404 820728
PDR QA999 EECBECH
99900521 PDR

DESIGNATED ORIGINAL
Certified By Rheanna J. [Signature]

ORGANIZATION: BECHTEL POWER CORPORATION
LOS ANGELES POWER DIVISION
NORWALK, CALIFORNIA

REPORT NO.: 99900521/82-02

INSPECTION RESULTS:

PAGE 2 of 4

A. VIOLATIONS:

None

B. NONCONFORMANCES:

Contrary to the requirements of Criterion V of 10 CFR Part 50, Appendix B and Engineering Department Procedure EDP-4.66, five out of six Deficiency Evaluation Reports (DER's) examined, did not comply with the procedural requirement that the initiator sign and date the DER's.

C. UNRESOLVED ITEMS:

Procedure IP-2.12 (Audit Followup) has a requirement which states, "If the response to an audit report or corrective action request cannot be made by the requested due date, the Project Quality Engineer (PQE) or responsible Group Supervisor (GS) shall prepare a handwritten memo requesting an extension of time. The memo shall state the reason why the audit report cannot be answered by the requested due date and shall be countersigned by the Project Engineer (PE)." The inspector reviewed six Corrective Action Reports (CAR's), two of which requested an extension of time, but were not signed by the PE. CAR, PVH 81-285, pertained to an ASME design specification without a required PE seal and the other CAR, PVH 82-075, pertained to nonconforming items shipped without prior approved Supplier Deviation Disposition Requests (SDDR's). The inspector could not determine whether the extension of time for these two CAR's should have been signed by the PE, or whether they were special cases not requiring the PE signature. This matter will be inspected further during the next inspection.

D. STATUS OF PREVIOUS INSPECTION FINDINGS:

1. (Closed) Unresolved Item (81-02): It is not apparent that the requirement for independent verification of engineering specifications is being properly implemented. Procedure IP-4.6, "Project Material Requisitions and Specifications" requires an independent verification by an engineer who has a level of design capability sufficient to have originated the specification. Present documentation of design specification reviews does not clearly identify the independent reviewer.

IP-4.6 was revised on January 13, 1982. The revised procedure now requires the independent design reviewer's signature on the Document Review Notice for specifications.

2. (Open) Nonconformance (82-01): No managers or their designees attended the pre- and postaudit conferences for the management audit of Songs 2 and 3 engineering office. Also, no department/

project/construction manager or their designees attended the preaudit conference for the management audit of the Vogtle design office.

This item remains open because a response was not due at this time.

3. (Open) Nonconformance (82-01): The response to CAR-002 from the management audit of the Vogtle design office was 11 days beyond the 30-day requirement and no scheduled date for response had been established and the management audit of division engineering had scheduled corrective action for CAR-001 by March 20, 1981; however, this item was still open about a year later.

This item remains open because a response was not due at this time.

4. (Open) Nonconformance (82-01): The Vogtle Audit Activity Report for January and February 1982, did not identify the personnel contacted during the preaudit, audit, and postaudit activities.

This item remains open because a response was not due at this time.

5. (Closed) Unresolved Item (82-01): It was not apparent that there was an effective means of revision control for the Quality Assurance Training Manual (which is a controlled document). The inspector could not be certain the procedures in the manual were the latest procedures since the Table of Contents did not reference revisions.

The Table of Contents has been revised and now shows the revision numbers of the procedures.

6. (Open) Unresolved Item (82-01): It is not apparent that the present method of verifying indoctrination and training of Quality Assurance Engineers and project personnel is adequate. The practice of using signatures, initials, and dates in the training does not provide a measure of comprehension of the subject matter. Comprehension for NDE personnel, for example, is provided by written examination and is documented.

This item pertains to Bechtel/Houston and will be inspected during the next regular inspection at Houston.

E. OTHER FINDINGS OR COMMENTS

1. Design Corrective Action - Applicable engineering department procedures,

ORGANIZATION: BECHTEL POWER CORPORATION
LOS ANGELES POWER DIVISION
NORWALK, CALIFORNIA

REPORT NO.: 99900521/82-02

INSPECTION RESULTS:

PAGE 4 OF 4

division instructions, Palo Verde quality program procedures, quality assurance department procedures, and Palo Verde project procedures were examined to determine quality assurance program commitments. To verify implementation of these commitments, the following documents were examined: five corrective action reports (CAR), one CAR status report, five document review notices, one material requisition, one deficiency evaluation report log, one DER status summary, six deficiency evaluation reports and one QA bulletin. Relative to the documents examined, the non-conformance in B was identified and the following concern was identified for followup during the next regular inspection.

Palo Verde internal procedure, IP-4.14, requires that specification change notices (SCN) be incorporated into a specification when 10 or more SCN's are outstanding. This has been identified by Bechtel on CAR PVH 7/82-11A, but the practice of allowing more than 10 SCN's to accumulate before incorporation is still being practiced. Revision 6 to specification 13-MM-598, dated May 7, 1980, incorporated 25 SCN's, and revision 7 to the same specification dated January 23, 1981, incorporated 37 SCN's.

2. Design Verification Followup - As a result of NRC QAB Interpretation No. 8, dated July 26, 1977, a signature or initial of the reviewer with the date on the design document is adequate evidence that a satisfactory design review has been performed. QAB Interpretation No. 8 also requires that records be maintained such that signatures or initials can be traced to individuals. Within the Bechtel Power Corporation, the practice of maintaining signature and initial identification varies widely. An inspection of the signature and initial identification at LAPD disclosed that neither the Vogtle nor San Onofre projects had procedures governing this subject while Palo Verde did. The Palo Verde project procedure, IP-2.8, requires the project administrator to review the project signature list at least every two months, but this requirement is not auditable. On the Vogtle project, 10 names were identified where either the signature or initials were missing and on the Palo Verde project six names were identified without signature or initials. On the San Onofre project the signature and initial identifications were maintained by the Project Quality Engineer and all signatures and initials were identifiable. Also, on the San Onofre project the initials had to be written, not printed. The inspector's concern over LAPD signature and initial identification will be reviewed again during the next regular inspection.

Design Corrective Action

1	2	TITLE/SUBJECT	3	4
1	8	PVNGS - 1, 2 & 3 PSAR Section 17.1B - Bechtel Quality Assurance During Design And Construction	6/2/75	7
2	3	EDP-4.60 Processing Corrective Action Reports (CAR's)	9/18/81	3
3	3	EDP-4.65 Design Deficiency Processing	4/1/74	0
4	3	EDP-4.66 Substantial Safety Hazard Reporting in Compliance with 10 CFR Part 21	10/29/80	2
5	3	IP-5.12 Processing Corrective Action Requests	6/1/76	1
6	3	IP-5.16 Design Deficiency Processing and Deficiency Evaluation Reports	1/26/81	1
7	3	Division Instruction 3-17 Reporting Substantial Safety Hazard Defects And Noncompliance	9/5/80	4
8	3	Pala Verde Quality Program Procedure No. 16.0, Corrective Action	11/24/81	10
9	3	Pala Verde Quality Program Procedure No. 16.1, Processing Deficiency Evaluation Report 10CFR 50.55(a)	12/9/80	4

Document Types:

- | | |
|------------------|---------------------------------|
| 1. Drawing | 5. Purchas Order |
| 2. Specification | 6. Internal Memo |
| 3. Procedure | 7. Letter |
| 4. QA Manual | 8. Other (Specify-if necessary) |

Columns:

1. Sequential Item Number
2. Type of Document
3. Date of Document
4. Revision (If applicable)

DOCUMENTS EXAMINED

Inspector J. R. Castella
 Scope/Module 37997B
Design Corrective Action

1	2	TITLE/SUBJECT	3	4
10	3	Palo Verde Quality Program Procedure No. 16.2, Processing Deficiency Evaluation Report 105ER Part 21	12/9/80	3
11	3	Quality Assurance Department Procedure No. 7.10, Corrective Action	2/5/82	11
12	8	PVNGS Quality Assurance Activities Status CAR's	6/9/82	-
13	8	CAR No. PVH 7/82-11A, Incorporation of SCN's into Specifications	5/7/82	-
14	8	CAR No. PVH 81-285 ASME Design Spec without a required P.E. Seal	12/8/81	-
15	8	CAR No. PVH 6/82-01A, Incorporation of PCN's into Drawings	1/6/82	-
16	8	CAR No. PVH 5/82-04A, Discrepancies in the processing of Calculations	2/22/82	-
17	8	CAR No. PVH 82-075, Nonconforming items shipped without approved SDDR's	3/10/82	-

Columns:
 1. Sequential Item Number
 2. Type of Document
 3. Date of Document
 4. Revision (If applicable)

Document Types:
 1. Drawing
 2. Specification
 3. Procedure
 4. QA Manual
 5. Purchase Order
 6. Internal Memo
 7. Letter
 8. Other (Specify-if necessary)

Inspector J.R. Costello
 Scope/Module 37997 B
Design Corrective Action

DOCUMENTS EXAMINED

	1	2	TITLE/SUBJECT	3	4
18	8		DRN Log No. 3018, Specification 13-MM-021, Auxiliary Feedwater Pumps	4/1/81	9
19	8		DRN Log No. 2920, Specification 13-MM-018, Diesel Generators And Auxiliaries	2/22/81	8
20	8		DRN Log No. 3018, Specification 13-MM-021, Auxiliary Feed Pumps	4/2/81	9
21	8		DRN Log No. 3382, Specification 13-PM-205, Field Fabrication And Installation Of Piping Systems	5/27/82	11
22	8		DRN Log No. 2957, Specification 13-MM-598, Heating Ventilating & Air Conditioning Equipment & Installation	1/22/81	7
23	8		MR 13-MM-598, HVAC Equipment & Installation	1/23/81	7
24	3		IP-2.12, Audit Followup	4/1/76	3
25	8		Deficiency Evaluation Report Log	4/9/82	-
26	8		PVNGS Deficiency Evaluation Reports Status Summary	6/2/82	-
27	8		DER No. 82-3, Diesel Generator Sats supplied by Cooper Energy. Mesh Strainer Basket found to tear and disintegrate	2/9/82	0

Columns:
 1. Sequential Item Number
 2. Type of Document
 3. Date of Document
 4. Revision (If applicable)

Document Types:
 1. Drawing
 2. Specification
 3. Procedure
 4. QA Manual
 5. Purchas Order
 6. Internal Memo
 7. Letter
 8. Other (Specify-if necessary)

1	2	TITLE/SUBJECT	3	4
28	8	DER No. 81-15, Auxiliary Feedwater Turbine Pump Flow Cannot Reach Steam Generator	5/24/81	# 1
29	8	Quality Assurance Bulletin No. QAB 142-81, Emergency Feedwater System	5/6/81	-
30	8	DER No. 81-57, Defective GE HMA Relays	12/22/81	→ 0
31	8	DER No. 82-18, HPSI Pump Motors had Ferrrous Metal Chips and Filings in the Motor Oil	4/9/82	0
32	8	DER No 81-13, 4160V Switchgear contains numerous locations of internal wiring in violation of Class 1E separation requirements	9/25/81	1
33	8	DER No. 82-14, Code compliance of bolting material for instrument installations indeterminate	3/25/82	0

Document Types:

- | | |
|------------------|---------------------------------|
| 1. Drawing | 5. Purchas Order |
| 2. Specification | 6. Internal Memo |
| 3. Procedure | 7. Letter |
| 4. QA Manual | 8. Other (Specify-if necessary) |

Columns:

1. Sequential Item Number
2. Type of Document
3. Date of Document
4. Revision (If applicable)

