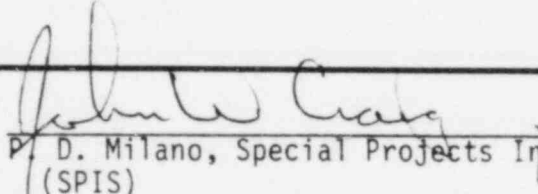
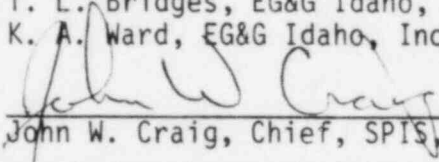


ORGANIZATION: BECHTEL POWER CORPORATION
WESTERN POWER DIVISION/HOUSTON PROJECT OFFICE
LOS ANGELES, CALIFORNIA

REPORT NO.: 99900521/85-01	INSPECTION DATE(S): 2/4-8/85	INSPECTION ON-SITE HOURS: 120
CORRESPONDENCE ADDRESS: Bechtel Power Corporation Western Power Division/Houston Project Office ATTN: Mr. L. G. Hinkleman Post Office Box 60650, Terminal Annex Los Angeles, California 90060 ORGANIZATIONAL CONTACT: Mr. J. Gatewood TELEPHONE NUMBER: (512) 972-3611 X4168		
PRINCIPAL PRODUCT: Architect-Engineering Services NUCLEAR INDUSTRY ACTIVITY: The Houston Project Office is currently providing principal architect-engineering and construction management services for the South Texas Project.		
ASSIGNED INSPECTOR:  P. D. Milano, Special Projects Inspection Section (SPIS)		7/19/85 Date
OTHER INSPECTOR(S): R. L. Cilimberg, SPIS T. L. Bridges, EG&G Idaho, Inc. K. A. Ward, EG&G Idaho, Inc.		
APPROVED BY:  John W. Craig, Chief, SPIS, Vendor Program Branch		7/19/85 Date
INSPECTION BASES AND SCOPE: A. <u>BASES</u> : 10 CFR Part 21 and 10 CFR Part 50, Appendix B. B. <u>SCOPE</u> : Site procurement process control for material and services.		
PLANT SITE APPLICABILITY: South Texas Project, Units 1 & 2 (50-498, 50-499).		

8508050233 850801
PDR QA999 EECBECH
99900521 PDR

ORGANIZATION: BECHTEL POWER CORPORATION
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LOS ANGELES, CALIFORNIA

REPORT
NO.: 99900521/85-01

INSPECTION
RESULTS:

PAGE 2 of 7

A. VIOLATIONS:

None.

B. NONCONFORMANCES:

None.

C. UNRESOLVED ITEMS:

1. (Open) 85-01: Questions concerning the qualification of the coating system on the steel containment liner of Unit 1 will be reviewed by the NRC. This item will remain open pending completion of this review.

D. STATUS OF PREVIOUS INSPECTION FINDINGS:

Previous findings were not covered during this inspection.

Previous inspection findings are discussed in Nonconformance B.1 and Unresolved Items C.1 thru C.4, of the previous inspection report, 84-01.

These items will be covered during a future inspection.

E. OTHER FINDINGS AND COMMENTS:

1. Site Procurement Process Control

A review of the Bechtel field office procurement process for the purchase of material and services was conducted and focused upon the area of mechanical and electrical procurements. Purchase order packages for nine orders including any changes processed after contract award were reviewed. The majority of the changes to the orders for these packages were the result of Specification Change Notices (SCNs) and nonconformance reports (NCRs). With one exception, none of the purchase orders involved any source inspection. Thus, the acceptance of the material was done by receiving inspection along with, in some cases, receipt of Supplier Certificates of Conformance.

ORGANIZATION: BECHTEL POWER CORPORATION
WESTERN POWER DIVISION/HOUSTON PROJECT OFFICE
LOS ANGELES, CALIFORNIA

REPORT
NO.: 99900521/85-01

INSPECTION
RESULTS:

PAGE 3 of 7

Procedure change number NPC-27 to South Texas Project (STP) Procedure WPP-QCI-4.0, "Receiving Inspection," Revision 8, dated January 24, 1985, made changes to indicate what Bechtel responsibility will be for the review of Westinghouse Electric Corporation documentation supplied with the shipment of ASME materials for which Bechtel has and maintains Code responsibility for the system design. In these cases, the procedure now states that "Bechtel QC shall perform a technical review of the Westinghouse documentation supplied with shipment...." A review of the purchase order for inspection and repair of high pressure safety injection, low pressure safety injection, and containment spray pumps (P.O. BF-2255 with Westinghouse/Pacific Pump), identified that neither of the two Receiving Inspection Plans were performed by Bechtel QC. While one of the plans had this QC inspection requirement deleted by a "N/A" (not applicable) in the signoff area, the other inspection, as described by the responsible Quality Control Inspector, only verified the physical receipt of the Westinghouse data that came with the shipment.

The documentation for Receiving Inspection Plan No. 1387 for P.O. BF-2255 was reviewed, a Westinghouse Quality Release for Shipment was attached describing the information that the Westinghouse source inspector reviewed prior to accepting the items. While other documentation stated that no repairs were necessary on the pumps, the Quality Release indicated that Welder Performance Qualification Records (PQRs) were reviewed. The NRC inspector was not able to determine the type of work that was done which would require welder certifications on this order.

The purchase order for machining services on the Reactor Vessel Lateral Restraints (BF-0689), while found to be adequate, contained a nonconformance report with a questionable resolution. Nonconformance Report BM-00154 was prepared when it was determined that the precision straight edge used in verifying the surface flatness requirement had not been calibration checked. Rather than recheck the instrument, as the original disposition stated, the disposition was changed to accept the data as-is stating that the straight edge does not need to be calibrated. Additionally, the order requirement for flatness within .001 inch could not be accurately measured by the system utilized. First, a piece of .001 inch shim stock was checked with a 0 to 1 inch micrometer. Then, the shim was used as a feeler gage with the straight edge. This method of record measurement transfer leads to potential

ORGANIZATION: BECHTEL POWER CORPORATION
WESTERN POWER DIVISION/HOUSTON PROJECT OFFICE
LOS ANGELES, CALIFORNIA

REPORT
NO.: 99900521/85-01

INSPECTION
RESULTS:

PAGE 4 of 7

inaccuracies that are greater than the actual measurement required.

The purchase order for a replacement valve positioner (BF-2828) was reviewed. When the NRC inspector questioned why a second positioner was ordered after the first was received, it was stated that the person specifying the replacement did not completely record the correct model number from the damaged unit. The supplier initially sent and the constructor installed an incorrect unit. The error was identified when the unit would not function properly when tested.

The purchase order for the repair of a damaged weld on a gate valve (BF-2687) was also reviewed and found to be adequate. However, the Certified Material Test Reports (CMTRs) were not included with the Receiving Inspection Documentation nor was their location referenced. The CMTRs were later found in an equipment file.

2. Receiving Inspection of Home-office Procured Transmitters

The receiving inspection criteria were reviewed for the pressure and differential pressure transmitters procured from Rosemount (P.O. 14926-4332). This order was selected to be reviewed even though the purchase order was initiated by the Houston Project Office because these items do not receive source inspection prior to shipment. The Bechtel procurement policy identifies these instruments as standard, off-the-shelf, commodities and thus, do not warrant source inspection. Therefore, acceptance of the material is based on the receiving inspection and Certificates of Compliance.

The review of the Receipt Inspection Plans for this order indicated that Certified Material Test Reports (CMTRs) were to be received and evaluated per the technical specification requirement. However, the specification requires that, if the vendor does not submit the required information that is required, the vendor is required to maintain and not destroy the data. Approximately half of the Receiving Inspection Plans gave no indication that the CMTRs did not arrive although this was stamped as approved. Rosemount provided only a statement in a Certificate of Compliance that "Records are kept on file which identify the process wetted surface materials used in the transmitter. The materials are in accordance with applicable material specifications; the chemical

ORGANIZATION: BECHTEL POWER CORPORATION
WESTERN POWER DIVISION/HOUSTON PROJECT OFFICE
LOS ANGELES, CALIFORNIA

REPORT
NO.: 99900521/85-01

INSPECTION
RESULTS:

PAGE 5 of 7

and physical reports are on file." In order to determine whether the materials used at the Project Site are correct, the Rosemount installation drawings must be reviewed. However, these are not utilized during receiving inspection.

The same Certificate of Compliance is utilized for acceptance of the cleanliness inspection and hydrostatic test. The actual hydrostatic test pressure specification is not provided. But a statement that the test was conducted at 150% of maximum rated pressure or a minimum of 2000 PSI is included. The Certificate also indicates that the transmitter was tested for nuclear service. Rosemount Qualification Report D830040 was identified but did not contain a statement to indicate that the hydrostatic test results were acceptable.

In accordance with Section 10.2 of ANSI N45.2.13-1976, Quality Assurance Requirements for Control of Procurement of Items and Services for Nuclear Power Plants, the Purchaser should provide a means to verify the validity of Supplier certificates and the effectiveness of the certification system, such as during the performance of audits of the Supplier or independent inspection or test of the items. Such verifications should be conducted by the Purchaser at intervals commensurate with the Supplier's past quality performance. The validity of Certificates takes on an added importance when the acceptance of the item, such as the case of the transmitters, is based solely on this document.

The Bechtel Quality Assurance Program for Nuclear Power Plants, BQ-TOP-1, Rev. 3A, dated October 1980, which forms Section B of the STP Quality Assurance Program Description, Rev. 9, dated December 28, 1984, provides Bechtel's alternate interpretation to the ANSI N45.2.13. It states that the means of verification may include source witness/hold points, source audits, and document reviews; independent inspections at the time of material receipt; user tests on selected commodities, such as concrete components; and tests after installation on selected components and systems. All of these means verify whether or not a supplier has fulfilled procurement document requirements and whether or not a certification system is effective.

In the case of the Rosemount transmitter purchase order, independent inspections are not done upon receipt and the material properties are not independently tested. The absence of source inspection and the lack of source audits that verify Certificate validity for these transmitters raise questions

REPORT
NO.: 99900521/85-01

INSPECTION
RESULTS:

PAGE 6 of 7

concerning the effectiveness of this system. It appears that the present Bechtel approach is: not question the validity unless a problem occurs which may relate to the area addressed by the Certificate. A further review of this area may be performed at a later date.

3. General Comments on Receiving Inspection

The STP procedure WPP-QCI-2.2, Control of Inspection Planning, Rev. 6, dated June 20, 1984, requires that Receiving Inspection Plans (RIPs) be approved by the Project Management Coordinator, Project Quality Assurance Engineer, and the Project Quality Control Engineer. Generally, a preprinted "Receiving Inspection Plan for Permanent Plant Items" (form STP-010A) is utilized which contains the information listed in Section 5.2 of ANSI N45.2.2. This form is not formally approved for each use and is usually modified at the discretion of the QC inspector. The QC Inspector fills out the form including the reference documents such as the technical specification and deletes those attributes that he considers not applicable. Although modified in cases, this form is considered by the Project to be preapproved since it is included as a "Typical form" in STP Procedure WPP-QCI-4.0.

Section 1.7 of the Receiving Inspection Plan (RIP) for Permanent Plant Items states that the QC should sign and date the Material Receiving Request (MRR). When reviewing the MRRs, it was noted that the QC inspector signs a block on the MRR stating "QC Approved." When reviewing MRR B11827 and RIP 4043, on purchase order BF-2255 for the inspection and repair of selected pumps, the NRC inspector identified that the MRR was approved on August 2, 1984 but the RIP was not completed indicating item acceptance until January 30, 1985.

4. Protective Coatings

During the review of purchase orders and specifications for protective coatings it was determined that a zinc rich primer and an epoxy top coat was applied to the steel containment liner of Units 1 and 2. The NRC inspectors reviewed the procurement and receiving inspection documents for these coatings. A material Certificate of Compliance was not provided by the coating supplier (Eastern Imperial Coatings) for the 27 RIPs reviewed. The coating supplier did provide the following statement on all but three RIPs:

ORGANIZATION: BECHTEL POWER CORPORATION
WESTERN POWER DIVISION/HOUSTON PROJECT OFFICE
LOS ANGELES, CALIFORNIA

REPORT
NO.: 99900521/85-01

INSPECTION
RESULTS:

PAGE 7 of 7

"Eastern Imperial Coatings Corporation certifies that the coating material supplied to Bechtel Energy Corporation (South Texas Project) on Purchase Order 1496-BF-1788, essentially has the same required performance properties and composition as the coating material on which approval was granted.

Discussions with the NRC Resident Inspector and Bechtel representatives revealed that the coatings on the Unit 1 containment liner were removed down to bare steel from all areas except those areas behind installed ducts, Bechtel Specification No. 5A819AQ1001.

Revision 2 dated July 18, 1984, requires that the Unit 1 containment liner plate be coated with two coats of epoxy and the Unit 2 containment liner plate retain the initial coating system (zinc primer with epoxy top coat).

The inspectors questioned the suitability of this coating system for Unit 1 since the coating will be routinely exposed to high humidity during outages when containment integrity is not maintained. The inspector noted that this two coat epoxy system may result in accelerated corrosion if the bare steel should become exposed to moisture through voids in the coating system. A potential concern noted by the inspectors was that corrosion may result in separation of the coating from the steel with subsequent entrapment in the containment sump.

At the exit meeting the inspectors stated that this item would be an unresolved item pending additional NRC review of the specification and acceptance tests for the two coat epoxy system used on the liner of Unit 1.

PERSONS CONTACTED

Company BECHTEL POWER - HOUSTON PROJECT OFFICE

Dates FEBRUARY 4-8, 1965

Docket/Report No. 99900521/84-01

Inspector P. D. MILANE

Page 1 of [illegible]

PERSONS CONTACTED

Company BECHTEL POWER - HPC

Dates FEBRUARY 4-8, 1985

Docket/Report No. 104-10000-10000-10000

Inspector P. Milano

Page of

NAME(Please Print)

TITLE(Please Print)

ORGANIZATION(Please Print)

[illegible]

PERSONS CONTACTED

Company Becton Powder - Houston Project Office

Dates February 4-8, 1985

Docket/Report No. 99900521/84-01

Inspector P. D. MILANO

Page 1 of 1

NAME(Please Print)

TITLE (Please Print)

ORGANIZATION(Please Print)

[illegible]

PERSONS CONTACTED

Company BECHTEL - HPO

Dates February 8, 1985

Docket/Report No. 99900521/84-01

Inspector P. D. MilanoPage 1 of 1

EXIT MEETING

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INSPECTOR _____

SCOPE _____

DOCUMENTS EXAMINED

DOCKET NO. _____

REPORT NO. _____

PAGE _____ OF _____

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	PRO	WPP- QCI-10.0	9	11-13-84 2-15-86	FIELD MATERIAL REQUISITION PREPARATION AND APPROVAL
2	PRO	WPP- QCI-6.0	8	9-26-84	CONTROL OF QUALITY RECORDS
3	P.O.	BF-2255	1	9-26-84	P.O. for repair of pumps per dispositions to NCR's BN-00007, 00008, 00009, and BM-00198 - Pacific Pumps
4	LTR	ST-HL-YO- 3012		10/31/83	LTR. J. E. Givens (HLSP, QA) to L.W. Harst (BPCo), Quality Assurance Supplier Approval of Westinghouse Electric Corp. With Reactor Division
5	LTR	ST-Y5-WY 00050		10/3/83	R.L. Yerkes (BPCo Purchasing) to T. Conley/H. Gutzman (WEC), Bid Request No. 14926-FP-00377, Repair of Pumps
6	PO	FP-00377		11/11/83	Field Material Requisition, Westinghouse to S-purchase Repair of Pacific Pumps on NCR BN-00007 and NCR BN 00008
7	PRO	WPP- QCI-4.0	8	1-21-85	
8	PRO	WPP- QCI-3.2			
9	PRO	WPP- QCI-5.0	12	11-17-84	NONCONFORMING MATERIAL, PARTS AND COMPONENTS
10	SPEC	E-SPEC G78815	2	9/6/73	Class 2 Pumps - Based on ASME B31V Code Section III - Rules for Construction of Nuclear Power Plant Components
11	SPEC	C-SPEC 952455	1	6/30/76	Code Class 2 Pumps and Motors
12	QAM	QAPD	9	1/22/85	South Texas Project Quality Assurance Program Description
12	SDD	TPNS 55119M1016	1	7/11/84	Design Criteria - Auxiliary Feedwater System
14	QCD	3974	-	7/27/84	Receiving Inspection Plan Differential Pressure Transmitters
		4750		12/31/84	

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QAM - QA MANUAL
QCD - QC DOCUMENT
PO - PURCHASE ORDER

LTR - LETTER

INSPECTOR _____

SCOPE _____

SCOPE

CHAPTER TOP

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TYPE OF DOC:

DWG - DRAWING
 SPEC - SPECIFICATION
 PRO - PROCEDURE
 QM - QA MANUAL
 QCD - QC DOCUMENT

LTRA - LETTER

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INSPECTOR CILIMBERG

SCOPE _____

DOCUMENTS EXAMINED

DOCKET NO. 99900521REPORT NO. 85 - 01

PAGE _____ OF _____

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	SPEC	5A819AQ1001	2	7/18/84	Painting and Coating
2	PO	14926 - -BF-1788	1	12/16/83	Imperial Professional Coatings, P.O. Box 18363, Houston, TX 77227
3	"	"	2	1/24/84	{
4	"	"	3	7/23/84	
5	"	"	4	11/28/84	
6	"	"	5	12/4/84	
7	RIP*	2257	NA	NA	Protective Coatings - Bulk purchase.
8	"	3134	"	"	
9	"	3746	"	"	
10	"	4010	"	"	
11	"	4082	"	"	
12	"	4084	"	"	
13	"	4152	"	"	
14	"	4153	"	"	
15	"	4155	"	"	

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QAM - QA MANUAL
QCD - QC DOCUMENT
P.O. - PURCHASE ORDER
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LTR - LETTER

* Receiving and Inspection Package

INSPECTOR CILIMBERG

SCOPE _____

DOCUMENTS EXAMINED

POCKET NO. 99900521
REPORT NO. 85 - 01
PAGE OF

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
16	RIP	4257	N/A	NA	Protective Coatings - Bulk purchase
17	"	1258	"	"	
18	"	4259	"	"	
19	"	4272	"	"	
20	"	4304	"	"	
21	"	4317	"	"	
22	"	4406	"	"	
23	"	4623	"	"	
24	"	4815	"	"	
25	"	4831	"	"	
26	"	4881	"	"	
27	"	5265	"	"	
28	"	5168	"	"	
29	"	5169	"	"	
30	"	5302	"	"	

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QA - QA MANUAL
QC - QC DOCUMENT
PO - PURCHASE ORDER
TECH - TECHNICAL MEMO

LTR - LETTER

INSPECTOR K. A. WARD

SCOPE _____

DOCUMENTS EXAMINED

DOCKET NO. _____

REPORT NO. _____

PAGE _____ OF _____

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1					PACKAGE BF-803 CABLE TRAYS & HARDWARE - HUSKY PRODUCTS
1	PO	BF-0803	0	3-28-83	PROCUREMENT PACKAGE
2	PO	BF-0803	1	1-3-84	REVISION TO PROCUREMENT PACKAGE
3	FMR	FE-00138	051	3-25-83 12-30-83	MATERIAL REQUISITION
4	MRR	B-4416		9-22-83	MATERIAL RECEIVING REPORTS
5	MRR	B-5159	0 1	10-24-83 1-18-84	
6	MRR	B-2909		6-21-83	
7	MRR	B-2879	0	6-21-83 6-24-83	
8	MRR	B-2834	1	1-12-84	
9	MRR	B-2757	0 1	6-10-83 1-12-84	
10	SPEC	3E209E0031	1		SPEC FOR ELECT. CABLE TRAYS
11	NCR	BE-00136		6-13-83	REPORT ON DAMAGE SUSTAINED DURING SHIPPING
12	NCR	BE-00142		6-27-83	REPORT ON DAMAGE SUSTAINED DURING SHIPPING

TYPE OF DOC:

DWG - DRAWING
 SPEC - SPECIFICATION
 PRO - PROCEDURE
 QAM - QA MANUAL
 QCD - QC DOCUMENT
 QM - QUALITY MANAGEMENT

LTR - LETTER
 FMR - FIELD MAT'L REQ
 MRR - MAT'L RECV REPORT

SCOPE _____

DOCUMENTS EXAMINED

DOCKET NO. _____

REPORT NO. _____ - _____

PAGE _____ OF _____

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TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PROC - PROCEDURE
QAH - QA MANUAL
QCD - QC DOCUMENT

LTR - LETTER
FMR - FIELD MAT'L REQ.
MRB - MAT'L RECEIVING REPORT
RIP - REPLY INFO. PLAN
NCR - NONCONFORMANCE REPORT

INSPECTOR T.L. Bridges

SCOPE _____

DOCUMENTS EXAMINED

DOCKET NO. _____

REPORT NO. _____

PAGE _____ OF _____

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	P.O.	BF-2687		6/27/84	P.O. for repairs to 6" Gate valve Anchor/Darby valve 3# E6288-338
2	Receiving Inspection Planning	RIP 4614		10/2/84	Receiving Inspection Planning for 6" Gate valve
3	P.B.E.S.	BF-02687		6/27/84	Site purchase order of item 1
4	equipment file	E-6288-338		9/16/84	Vendor supplied info for 6" Gate valve
5	Receiving inspection report	RIR 4152		10/29/84	original RIR for 6" Gate valve
6	P.O.	BF-3099		8/16/84	P.O. requesting Pump Support mod. fixtures
7	P.O.	6026		6/16/78	original P.O. To Pittsburgh-Des Moines Steel Co.
8	R.I.P.	4692		10/17/84	Receiving Inspection Package for modified pump supports
9	P.O.	BF-689		3-25-83	P.O. Requesting machining & R.V. Isoterial supports
10	R.I.P.	0335		3-8-83	Receiving Inspection Planning for item 9
11	non-conformance report	BN-00154		3-30-83	non-conformance report. Receiving inspection of item 9 modification

TYPE OF DOC:

DWG - DRAWING
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QA - QA MANUAL
QCD - Q.C. DOCUMENT
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POCKET NO. _____
REPORT NO. _____
PAGE _____

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QC - QC DOCUMENT

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