

EVALUATION RESEARCH CORPORATION

CONTROLLED COPY
CONTROL NO. DF-001

COMANCHE PEAK RESPONSE TEAM

PROJECT PROCEDURE FOR ISSUE-SPECIFIC ACTION PLAN VII.c

PROCEDURE NO.: CPP-007

REVISION: 2

ISSUE DATE: 01/07/86

PREPARATION OF CHECKLISTS AND DATA BASE REPORTS

Prepared by: *[Signature]* Date: 1/6/86

Approved by: *E. W. Ross* Date: 1-7-86
On-Site QA Representative

Approved by: *J. L. Hessel* Date: 1/7/86
QA/QC Review Team Leader

1.0 PURPOSE

This procedure describes the preparation of checklists and Data Base Reports which will be used during field reinspections and documentation review as required by Issue-Specific Action Plan (ISAP) VII.c.

2.0 APPLICABILITY

This procedure is applicable to safety-related hardware constructed and final QC accepted at Comanche Peak Steam Electric Station, Unit 1, 2, and areas common to both units.

3.0 REFERENCES

- 3.1 CPP-001, "Preparation of Project Procedures and Quality Instructions."
- 3.2 CPP-008, "Preparation of Verification Packages."

4.0 GENERAL

Reinspections/document reviews are performed in accordance with accept/reject criteria established in Quality Instructions (QIs) prepared in accordance with Reference 3.1. The results of reinspections/reviews are documented on a checklist and a Data Base Report.

4.1 Responsibilities

4.1.1 QA/QC Discipline Engineer

QA/QC Discipline Engineers prepare QIs, checklists, and Data Base Reports for each population within their discipline.

4.1.2 QA/QC Lead Discipline Engineer

The QA/QC Lead Engineers review QIs, checklists, and Data Base Reports.

4.1.3 QA/QC Engineering Supervisor

The QA/QC Engineering Supervisor reviews QIs, checklists, and the information in the forwarding memorandum, then signs the memorandum.

4.1.4 QA/QC Records Administrator

The QA/QC Records Administrator maintains a file of the memoranda and attachments described in Paragraph 5.1.5.

4.2 Policy

Activities performed under this procedure shall conform to the policies contained in the latest CPRT Program Plan, ERC Management Program Plan, and ISAP VII.c.

Should an activity be designated as the responsibility of a Lead Discipline Engineer, or higher, it may be delegated by that engineer to an individual under his or her supervision.

4.3 Conflicts

In case of a conflict between this procedure and the documents referenced in Section 4.2, the latter shall govern.

4.4 Definitions

4.4.1 Safety-Significant Attribute

A characteristic of a component or construction activity which, if not in accordance with applicable design documents, codes, and standards, could impair the ability of the component to perform its safety-related function under design loading conditions.

4.4.2 Checklist

A tabulation of safety-significant attributes to be used to document the acceptance/ rejection of a component or construction activity or documentation review.

4.4.3 Data Base Report

A tabulation of information appropriate for evaluating the significance of deviations on the quality of construction.

5.0 PROCEDURE

5.1 Preparation of Checklists and Data Base Reports

Responsible QA/QC Discipline Engineers review the latest Gibbs and Hill, Brown and Root, and subcontractor design documents relating to the population. As applicable, the latest installation procedures, construction drawings (including as-builts), and manufacturer's prints and manuals are also reviewed. Discussions may be held with Texas Utilities Generating Company Project Support personnel to obtain information and/or interpretation of design and construction documentation, and with QA/QC Reinspection personnel as to the feasibility of inspecting selected attributes.

- 5.1.2 Subsequently, the engineer develops a list of safety-significant attributes that are common to the population and which can be reinspected, then documents those safety-significant attributes in accordance with Attachment 6.1 and prepares a QI for the reinspection of the populations per Reference 3.1.
- 5.1.3 The engineer also documents those safety-significant attributes which require a documentation review, either to verify in-process inspections, inspections of processes which cannot be physically recreated, or those otherwise unsuitable for reinspection on a second checklist in accordance with Attachment 6.1, then prepares a QI for the documentation review of the population per Reference 3.1.
- 5.1.4 The engineer consults with the QA/QC Hardware Collective Evaluation Engineer to consider the appropriateness of Data Base Reports for the population to be reinspected/reviewed. As required, the engineer selects a list of items/characteristics for the Data Base Report. Items included should be those which will facilitate evaluating the significance of any deviation, provide data to aid in the identification of adverse trends, or otherwise contribute to a definitive final report. Examples of such items are: feet of cable, tubing, pipe, weld, etc. reinspected; number of welds, cable terminations, etc. of a given type reinspected; number of documents of a certain type reviewed, etc. These items are entered, together with the appropriate identification, sample size, etc. on the form as shown in Attachment 6.2.

The QA/QC Discipline Engineer then forwards the Data Base Report to the Lead Discipline Engineer for review.

- 5.1.5 After preparing the QI and the checklist, the QA/QC Discipline Engineer prepares a memorandum to the QA/QC Engineering Supervisor via the Lead Discipline Engineer including as attachments:
- The QI for the population, prepared in accordance with Reference 3.1 and including the checklist described above as an attachment.
 - A list of the source documents for each attribute included.
 - A list of attributes which have been excluded from the checklist, such as those determined not to be safety-significant, with a justification for each exclusion.

- A list of those criteria and the rationale for their use if any alternate (i.e., other than that specified in the source documents) accept/ reject criteria were developed for attributes on the checklist.

5.2 Review and Approval

5.2.1 QA/QC Lead Discipline Engineer

On receipt of the memorandum with attachments, the QA/QC Lead Discipline Engineer reviews the documents for accuracy, completeness, and conformance with this procedure. If satisfactory, the Lead signs the memorandum then forwards all the documents to the QA/QC Engineering Supervisor. The Lead also reviews the Data Base Report for clarity and appropriate choice of items/ characteristics to be enumerated, and if satisfactory, returns it to the preparer for inclusion in the Verification Package.

5.2.2 QA/QC Engineering Supervisor

On receipt of the memorandum, the QA/QC Engineering Supervisor reviews the documents to ensure that the attributes are safety-significant, adequately represent the construction quality of the population, are logical, and represent good engineering judgement. Upon satisfactory review, the Supervisor signs the memorandum, then forwards it with all attachments except the QI to the QA/QC Records Administrator. The QI is reviewed and approved in accordance with Reference 3.1.

5.3 Revision

Changes to the previously approved attributes and/or accept/reject criteria for a population require the preparation, review, and approval of a memorandum as described in Paragraph 5.1.5 and Section 5.2. This memorandum shall be specific only to the revision/Change Notice and shall:

- List all of the Verification Packages associated with the affected population and issued for reinspection/ documentation review.
- Specify what effect the change will have on each previously performed reinspection/documentation review e.g., no effect, requires reinspection, etc.

5.4 Distribution and Control

5.4.1 QA/QC Records Administrator

The QA/QC Records Administrator maintains the file (marked VII.c-4B-5) of the memorandum with all attachments except the QI.

6.0 ATTACHMENTS

6.1 Checklist and Continuation Sheet (Sample and Instruction)

6.2 Data Base Report (Sample and Instruction)

CHECKLIST

COMANCHE PEAK RESPONSE TEAM CHECKLIST				
POPULATION DESC (1)	VERIFICATION PKG NO.		PAGE 1 OF (6)	
QUALITY INSTRUCTION (2)	<input type="checkbox"/> REINSPECTION (3) <input type="checkbox"/> DOCUMENTATION REVIEW		<input type="checkbox"/> UNIT 1 <input type="checkbox"/> UNIT 2 <input type="checkbox"/> COMMON	
EQUIPMENT MARK/TAG NO.				
ATTRIBUTE	VERIFICATION			REMARKS
	ACCEPT	REJECT	DATE	
(4)				(5)
SAMPLE				
PREPARED BY: _____		APPROVED BY: _____		
DISCIPLINE ENGR. _____ DATE _____		LEAD DISCIPLINE ENGR. _____ DATE _____		
INSPECTED BY: _____		APPROVED BY: _____		
INSPECTOR _____ DATE _____		LEAD INSPECTOR _____ DATE _____		

CHECKLIST
 (Continuation Page)

COMANCHE PEAK RESPONSE TEAM CHECKLIST				
POPULATION DESC (1)	VERIFICATION PKG NO.			PAGE (6) OF (6)
ATTRIBUTE	VERIFICATION			REMARKS
	ACCEPT	REJECT	DATE	
(4)				(5)

SAMPLE

INSTRUCTIONS FOR COMPLETING
FORM CPP-007.1A and CPP-007.1B
"CHECKLIST"

QA/QC Discipline Engineer

- (1) Enter the population description per the Master Population List.
- (2) Enter the number of the appropriate QI excluding its revision designation.
- (3) Check the appropriate block for reinspection or documentation review.
- (4) Enter reinspection/review attributes consistent with the referenced QI.
- (5) Enter any additional instruction applicable to the population.
- (6) Add continuation pages as required, then indicate the page number information.

NOTE: Approvals of this generic checklist are documented by signature of the cover sheet of the QI to which it is attached. Signature blocks on the checklist are for use when the checklist has been adapted as necessary to a specific Verification Package. (See Reference 3.2.)

ERC DATA BASE REPORT

COMANCHE PEAK RESPONSE TEAM ERC DATA BASE REPORT			
VERIFICATION PKG NO.	POPULATION SIZE (1)	SAMPLE SIZE (2)	SH (5) OF (5)
NO.	CHARACTERISTICS(■) AND INFORMATION REQUIRED	QUANTITY	
(3)	(4)		
SAMPLE			
PREPARED BY _____ (6)		COMPLETED BY _____	
QA/QC DISCIPLINE ENGINEER _____ DATE _____		QA/QC INSPECTOR _____ DATE _____	

INSTRUCTIONS FOR COMPLETING
FORM CPP-007.2
"ERC DATA BASE REPORT"

QA/QC Discipline Engineer

- (1) Enter the population size.
- (2) Enter the sample size.
- (3) Assign a consecutive number e.g., 1, 2, 3, etc., to each characteristic in block (4).
- (4) List the appropriate characteristics to be included based on the instructions in Paragraph 5.1.4. Include the unit to be used for each characteristic, i.e., feet, inches, individual units, etc.
- (5) Enter page number information.
- (6) Sign as preparer and date.