BROWN & ROOT, INC. CPSES	PROCEDURE NUMBER	REVISION	ISSUE DATE	PAGE
JOB 35-1195	CP-CPM-5.1	2	9/12/79	1 of 9

TITLE:

"FIELD PROCUREMENT ACTIVITIES"

ORIGINATOR: [signature] 9-13-79 DATE

REVIEWED BY: [signature] QA/QC 9/17/79 DATE

APPROVED BY: [signature] CONSTRUCTION PROJECT MANAGER 9-17-79 DATE

DCN #1

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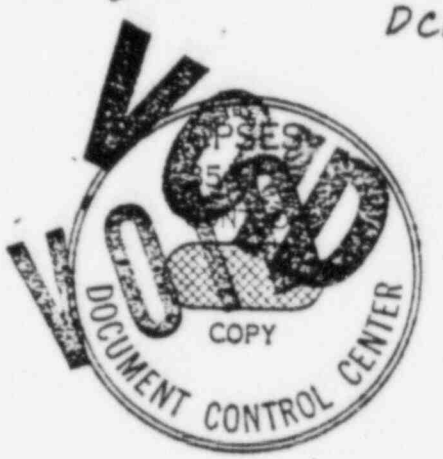

1.0 REFERENCES

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THIS PROCEDURE REPLACES No. 35-1195-GCP-4 and 35-1195-QAP 4.1.

DATE:

JOB 35-1195
Comanche Peak Steam Electric Station

Construction Procedure
DOCUMENT CHANGE NOTICE NUMBER 1 Sheet 1 of 3

This notice applies to Construction Procedure No. 35-1195-CP-CPM 5.1 Revision 2.

This change will be incorporated in the next revision of the procedure.

Change the procedure as follows:

Replace the following pages with the attached:

Page 7 of 9

Page 9 of 9

Reason for change: Clarification of flow path for non-"Q" subcontract activities.

This change approved by:

R P Baker 3 Aug 80
Originator Date

Reviewed by:

[signature] 8-5-80
Brown & Root Quality Assurance Date

[signature] 8/5/80
~~FUGCO~~ Quality Assurance Date

Reviewed by:

[signature] 8-8-80
Construction Project Manager Date

August 7, 1980
Effective Date

1.0 REFERENCES

1.1 Brown & Root Administration Procedures, Section V, "Purchasing, Expediting & Traffic"

1.2 Brown & Root Power Plant Construction Department, "Manual for Subcontracting"

1.3 Brown & Root Quality Assurance Manual

2.0 GENERAL

2.1 PURPOSE

2.1.1 This procedure provides instructions for those persons involved in field procurement. These instructions are intended to assure that proper coordination is maintained with Texas Utilities Services Inc. (TUSI), Gibbs & Hill (G&H), Brown & Root, Inc. (B&R) Construction, Purchasing and Quality Assurance (QA) throughout the procurement process.

2.2 SCOPE

2.2.1 This procedure covers all procurement activities initiated by B&R Construction except those Non-"Q" items which are valued at less than $100 and which do not have extended delivery dates. These exceptions will be purchased on a petty cash basis utilizing a B&R field requisition as authorization for payment. From the standpoint of administrative flow charts, all other procurement activities will fall into one of the following four categories:

1. "Q" Item Purchases - The purchase of an item which is the subject of the Quality Assurance (QA) program as defined in Chapter 17 of the Comanche Peak Steam Electric Station (CPSES) Final Safety Analysis Report (FSAR).

2. Non-"Q" Item Purchases - The purchase of an item not subject to QA as defined above (primarily conventional construction materials, tools and equipment.)

3. Subcontracts - Services procured by B&R from another company or organization. Subcontracts, like purchases, may be categorized "Q" or Non-"Q".

4. Change Orders (in any of the above three categories) - The administrative flow path for a change order will always be the same as for the original procurement action unless otherwise specified herein, or by supporting special instructions issued to supplement this procedure.

2.3 RESPONSIBILITY

2.3.1 The B&R Construction Project Manager is responsible to assure that this procedure is followed by all disciplines within his organization. The B&R site Quality Assurance Manager is responsible to assure that this procedure is followed within his organization. Initiation of any procurement activity must be approved by the B&R Construction Project Manager or his authorized representative. In no case shall a "Q" item purchase order be issued without QA concurrence. Deviations from this procedure as may be required to meet an urgent procurement need are permitted only for Non-"Q" item purchases and subcontracts, and then only by direction of the B&R Construction Project Manager or his authorized representative.

2.3.2 Material Procurement Group (MPG) is responsible for maintaining purchase orders and subcontracts in an up-to-date status in relation to specifications and drawings.

2.3.3 Site Purchasing is responsible for filing the Purchase Order and any other pertinent commercial/purchasing data in an organized and systematic sequence for records and retrieval purposes.

2.4 SPECIAL ITEMS AND OPERATIONS

2.4.1 Special Instructions and Quality Instructions detailing the implementation of this procedure will be provided, where necessary, by the disciplines responsible for the various activities.

3.0 PROCEDURE

3.1 PURCHASING FLOW PATH

3.1.1 The following steps are performed in the total Purchasing Flow Path as shown in Figure A.

1. TUSI/G&H issues specifications and drawings that describe permanent material, design criteria, and documentation requirements. These documents must have an issue status, at a minimum, of "For Procurement" before B&R can initiate purchasing procedures. This step does not apply to temporary or miscellaneous materials or services that do not require project specifications.

2. The issues of specifications and drawings referenced in Step 1 are distributed through the Document Control Center to the responsible B&R Construction Engineer. The Construction Engineer makes a material take-off, states the design documentation requirements and indicates whether the material is Safety Related or Non-Safety Related and forwards the information to the Material Procurement Group.

3. The Material Procurement Group reviews the information package for technical, quality, commercial and source requirements. A material requisition and inquiry delineating these requirements is completed and submitted to site QA when the material is nuclear safety related.

4. Site QA reviews and approves the requisition and inquiry.

5. Purchasing reviews the inquiry and submitts it to qualified bidders on the project final bidders' list for quotations.

6. The qualified bidders receive the Inquiry package, prepare and submit proposals.

7. Site Purchasing receives the proposals from the various prospective suppliers and forwards them to MPG for tabulation.

8. The Materials Procurement Group prepares the bid tabulation, makes a detailed evaluation of the proposals, (with consultation from Construction Engineering when applicable) and indicates recommendation (with QA concurrance) to Owner for approval.

9. After TUSI approval, the Material Procurement Group Reviews the approval, transmits the complete approved package to Site Purchasing. At this point, a Letter of Intent may be prepared, co-signed by the B&R Construction Project Manager and the B&R QA Manager and issued to the sucessful supplier.

10. Site Purchasing prepares a formal Purchase Order.

11. Site QA reviews and approves the formal Purchase Order.

12. Site Purchasing transmits the formal Purchase Order to the successful bidder.

13. The successful bidder provides acceptance of the order by signing the Purchase Order Agreement.

3.1.2 The Purchase Order Agreement can only be modified by a formal Change Order or by a Letter of Instruction to the Vendor. In both cases, when the order is designated as Safety-Related, the changes are approved by Site QA and distribution is made in the same manner as the original Purchase Order.

3.2 SUBCONTRACT FLOW PATH

3.2.1 The following steps are performed in the total Subcontract Flow Path as shown in Figure B.

1. TUSI/G&H issues specifications and drawings that describe permanent material, design criteria and documentation requirements. These documents must have an issue status, at a minimum, of "For Procurement" before B&R can initiate Subcontract procedures. This step does not apply to temporary or miscellaneous materials or services that do not require project specifications.

2. The issues of specifications and drawings referenced in Step 1 are distributed through the Document Control Center to the responsible B&R Construction Engineer who provides a memorandum to the Site Subcontracts Group requesting that the activity be subcontracted.

3. The Site Subcontracts Group reviews the activity for technical, quality, commercial and source requirements and prepares the Inquiry Documents.

4. Site QA reviews the package adding Quality Program requirements and approves the Inquiry.

5. The Inquiry is submitted to TUSI for approval.

6. After TUSI approval, the Site Subcontracts Group incorporates comments and submits the formal Inquiry to Project approved bidders for quotations.

7. Vendors submit proposals.

8. The Site Subcontracts Group receives and reviews the proposals, prepares a bid tabulation and the Letter of Recommendation.

9. Site QA reviews and approves Letter of Recommendation.

10. The Letter of Recommendation is submitted to TUSI for approval.

11. After TUSI approval, the Site Subcontracts Group incorporates any comments and transmits the complete approved package to B&R Houston Subcontracts. At this point, a Letter of Intent may be issued to the successful bidder provided it is co-signed by the B&R Construction Project Manager and by Site QA Manager (for "Q" subcontracts).

12. The B&R Houston Subcontracts Group prepares the formal Subcontract draft.

13. Site Subcontracts Group reviews the Subcontract draft.

14. Site QA reviews and approves the Subcontract Draft.

15. The Subcontract draft is submitted to TUSI for approval.

16. After TUSI approval, B&R Houston Subcontracts reviews and incorporates comments to the Subcontract draft and transmits the formal Subcontract to the successful Vendor for acceptance.

17. The successful Vendor signs and accepts the Subcontract Agreement.

3.2.2 The Subcontract Agreement can only be modified by a formal Change Order, a Supplemental Agreement or by a Letter of Instruction to the Subcontractors. In all cases, when the order is designated as Safety-Related, the changes are approved by Site QA.

3.2.3 For those subcontracts which are "non-Q" per Section 2.2.1.3, steps 4, 9, and 14 may be omitted.

PURCHASING FLOW PATH

TUSI & G&H	B&R ENGINEERING	MATERIAL PROCUREMENT GROUP	B&R SITE QA	PURCHASING	VENDOR
1.) Issue Specifications and drawings.	2). Prepare Bill of Material (Memorandum or Requisition).	3). Review technical, quality, commercial and source requirements. Prepare Inquiry.	4). Review and approve the Requisition and Inquiry.	5). Approve and submit Inquiry Request for Quotation to qualified vendors.	6). Submit Bids.
				7). Receive Bid from Vendor, review & forward to MPG.	
		8). Prepare Bid Tabulation and submit or prepare Letter of Recommendation for Approval.	9). Review Bid Tabulation or approve Letter of Recommendation		
10). Approve Bid Tab or Letter of Recommendation.		11). Transmit complete approved package to Purchasing.		12). Prepare formal Purchase Order.	
			13). Approve Purchase Order.	14). Transmit Purchase Order to Vendor.	15). Accept Purchase Order.

FIGURE A

NOTE 1. For Non-Nuclear Safety-Related Procurement Steps 4, 9 & 13 may be omitted.

NOTE 2. For Procurement other than the following categories: Steps 4, 6, 9, 11 & 15 may be omitted.
a. All "Q" permanent materials
b. Tools used in construction/fabrication of stainless steel.
c. All miscellaneous materials used in construction/fabrication of stainless steel.
d. All outside Services.

NOTE 3. For Procurement other than "Q" permanent materials, Steps 3, 4, 8, 9, 11 & 13 may be performed by the Construction or Engineering Group that initiates the order and those mentioned in Note 2 above.

SUBCONTRACT FLOW PATH

TUSI/G&H	B&R ENGINEERING	B&R SITE SUBCONTRACTS	B&R SITE QA	B&R HOUSTON SUBCONTRACTORS	VENDOR
1). Issue Specifications and drawings	2). Prepare Memorandum requesting Subcontract.	3). Review, technical, quality commercial, and source requirements and prepare Inquiry.	4). Review, Approve and add quality program requirements. (1)		
5). Approves Inquiry.		6). Incorporates comments and submits Inquiry to Vendors.			7). Submit Bids.
		8). Review proposals, prepare Bid Tabulation and Letter of Recommendation	9). Review and approve Letter of Recommendation (1)		
10). Approve Letter of Recommendation		11). Transmit complete approved package to Brown & Root Subcontractors.		12). Reviews and prepares formal Subcontract.	
		13). Review draft of Subcontract.	14). Approves draft of Subcontract. (1)		
15). Approves draft of Subcontract.				16). Reviews and incorporates comments to Subcontract draft and transmits the formal Subcontract to the successful vendor.	17). Accepts Subcontract.

FIGURE B

Note #1: Steps 4, 9, and 14 may be omitted for Non-"Q" subcontracts per Section 2.2.1.3.

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9. Site QA reviews and approves Letter of Recommendation.

10. The Letter of Recommendation is submitted to TUSI for approval.

11. After TUSI approval, the Site Subcontracts Group incorporates any comments and transmits the complete approved package to B&R Houston Subcontracts. At this point, a Letter of Intent may be issued to the successful bidder provided it is co-signed by the B&R Construction Project Manager and by Site QA Manager.

12. The B&R Houston Subcontracts Group prepares the formal Subcontract draft.

13. Site Subcontracts Group reviews the Subcontract draft.

14. Site QA reviews and approves the Subcontract Draft.

15. The Subcontract draft is submitted to TUSI for approval.

16. After TUSI approval, B&R Houston Subcontracts reviews and incorporates comments to the Subcontract draft and transmits the formal Subcontract to the successful Vendor for acceptance.

VOID

The successful Vendor signs and accepts the Subcontract Agreement.

3.2.2 The Subcontract Agreement can only be modified by a formal Change Order, a Supplemental Agreement or by a Letter of Instruction to the Sbucontractors. In all cases, when the order is designated as Safety-Related, the changes are approved by Site QA.

VOID per DCN #1

SUBCONTRACT FLOW PATH

TUSI/G&H	B&R ENGINEERING	B&R SITE SUBCONTRACTS	B&R SITE QA	B&R HOUSTON SUBCONTRACTORS	VENDOR
1). Issue Specifications and drawings	2). Prepare Memorandum requesting Subcontract.	3). Review, technical, quality commercial, and source requirements and prepare Inquiry.	4). Review, Approve and add quality program requirements.		
5). Approves Inquiry.		6). Incorporates comments and submits Inquiry to Vendors.			7). Submit Bids.
		8). Review proposals, prepare Bid Tabulation and Letter of Recommendation	9). Review and approve Letter of Recommendation		
10). Approve Letter of Recommendation		11). Transmit complete approved package to Brown & Root Subcontractors.		12). Reviews and prepares formal Subcontract.	
		13). Review draft of Subcontract.	14). Approves draft of Subcontract.		
15). Approves draft of Subcontract.				16). Reviews and incorporates comments to Subcontract draft and transmits the formal Subcontract to the successful vendor.	17). Accepts Subcontract.

FIGURE B

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@ CP

IM-22388

INTEROFFICE MEMO

TO: T. N. Hood

SUBJECT: Recall of Controlled Documents

The following documents have been voided and need to be recalled from all controlled copy holders.

CI-CPM 5.1-1	Rev. 1	Superceded by CP-EI-5.0-2
CI-CPM 5.1-2	Rev. 1	
CI-CPM 5.1-3	Rev. 1	
CP-CPM 5.1	Rev. 2	Superceded by CP-EP-5.0

R. M. Darrin
Staff Engineer

RMD/lah

DOCUMENTS

SSER CATNAS 5

WORK PACKAGE

FOIA-85-59

A 85

TRACEABILITY Rec'd 4 Oct 84

TEXAS UTILITIES GENERATING CO. CPSES	INSTRUCTION NUMBER	REVISION	ISSUE DATE	PAGE
	QI-QP-11.4-5	13	MAR 0 1 1983	1 of 24

INSPECTION OF STEEL SUBSTRATE PRIMER REPAIR AND SEAL AND FINISH COAT APPLICATION AND REPAIR

PREPARED BY: Cherry C. Williams — DATE 2/23/83

APPROVED BY: W.E. Ehrhardt — DATE 2/23/83

APPROVED BY: C.T. Hauser — DATE 3/1/83

1.0 REFERENCES

1-A QI-QP-11.4-1, "Inspection of Steel Substrate Surface Preparation and Primer Application and Repair"

1-B CCP-30, "Coating Steel Substrates Inside Reactor Buildings and Radiation Areas"

1-C CCP-30A, "Coating Steel Substrates Inside Reactor Buildings and Radiation Areas"

1-D CP-QP-18.0, "Inspection Reports"

1-E QI-QP-11.4-22, "QC Verification of Protective Coatings Unique Identification Number Verification"

2.0 GENERAL

2.1 PURPOSE AND SCOPE

The purpose of this instruction is to outline methods utilized by Quality Control personnel in inspection of primer repair and seal and finish coat application and repair.

3.0 INSTRUCTION

3.1 INSPECTION OF PRIMER

3.1.1 Primer Inspections Prior to Application of Seal or Finish Coat

a) QC shall verify that construction has identified each piece with a unique number in accordance with References 1-A, 1-B and 1-C. The QC Inspector shall maintain a Protective Coating Unique Identification Number Log, Attachment 1 for all protective coatings application on all steel designated for use in the Reactor Building. Subsequent subdivision of coating steel in the field or shop shall be witnessed by QC in accordance with Reference 1-E.

NOTE:

A. Unique number may be assigned to a lot of material to be prime coated at the same time. For example, six pieces steel to be coated at same time may all have same unique number.

B. Liner plate is excluded from QP numbers.

VOID

Equipment which is identified with permanent plant identification number need not be identified with a Protective Coatings unique identification number. The term "Equipment" is not to include pipe hangers, cable tray hangers, conduit supports, or structural steel. They will all have Protective Coating unique identification numbers assigned.

b) For all prime coated items which do not exhibit a Protective Coatings Unique Identification Number (QP Number) the Inspector shall perform an Adhesion (Patch) Test. If adequate documentation exists the above is not applicable. A calibrated Elcometer 106 Adhesion Tester shall be used to verify that the minimum acceptable tensile of adhesion to the steel substrate has been attained. Each test shall consist of three individual dollies tested to failure. (See Notes 1 and 2 below.)

Criteria: The minimum acceptable strength per dolly shall be 200 psi. If any one of the three dollies should test below the minimum acceptable strength, the prime coat shall be removed to the steel substrate over the entire item.

Prime coated items which are acceptable shall be stamped with a "QP" number by Construction. The QC Inspector shall maintain a protective coatings unique identification number log for all protective coatings applications per this section.

Primer repairs, if required, shall be performed in accordance with Section 3.2.

NOTE 1: Any item, which due to their size or configuration will not accomodate testing with an Elcometer 106 Adhesion Tester, shall not be subject to adhesion testing.

NOTE 2: For items with total exposed surface area of 10 square feet or less - each adhesion test shall consist of only one dolly tested to failure.

c) Verify the primer has cured required amount of time per Reference 1-B or 1-C, as applicable.

d) Perform a visual inspection of the primed surface in accordance with the following:

1. Runs/sags - A DFT measurement shall be made with the Elcometer DFT gage. Runs/sags 5.5 mils or less thick (DFT) which show no evidence of mudcracking (See NOTE) are acceptable. Refer to References 1-B and 1-C for repair of runs/sags exceeding 5.5 mils.

   NOTE: Mudcracking is defined as irregular cracking as in a dried mud puddle.

2. Dry Spray - Must be removed by screening or abrading before overcoating.

3. Over Spray - Must be removed before overcoating.

4. Contamination

   Oil and grease - unacceptable
   Embedded foreign materials - unacceptable
   Stains - rust (red) and zinc oxide (white) stains are acceptable provided loose particles are removed prior to application of finish coat.

5. Skips/damaged areas/gross discontinuities such as holidays or voids - unacceptable.

e) The inspector shall perform a DFT inspection of the cured primer film. A calibrated 0-25 Elcometer Inspector DFT gage Model III/1E, or equivalent, shall be used. A minimum of five separate spot measurements (See Note 1) spaced evenly over the structure (See Note 2) shall be taken. Since the magnetic gage is sensitive to geometric discontinuities in the steel, measurements less than 1 inch from the edge or a hole shall be avoided where possible. (See Note 3)