

TEXAS UTILITIES SERVICES INC.  
AGENT FOR  
TEXAS UTILITIES GENERATING COMPANY  
ACTING FOR  
DALLAS POWER & LIGHT COMPANY  
TEXAS ELECTRIC SERVICE COMPANY  
TEXAS POWER & LIGHT COMPANY

# THIS SPECIFICATION COVERS NUCLEAR SAFETY RELATED EQUIPMENT

COMANCHE PEAK STEAM ELECTRIC STATION  
UNITS NOS. 1 AND 2

## APPROVED BY TUSI

**VOID**

PROTECTIVE COATINGS  
SPECIFICATION 2323-AS-31  
APRIL-45, -1977-  
REVISION 1 - MARCH 15, 1978

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R.A. 4844 Date 4-12-78

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GIBBS & HILL, INC.  
ENGINEERS, DESIGNERS, CONSTRUCTORS  
NEW YORK, NEW YORK

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PROTECTIVE COATINGS  
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## PROTECTIVE COATINGS

### 1.0 SCOPE

This specification covers the furnishing of all labor, tools, materials, equipment, and supervision for supplying, delivering, storing, and applying all protective coatings specified herein and shown on the finish schedules drawings.

### 1.1 WORK INCLUDED

- a. Surface preparation as specified herein
- b. Application of protective coatings to exposed surfaces of the buildings and equipment listed herein, Appendix A.

Generally, exposed surfaces shall mean all surfaces of structures and equipment not encased in concrete, masonry or insulation.

Exposed steel surfaces rendered inaccessible after shop assembly shall not require field protective coating application in most cases. In some cases, a review of the equipment function, location, ease of disassembly, and warranty impact shall be required at the discretion of the field engineer to determine protective coating requirements.

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- c. In general, the types of surfaces to be coated shall consist of, but not be limited to, the following:
  - 1. All concrete blocks
  - 2. Doors and frames
  - 3. Elevator shaft enclosure (interior and exterior surfaces)
  - 4. Concrete surfaces
  - 5. Structural Steel
  - 6. Miscellaneous Metal
  - 7. Hollow Metal

8. Uninsulated piping and valves
  9. Pipe hangers and seismic and pipe whip restraints
  10. Any other carbon steel surfaces in rooms or areas scheduled to receive protective coating (i.e., exterior of pipe sleeves which protrude from walls).
  11. Plaster surfaces
  12. Miscellaneous steel (including surfaces abutting concrete but excluding surfaces against which concrete is to be cast and the interior of pipe sleeves).
- d. If the primed surfaces of certain supplied items prove incompatible with the specified finish protective coatings by failure of testing per Paragraph 9.2.2, it shall be the responsibility of the contractor to clean and apply a tie coat or to remove the incompatible paint and resurface the item as specified herein, Appendix A.

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1.2 WORK NOT INCLUDED

- a. Surfaces, other than those to receive protective coatings, shall be painted in accordance with Specification 2323-AS-30, Finish Painting.
- b. The following surfaces will not require protective coatings under the scope of this contract.
  1. Aluminum
  2. Stainless steel
  3. Priming of mechanical equipment
  4. Brass
  5. Bronze
  6. Copper
  7. Chromium-plated metals
  8. Porcelain enamel finishes

9. Galvanized steel
10. Electrical equipment and raceways
11. Concrete surfaces to which miscellaneous steel has been attached prior to commencement of concrete coating. (Coating will be applied to the edges of the steel items only Caulking will not be required.)

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## 2.0 GENERAL REQUIREMENTS

- a. Nothing in this specification shall be construed as relieving the supplier of responsibility for compliance with all applicable codes and regulations.
- b. All coatings supplied under this specification shall have been tested and approved for application in areas exposed to radiation by the Oak Ridge National Laboratories (ORNL) for the United States Nuclear Regulatory Commission (USNRC), and the coating manufacturer.

## 3.0 APPLICABLE CODES, STANDARDS, AND SPECIFICATIONS

The latest edition of following codes or standards in effect on the date of purchase order shall apply.

- a. American National Standards Institute (ANSI)
  1. ANSI N101.2, Protective Coatings (Paints) for Light Water Nuclear Reactor Containment Facilities
  2. ANSI N512, Protective Coatings (Paints) for the Nuclear Industry
- b. Steel Structures Painting Council (SSPC)
  1. SSPC-SP1, Solvent Cleaning
  2. SSPC-SP5, White Metal Blast Cleaning
  3. SSPC-SP6, Commercial Blast Cleaning
  4. SSPC-SP7, Brush-Off Blast Cleaning
  5. SSPC-SP8, Pickling

- 6. SSPC-SP10, Near-White Blast Cleaning
- 7. SSPC-PA2, Measurement and Determination of Film Thickness

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#### 4.0 DELIVERY AND STORAGE CONDITIONS

- a. All coating materials shall be delivered to the jobsite in their original unopened containers, plainly marked with proper designation of the product, name of manufacturer, and required storage conditions.
- b. Coatings shall not be delivered so far in advance that they cannot be used within the manufacturer's recommended shelf life. Coatings shall be stored in sealed containers in an area, meeting the manufacturer's storage recommendations.
- c. The coating manufacturer's recommended application instructions shall be included with each shipment of material to the jobsite. For coatings to be used inside the containment, additional documentation as required by Appendix C shall be furnished.
- d. All coating materials shall be stored under cover and at a temperature recommended by the manufacturer.
- e. Manufacturer's product identity forms shall be supplied with materials shipped to the jobsite.

#### 5.0 MATERIALS

- a. Materials shall be supplied by one of the following protective coating manufacturers:
  - 1. Ameron Corporation  
201 North Berry Street  
Brea, California 92621
  - 2. Carboline Company  
328 Hanley Industrial Court  
St. Louis, Missouri 63144
  - 3. Keeler and Long, Inc.  
P.O. Box 460  
Watertown, Connecticut 06795

4. Mobil Chemical Company  
P.O. Box 250  
Edison, New Jersey 08817
5. Tnemec Co. Inc.  
P.O. Box 1749  
Kansas City, Mo. 64141
6. Stonehard, Inc.  
Park Avenue  
P.O. Box 308  
Maple Shade, N.J. 08052
7. Southern Imperial Coatings Corp.  
P.O. Box 29077  
New Orleans, La. 70189

- b. The contractor shall supply any one of the coatings listed in Appendix "A".

6.0 SURFACE PREPARATION

6.1 GENERAL

- a. All surfaces to be coated shall be prepared in accordance with the requirement specified herein.
- b. In addition to the requirements of this specification all necessary surface preparation shall be performed in accordance with the coating manufacturer's latest application instructions.

6.2 ALL STEEL SURFACES - GENERAL

- a. Any oil or grease shall be removed from surfaces to be coated, with clean rags soaked in solvent, in accordance with SSPC-SP1. Any chemical contamination shall be eliminated by means of neutralization or flushing, or both, prior to additional surface preparation. Solvent and rags shall be changed frequently to ensure their cleanliness.
- b. All edges, protrusions, and peaks shall be ground smooth to a rounded contour; as a guide 1/8 inch radius of the contour may be used. Weld splatter shall be removed by grinding prior to sandblasting. Details regarding weld splatter

removal from piping shall in accordance with G&H Specifications 2323-MS-43A, 43B, 44A, 44B and 100.

- c. The proper abrasive for sandblasting required to obtain the specified profile (anchor pattern) as designated in the coating manufacturer's latest application instructions shall be used.
- d. After sandblasting, dust and spent sand shall be removed from the surfaces by brushing, vacuum cleaning, or oil and moisture free air blasting.
- e. The prime coat shall be applied as soon as possible after the blasting preparation is finished, and before the surface starts to rust. No sandblasted surface shall stand overnight before coating.
- f. The minimum degree of sandblasting required shall be in accordance Appendix "A".

#### 6.3 CONCRETE AND MASONRY SURFACES

- a. All surfaces shall be clean, dry, and free from cement splatter, laitance, mortar and other deleterious matter. Outside containment wood splinters and "fuzz" as defined by the field engineer need not be completely removed. Incompatible form-release agents and membrane curing components shall be removed.

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- b. Surface defects shall be repaired as follows:

- 1. For defects protruding approximately 1/4" or less from the smooth concrete surface, grind defects to a smooth or beveled finish.
- 2. For protrusions greater than 1/4", repair with dry pack grout or remove protrusion to a smooth or beveled finish.
- 3. Defects on walls shall be repaired to approximately 10'-0" height from the floor slab. Defects above 10'-0" do not have to be repaired, unless deemed essential (as determined by the field engineer) to application and subsequent performance of the coating system.

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- c. Loose powdery concrete or mortar shall be removed with a wire brush or high-pressure air before coatings are applied. Proper protection shall be provided to prevent air pressure from spreading dust. All oil, grease, dirt, or foreign matter shall be removed either by steam cleaning with detergent or by scrubbing with a strong commercial detergent and flushing with water. All chemical contamination shall be neutralized and flushed. Felt tip ink markings on concrete outside of containment need not be completely removed. |Rev.1
- d. When the coating manufacturer requires blast cleaning as a surface preparation on concrete, laitance and loose deposits shall be removed by whip sandblasting, or air blasting using high pressure compressed air, approximately 100 psig, or a 4000 psig water blast. Air lines shall be equipped with oil and water traps. |Rev.1
- e. When the manufacturer of protective coating requires acid etching as a concrete surface preparation for his concrete primer, the surface shall be washed down, and etched for 4 or 5 minutes with a 40-percent solution of phosphoric acid diluted with an equal part of water. The surface shall then be neutralized and washed down with water. This neutralizing treatment may vary from the manufacturer's instructions subject to engineer's approval. Proper drainage and fume exhaust shall be provided.
- f. When the manufacturer of protective coating requires a caustic-wash surface preparation, a 10 percent solution of trisodium phosphate or sodium carbonate, 3 pounds per gallon, shall be applied with a brush or mop. The caustic wash shall then be washed off and dried. All residue of trisodium phosphate shall be removed before application of protective coating. |Rev.1
- g. If a residue remains on the concrete, or masonry the surface shall be swept or vacuumed to remove residue. |Rev.1
- h. In areas which contain steel tanks or pipes adjacent to concrete surfaces or masonry to be etched, the concrete surface shall be wet down and a 10-percent solution of phosphoric acid shall be applied. The solution shall be allowed to etch for 10 to 15 minutes before being neutralized. Proper drainage and fume exhaust shall be provided. |Rev.1

7.0 FIELD TOUCHUP

- a. All shop-primed, and shop-topcoated, steel shall be touched up in the field prior to final field-topcoating. Touchup shall include any damaged or masked areas. Sufficient primer to touchup shop-primer or coated equipment will be supplied with the equipment in many cases.
- b. Surface preparation shall be in accordance with manufacturer's written coating repair procedures. The coating repair procedures shall address the following as a minimum:
  1. When substrate is not exposed;
    - Solvent cleaning per SSPC SP-1
    - Hand or power tool cleaning per SSPC SP-2 or 3 to roughen surface.
    - Use of special solvent to enhance adhesion of top coat
  2. When substrate is exposed;
    - Solvent cleaning per SSPC SP-1
    - Remove rust and provide a clean roughened surface by use of abrasive blasting or power grinding followed by needle gun roughening.
    - Roughen and taper (feather) adjacent undamaged areas by hand or power sandings for a minimum of 2 inches in all directions from the bared substrate

- c. The coating systems specified in this specification shall be used for field-touchup work when touchup coatings are not supplied with equipment.
- d. If a marking paint or ink which does not meet the coating manufacturer's recommendation is used on a primed surface (i.e., Carboline Marking Paste X1000-190 should only be used over Carbozinc 11 primer), then that marking compound should be removed by abrading. If excessive primer is removed repair shall be per paragraph 7.0.b.2.
- e. The repaired areas shall be tested and inspected as defined herein, including Appendix C where applicable.

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## 8.0 COATING APPLICATION

### 8.1 GENERAL

- a. Coatings shall be applied in strict accordance with manufacturer's instructions. All coatings shall be applied under favorable conditions by qualified applicators. All cleaned metal shall be prime-coated, as specified, immediately after cleaning to prevent new rusting or oxidation of cleaned surfaces.
- b. Coatings shall be used and applied, in accordance with the manufacturer's instructions, without being extended or modified except as called for in these instructions. The correct surface preparation and condition of surface to be painted shall be rigidly adhered to.

### 8.2 WORKMANSHIP

- a. All coatings shall be applied in a workmanlike manner, in accordance with the most recent written application instructions from the coating manufacturer, and shall be in accordance with ANSI N101.2 (inside containment), and ANSI N512 (all potentially radioactive and high radiation areas). Coatings shall be applied by conventional or airless spray wherever possible.
- b. The application shall not leave any defects which will affect the performance of the coating system as defined by the coating manufacturer. Definitions of defects are to be included in Appendix "D."

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- c. Drying time between coats shall comply with the coating manufacturer's recommendation, with conditions of temperature and humidity taken into consideration.
- d. In areas, other than the containment, where protective coating is specified on the concrete and masonry surfaces, the surfacer and topcoat shall be carried up to a height of 6'-0" to protect against spills and splashes. Above 6'-0" height apply surfacer and topcoat only where noted on the Room Finish Schedule drawings. Surfacers will be applied to full height on block walls scheduled to receive protective coatings. Also above 6'-0" height QA/QC inspection shall not be required. Rev.1
- e. Hardware, trim, and other items shall be removed, as required, for proper application of coatings.
- f. Imperfections and holes in surfaces to be coated shall be cleaned and filled where required, as recommended by the manufacturer and as approved by the Gibbs & Hill field engineer. Rev.1
- g. The dry-film thickness of each coat, and of the entire system, shall be per the manufacturers' recommendations based on the application (i.e. steel, concrete, containment). The minimum number of coats required to achieve the specified film thickness shall be provided.
- h. Except where otherwise specified, thinning shall be done where necessary for the workability of the coating material, and shall be in accordance with the coating manufacturer's latest application instructions.
- i. Each coat applied shall be a different color or shade from the preceding coat to aid in determining the uniformity and coverage of the coating. When a white finish coat is specified, the last two coats shall be white.
- j. Coatings shall not be applied when the atmospheric conditions do not conform to the recommendations of the coating manufacturer.

## 9.0 QUALITY ASSURANCE, TESTS, AND INSPECTION

### 9.1 GENERAL

- a. Quality assurance requirements for coatings applied inside containment shall be as defined by Appendix "C" of this specification.
- b. Coatings applied outside containment shall be tested and inspected as indicated herein. The only documentation shall be the final approved inspection report pending corrective action found necessary. Coatings applied to pipe sleeves cable tray supports outside containment, and areas of concrete receiving protective top coat without surface shall be exempt from testing and inspections. Rev.1
- c. Shop-primed equipment shall be tested and inspected upon receipt at the jobsite. The contractor shall perform a patch test with the specified topcoat and existing primer to determine proper adhesion. Any failure of a patch test shall be reported in writing to the Gibbs & Hill field engineer for resolution.
- d. Shop-primed equipment to be installed in the containment shall have all documentation requested in Appendix "C".

### 9.2 TESTS

#### 9.2.1 FILM THICKNESS

Wet film thickness shall be measured for the topcoat on concrete surface after proper application of surfacer. Wet film thickness measurement shall not be used on inorganic zinc coatings. Dry film thickness shall be measured for most carbon steel surfaces which receive coatings using magnetic gauges. The standards of SSPC-PA2-73T shall govern the use, calibration and accuracy of the gauges. Due to the inaccuracy of determining film thickness at edges, coatings applied to handrails, gratings and stairs shall be subjected only to inspection per Paragraph 9.2.3. The following methods shall be used for film thickness determination:

a. Wet-Film Thickness

A wet-film gauge of steel or aluminum, graduated to read in mils to the nearest 2 or 3 mils, shall be used to determine the wet-film thickness of a coating while wet. When using this gauge, the applicator shall divide the desired dry-film thickness by the volume solids of the coating as expressed in a decimal (taking into account the amount of thinning done) to yield the necessary wet-film thickness to produce the desired dry-film thickness.

b. Dry-Film Thickness

An Elcometer Paint Inspector, a Microtest, or similar gauge shall be used to measure the thickness to the nearest mil. The gauge shall be accompanied by a set of standard shims against which it shall be verified by the inspector prior to use. The acceptable tolerance in dry-film thickness when a range is indicated shall be within the specified range. When no range is indicated the thickness shall be the minimum specified with an acceptable tolerance per the coating manufacturer's recommendation. Excessively thick coatings shall be blasted off the surface, and recoating shall be done at applicator's expense. | Rev.1  
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9.2.2 PATCH (ADHESION) TEST

For the shop-primed equipment to receive a field-applied topcoat as denoted in Appendix "A", patch tests shall be performed to determine the adequacy of specified coating system. An adhesion tester shall be used to measure the tensile strength of adhesion of applied coatings to the substrate beneath as follows:

- a. 200 psi shall be the minimum acceptable strength per test
- b. A test shall consist of three individual dollies tested to failure
- c. For large, essentially one-component equipment one test per 500 linear feet shall be required. | Rev.1
- d. For equipment with several components tests shall be:
  - 1. From 1 to 10 items - test 20 percent

2. Over 10 items - test 10 percent

- e. For concrete, one test every 1000 square feet for the first 10,000 square feet of concrete coating shall be required. Subsequent testing on concrete shall be performed only as directed by the G&H field engineer.

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An Elcometer 106 Adhesion Tester or equal shall be used for patch testing in accordance with the recommendations of the manufacturer of the instrument. Due to the destructive nature of the adhesion test, all areas subjected to testing shall be repaired per the coating manufacturer's instructions and inspected for acceptability.

9.2.3 INSPECTION

The services of competent inspectors shall be furnished to assure compliance with the coating manufacturer requirements, and those set forth herein.

- a. The coating inspector shall check all documentation required for various coating applications. As examples: 1) inside containment all documents required by Appendix C shall be completed and 2) shop-primed equipment shall have patch test report, jobsite receipt inspection report, and final coating report.

- b. Coating defects as defined by Appendix D shall be visually checked on concrete and steel surfaces for each phase of coating application as follows:

1. Surface Preparation of Concrete - The following conditions, if observed, must be corrected before coating application.

- |                    |   |  |
|--------------------|---|--|
| - Porosity (Holes) | : | All holes greater than 2" diameter         |
|                    |   | Many small holes at inspector's discretion |
| - Roughness        | : | Protrusion greater than 1/8"               |
| - Cracking         | : | All cracks greater than 1/32" in width     |

- Laitance : Removal is required
  - Foreign Contaminants : Removal is required
2. Surface Preparation of Steel - The following conditions, if observed, must be corrected before coating application.
- Foreign Contaminants : Removal is required
  - Welds and Edges : Smooth with no weld splatter
  - Blast Profile : Must conform to SSPC standards
3. Coating Application - The following conditions, if observed, should be noted and corrected per the repair procedures recommended by the coating manufacturer. High dry film thickness may be acceptable in areas outside the containment if the following conditions are within acceptable limits and the coating manufacturer's minimum adhesion requirements are satisfied.

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<u>Condition</u>	<u>Pipe or Tank Lining</u>	<u>Concrete Surfacer</u>	<u>Concrete Topcoats</u>	<u>Inorganic Zinc Primer</u>	<u>Organic Primer</u>	<u>Organic Topcoat</u>
*Pinholes	X		X			X
*Blisters	X	X	X			X
*Color & Gloss Uni- formity			X			Rev.1 X
Bubbling	X	X	X		X	X
*Fish eyes	X	X	X		X	X
*Orange- Peel	X	X	X		X	Rev.1 X
*Mud Crack- ing	X	X		X		
Curing Prop- erties	X	X	X	X	X	Y
*Runs & Sags	X	X	X	X	X	X
Film Thick- ness, Dry	X			X	X	X
Film Thick- ness, Wet		X	X			
*Holidays, Missed Areas	X	X	X	X	X	X
*Dry Spray	X	X	X	X	X	X

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<u>Condition</u>	<u>Pipe or Tank Lining</u>	<u>Concrete Surfacer</u>	<u>Concrete Topcoats</u>	<u>Inorganic Zinc Primer</u>	<u>Organic Primer</u>	<u>Organic Topcoat</u>
Foreign Con- taminants	X	X	X	X	X	X
Mechanical Damage	X	X	X	X	X	X
Uniformity	X	X	X	X	X	X

X = observed conditions to be corrected  
\* = condition is defined in Appendix D

10.0 CLEANING

The Contractor shall remove all unnecessary equipment and surplus material during the course of the work and shall remove all of his equipment, scaffolding materials, and trash at the completion of the job.

11.0 GUARANTEE

All protective coating systems shall be guaranteed by the contractor against defective material and installation for a period of one year.

12.0 TECHNICAL ASSISTANCE

The coating manufacturer shall make available to the contractor's and the field engineering personnel a qualified technical representative at all times during coating application. The qualifications of the representative shall be submitted with proposals for evaluation.

## APPENDIX "A"

### COATING SCHEDULE

TABLE A-1	List of Approved Materials
A-2	Approved Coating Systems for Use in Containment
A-3	Approved Coating Systems for Use in Radioactive Areas Outside of Containment
A-4	Finish Coatings for Shop-Primed Equipment

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APPENDIX "A"  
 PROTECTIVE COATINGS  
 TABLE A-1  
 LIST OF APPROVED MATERIALS

COATING ITEM NO.	TYPE OF COATING	% ZINC DRY FILM	FILM FORM- ING SOLIDS	MANUFACTURER	PRODUCT NAME AND NO.
PC-P-1	Self-curing inorganic zinc alkyl silicate base inorganic zinc	85%	--	Ameron	Dimetecote 6
		86%	--	Carboline Company	Carbo Zinc 11
		83%	--	Mobil Chemical Company	Mobil Zinc 7, 13-F-12
		87%		Tnemec	Tnemec-Zinc 92E-12
PC-P-2	Self-curing inorganic zinc alkyl silicate base inorganic zinc	82%	--	Ameron	Dimecote E-Z
		75%	--	Carboline Company	Carbo Zinc 12
		79%	--	Mobil Chemical Company	Mobil Zinc 11, 13-F-11
		75%		Tnemec	Tnemec-Zinc 92E-12
PC-P-3	Epoxy surfacer - Sprayable organic based including primer where required	-	100%	Ameron	Nu-Klad 1871 Surfacer
		-	96%	Carboline Company	Carboline #195
		-	96%	Mobil Chemical	46 x 29 Sprayable Epoxy
		-	80%	Keeler & Long	6548S Epoxy Surfacer
		-	100%	Southern Imperial	No. 3 Surfacer

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 TABLE A-1  
 LIST OF APPROVED MATERIALS

COATING ITEM NO.	TYPE OF COATING	% ZINC DRY FILM	FILM FORM- ING SOLIDS	MANUFACTURER	PRODUCT NAME AND NO.	
		-	100%	Southern Imperial	Nutec No. 11 or 11S	[Rev.1
		-	100%	Stonehard	Stoneliner 5 Surfacer	
PC-P-4	Epoxy surfacer-organic grade	-	100%	Ameron	Nuklad 110AA Surfacer	
		-	100%	Carboline	306 TG Surfacer	
		-	100%	Stonehard	Stoneliner 5 Surfacer	

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APPENDIX "A"  
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 TABLE A-1  
 LIST OF APPROVED MATERIALS

COATING ITEM NO.	TYPE OF COATING	% ZINC DRY FILM	FILM FORM- ING SOLIDS	MANUFACTURER	PRODUCT NAME AND NO.
PC-P-5	Epoxy Surfacer-water based including primer where required	-	97%	Mobil	46 x 28 Surfacing Compound
		-	70%	Ameron	No. 2112
		-	68%	Carboline	No. 295 WB
		-		Mobil	46 x 27
		-	75%, 90%	Southern Imperial	No. 11, 11S
		-		Keeler & Long	No. 9104
PC-F-1	Epoxy Modified Phenolic or Epoxy - Polyamide		55.9%	Ameron	Amercoat 66
			64%	Carboline Company	Phenoline 305
			53%	Mobil Chemical Company	89 Series
			58%	Keeler & Long	7475 Epoxy Enamel
			54%	Southern Imperial	Reactic 1201
			58%	Tnemec	Epoxoline 66
PC-F-2	Water Base Epoxy Topcoat			Ameron	Amercoat No. 2109 or 2118
			32%	Carboline	No. 288 WB
			50%	Mobil	Series 98

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APPENDIX "A"  
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 TABLE A-1  
 LIST OF APPROVED MATERIALS

COATING ITEM NO.	TYPE OF COATING	% ZINC DRY FILM	FILM FORM- ING SOLIDS	MANUFACTURER	PRODUCT NAME AND NO.
PC-I-1	Upgrading Tie Coat			Southern Imperial	Reactic No. 1222
			40%	Keeler & Long	No. 9104
			42%	Themec	ChemPride No. 77
			32.5%	Carboline	Rustbond 8 HEX
			42%	Ameron	Amercoat No. 185
				Mobil	13-R-50 Chromox
				Keeler & Long	No. 9104

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# APPENDIX "A"

TABLE A-2

## APPROVED COATING SYSTEMS FOR USE IN CONTAINMENT

### Steel<sup>1</sup>

<u>Manufacturer</u>	<u>Primer</u>	<u>Topcoats</u>	
Ameron	Dimetecote 6 or E-Z	Amercoat 66	
Carboline	Carbozinc 11	Phenoline 305	
Mobil	Mobil-Zinc 7(13-F-12)	Series 89	
Tnemec	Tneme-Zinc 92E-12	Epoxoline 66	
Southern Imperial	Durazinc 560	Reactic 1201	
Ameron/Carboline	Dimetecote 6	Phenoline 305	Rev.1

### Concrete<sup>2</sup>

<u>Manufacturer</u>	<u>Surfacer</u>	<u>Topcoat</u>	
Ameron	Nu-Klad 110AA	Amercoat 66	
Carboline	No. 195	Phenoline 305	
Mobil	46-x-29 Epoxy	Series 89	
Stonehard/Tnemec	Stonliner 5	Epoxoline 66	
Southern Imperial	NUTEC 11S *	Reactic 1201	Rev.1
Keeler & Long	No. 6548C	No. 7475	

Gibbs & Hill, Inc.  
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Notes

1. Minimum surface preparation shall be near white metal blast cleaning per SSPC SP-10. | Rev.1
2. Surface preparation shall be as recommended by the manufacturer.
3. It is essential that coating systems be used only as specified above, unless an alternate system is proposed by a coating manufacturer and subsequently approved by the Engineer. | Rev.1
4. NUTEC 11S or NUTEC 11 may be used for touchup.

Gibbs & Hill, Inc.  
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# APPENDIX "A"

TABLE A-3

## APPROVED COATING SYSTEMS FOR USE IN RADIOACTIVE AREAS OUTSIDE OF CONTAINMENT

### Steel<sup>1</sup>

<u>Manufacturer</u>	<u>Surface Prep.</u>	<u>Primer</u>	<u>Topcoat</u>
Ameron	SP-6	Dimetecote E-Z	Amercoat 66 or 2118
Carboline	SP-6	Carbozinc 11	Phenoline 305
Mobil	SP-6	Mobilzinc 11 (13-F-11)	Series 89
Keeler & Long	SP-6	6548 Epoxy	7475 Epoxy Enamel
Southern Imperial	SP-6	Durazinc 560 or No. 6	Reactic 1201
Tnemec	SP-6	Tneme-Zinc 92E-12	Epoxoline 66

Rev.1

### Concrete<sup>2</sup> (Floor & Dados)

<u>Manufacturer</u>	<u>Surfacer</u>	<u>Topcoat</u>
Ameron	Nu-Klad 110AA	Amercoat 66
Carboline	No. 195	No. 288WB
Mobil	46 x 29 Epoxy Surf.	Series 89
Stonehard/Tnemec	Stonliner 5	Epoxoline 66
Southern Imperial	No. 11 or 11S Surfacer	Reactic 1201
Keeler & Long	6548S Epoxy Surf.	7475 Epoxy Enamel

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Concrete<sup>2</sup> (Walls & Ceilings)

<u>Manufacturer</u>	<u>Surfacer</u>	<u>Topcoat</u>
Ameron	No. 1871	Amercoat 66
Carboline	No. 295WB	No. 288WB
Mobil	46 x 27	Series 93
Stonehard/Tnemec	Stonliner 5	Epoxoline 66
Southern Imperial	No. 11 or 11S Surfacer	Reactic 1201
Keeler & Long	6548S Epoxy Surf.	7475 Epoxy Enamel

Notes

1. Gratings, handrails and stairs will be galvanized per specifications governing their procurement.
2. Surface preparation shall be as recommended by the manufacturer.
3. It is essential that coating systems be used only as specified above.
4. Single package inorganic zinc primers may be substituted as follows:

Carboline: Carbozinc SP-81

Mobil : Mobilzinc 13-G-10

APPENDIX "A"

TABLE A-4

FINISH COATINGS FOR SHOP PRIMED EQUIPMENT

NOTES

1. NSSS equipment is not included on this list.

TABLE A-4 NOTE 5

TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
1980-82 2300 MW INSTALLATION  
FINISH COATINGS FOR SHOP PRINCIPAL EQUIPMENT

UNCO P.O. NO.	SPEC. NO.	EQUIPMENT	SELLER	SURFACE PREPARATION	MANUFACTURER	PRIME COAT*	GENERIC TYPE	INTERMEDIATE COAT	FINISH COAT	FIELD TOUCH-UP (PRIMER)
CP-0003	MS-1	Turbine Generator	Allis-Chalmers Power Systems, Inc.	Solvent Clean SP-1 Blast Clean SP-6	C.A. Reeve Co.	MS-2900	WATER REDUCING ALKYD	NOTE 3 (MOBIL 15 R 50)	NOTE 5 (MOBIL 12 Series 500)	NOTE 7
	MS-2	Open								
	MS-3	Open								
CP-0004	MS-4	Feedwater Pump	Bingham-Willamette Co.	Wet Clean SP-6	Carboline Co.	Carboline II	Self-curing inorganic zinc	NONE	NOTE 2	NOTE 6
CP-0005	MS-5	Feedwater Pump Turb. Driver	General Electric Company	Solvent Clean SP-1	C.A. Reeve Co.	AP 15001	ALKYD	NOTE 3	NOTE 3 (MOBIL 12 Series 500)	NOTE 7
CP-0006	MS-6	Condensate Pump	Ingersoll-Rand Company	Sandblast	Sherwin-Williams	E 61 RN 30	Red Oxide	NONE	Sherwin-Williams E 61 RN 30	NONE 7
CP-0007	MS-7	Aux. Feedwater Pump	Ingersoll-Rand Company	Solvent Clean SP-1	Sherwin-Williams	E 61 RN 30	Red Oxide	NOTE 1	NOTE 1	NONE
CP-0008	MS-8	Boiler Drains Pump	Bingham-Willamette	Blast Clean SP-6	Carboline Co.	Carboline II	Self-curing inorganic zinc	NONE	NOTE 2	NOTE 6
CP-0009	MS-9	Circ. Water Pump	Ingersoll-Rand Company	Sandblast	Sherwin-Williams	E 61 RN 30	Red Oxide	NOTE 2	Sherwin-Williams E 61 RN 30	NONE
CP-0010	MS-10	Service Water Pump	Behcock & Wilcox Canada, Ltd.	Shotblast	N.D.	N.D.	N.D.	NONE	Sherwin-Williams E 61 RN 30	NONE
CP-0011	MS-11	Component Cooling Water Pump	Bingham-Willamette Co.	Blast Clean SP-6	Carboline Co.	Carboline II	Self-curing inorganic zinc	NONE	NOTE 2	NOTE 6
CP-0012	MS-12	Containment Spray Pump	Bingham-Willamette Co.	Blast Clean SP-6	Carboline Co.	Carboline II	Self-curing inorganic zinc	NOTE 2	NOTE 2	NOTE 6
CP-0013	MS-13	Spec. Fuel Pool Cooling Water Pump	Bingham-Willamette	#	#	#	#	#	#	#
CP-0014	MS-14	Turbine Plant Cooling Water Pump	Ingersoll-Rand Company	Sandblast	Sherwin-Williams	E 61 RN 30	Red Oxide	NONE	Sherwin-Williams E 61 RN 30	NONE

\* Shop applied  
N.D. = no available data

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JOB NO. 2323

TABLE A-4  
TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
1980-82 2300 MW INSTALLATION  
FINISH COATINGS FOR SHOP PRIMED EQUIPMENT

REPORT NO. AS-31  
SHEET NO. 2 OF 13  
DATE Sept. 15, 1977

TUGCO P.O. NO.	SPEC. NO.	EQUIPMENT	SELLER	Surface Preparation	Prime Coat *			Intermediate Coat	Finish Coat	FIELD TOUCH-UP (PRIMER)
					Manufacturer	Mfr's. Desig.	Generic Type			
CP-0015A	MS-15A	Reactive Heat-up Water Misc. Pipes - Nuclear	BINGHAM WILLAMETTE	Brush Clean SP-6	Carboline Co.	Carbozinc II	Self curing inorganic zinc	NONE	Phenolox 305 (in coat) NOTE 2 (in coat)	NOTE 6
CP-0016	MS-16A	Misc. Pipes - Non-Nuclear	Goulds Pump	Shotblast	Valplex Corp.	140-31345	N.A.	NONE	Sherwin-Williams P 62 RC 12 Submerged Better	NONE
CP-0016B	MS-16B	Misc. Pipes - Non-Nuclear	Crane - Pump	Grit blast Alcohol wash	Best Products Co.	Grade 45	Epoxy-Urethane			NOTE 7
CP-0017	MS-17	Chloromate Demineralizer	Graver Water Conditioning	Sandblast	Sherwin-Williams	B-50-Y1	Zinc Chromate	NOTE 3 (MOBIL 15 R 50)	NOTE 3 (MOBIL 12 Series Enam)	NOTE 7
CP-0015B	MS-15B	Steel Valves 2" (Nuclear)	CEMEX - Danbury	Brush Clean SP-6	Carboline Co.	Carbozinc II	Self curing inorganic zinc	NONE	NOTE 2	NOTE 6
CP-0015C	MS-15C	Steel Valves 2" (Nuclear)	NONE	1/2"	N.A.	N.A.	N.A.	NONE		
CP-0018	MS-18	Process Filters	Pall Trinity Co.	All stainless steel - no paint required						
CP-0019A	MS-19A	Turb. Oil Equipment	Keene Corporation	Shotblast SP-5	Pittsburgh Paint	23-85	N.D.	NONE	Pittsburgh Paint 23-85	LATER
CP-0019B	MS-19B	Turb. Oil Equipment	Liquiflo, Inc.	Wire brush sand + SP-6	Sherwin-Williams	E 61 A 1	Alkyd	NONE	Sherwin-Williams F 65 L-7 Rust-Prevent	NOTE 7
	MS-20	Nuclear Control Valve Rodless								
CP-0020A	MS-20A	Steel Valves 2" (Nuclear)	I.T.T. Grinnell	Sandblast SP-5	Carboline Co.	Carbozinc II	Self curing inorganic zinc		Phenolox 305 (in coat) NOTE 2 (in coat)	NOTE 6
CP-0020A.1	MS-20A.1	Steel Valves 2" (Nuclear)	Rockwell International	Sandblast SP-10 N.A.	Sherwin-Williams	Carbozinc II F 66 BT 10	Self curing inorganic zinc	NONE	Phenolox 305 (in coat) NOTE 2 (in coat)	NOTE 6
CP-0020B	MS-20B	Steel Valves 2" (Nuclear)	I.T.T. Grinnell	Sandblast SP-5	Carboline Co.	Carbozinc II	Self curing inorganic zinc	NONE	Phenolox 305 (in coat) NOTE 2 (in coat)	NOTE 6
CP-0020B.1	MS-20B.1	Steel Valves 2" (Nuclear)	Burg Warner	N.D.	"	"	"	"	Phenolox 305 (in coat) NOTE 2 (in coat)	"
CP-0020B.2	MS-20B.2	Steel Valves 2" (Nuclear)	Rockwell International	Sandblast	"	"	"	"	Phenolox 305 (in coat) NOTE 2 (in coat)	"
CP-0020C	MS-20C	Butterfly/Wafer Disc Valves (Nuclear)	Post-Test Int.	Sandblast SP-5	N.B.I.	Mobil zinc 13-F-12	"	"	NOTE 2	NOTE 7

\*or approved equal.

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TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
1980-82 2300 MW INSTALLATION

REPORT NO. AS-71  
SHEET NO. 3 OF 12  
DATE Sept 15, 1977

TUNCD P.O. NO.	SPEC. NO.	EQUIPMENT	SELLER	Surface Preparation	Prime Coat #			INTERMEDIATE COAT	FINISH COAT	FIELD TOUCHUP (PRIMER)
					Manufacturer	Manufacturer	Generic Type			
CP- 0021A	MS-21A	Manual/Self Actuated Bronze Valves 2" (Non-Nuc)	Jenkins Bros.		BRONZE - No painting required					
CP- 0021B	MS-21B	Steel Valves 2" (Non-Nuc)	Rockwell International	N.A.	Sherwin-Williams	G 66 ST 10	Aluminum	NONE	Sherwin Williams G 66 ST 10 or equal	NOTE 7
CP- 0021B.1	MS-21B .1	Steel Valves 2" (Non-Nuc)	I.T.T. Grinnell	Sandblast SP-5	Carboline Co.	Carbozinc II	Self curing inorganic zinc	NONE	Phenolox 305 (in coat) NOTE 2 (out coat)	NOTE 6
CP- 0021C	MS-21C	Bronze Valves 2 1/2"	Jenkins Bros.		BRONZE - No painting required					
CP- 0021D	MS-21D	Steel Valves 2 1/2" (Non-Nuc)	I.T.T. Grinnell	Sandblast SP-5	Carboline Co.	Carbozinc II	Self curing inorganic zinc	NONE	Phenolox 305 (in coat) NOTE 2 (out coat)	NOTE 6
CP- 0021.D.1	MS-21D .1	Steel Valves 2 1/2"	Crane	LATER	LATER	LATER	LATER			
CP- 0021E	MS-21E	Butterfly & Wafer Valves (Non-Nuc.)	Post-Steel Int. c/o Bernard Associates	Sandblast SP-6	Lecher & Long	No. 5862 PRIMER	Silicone - Zinc - Aluminum Enamel		MOBIL High Heat Resisting Enamel	NOTE 6
CP- 0022	MS-22	Fire Pump	F.W.C. Corporation Pump Division	LATER	LATER	LATER	LATER			
CP- 0023	MS-23	Main Condenser	Vestinghouse Electric Corp.	Shotblast	M.A. Bruden Co.	24-R-51	Rad Oxide	NOTE 3	NOTE 3 (MOBIL Series 17 Enamel)	NOTE 7
CP- 0024	MS-24	Feedwater Heaters	Struthers Wells Corp.	Sandblast SP-6	Carboline Co.	Carbozinc II	Self curing inorganic zinc	NONE	NOTE 2	NOTE 6
CP- 0025	MS-25	Traveling Screens C.W.	F.W.C. Corp.	Blast Clean SP-6	Mobil Koppers	13-Y-5 Bitumastic 50	Zinc Chromate Bitumastic	NOTE 3 NONE	NOTE 3 Bitumastic 50	NOTE 7 NOTE 6
CP- 0025A	MS-25A	Traveling Screens (NW. Sys.)	Envirox		Galvanized - No painting required					
CP- 0026	MS-26	Safety & Relief Valves - (Nuclear)	Crosby	Sandblast	Carboline Co.	Carbozinc II	Self curing inorganic zinc	NONE	Phenolox 305 (in coat) NOTE 2 (out coat)	NOTE 6
CP- 0027	MS-27	Safety & Relief Valves - (Non-Nuclear)	Dresser Industries Valve & Instrument	Hand tool SP-2	Sherwin- Williams	E 61 A 1	Alkyd	NOTE 1	NOTE 1	NOTE 7

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TABLE A-4

 TEXAS UTILITIES SERVICES INC.  
 COWANOE PEAK STEAM ELECTRIC STATION  
 1980-82 2300 MW INSTALLATION

FIND II COATINGS FOR SHIP PRIMED EQUIPMENT

REPORT NO. AS-31

SHEET NO. 4 OF 13

DATE Sept 15, 1977

TUNCO P.O. NO.	SPEC. NO.	EQUIPMENT	SELLER	Surface Preparation	Prime Coat *			Intermediate Coat	Finish Coat	FIELD TOUCHUP (PRIMER)
					Manufacturer	Alt. Design	Generic Type			
CP-0026	MS-26	Auxiliary Boiler & Assoc. Equipment	CAM Industries	Solvent Clean SP-1	Preservative Paint Co	NONE	Pretreatment Primer	W.P. Fuller Gray Primer	W.P. Fuller White Enamel *	MOBIL Series 12 Enamel
	MS-29a	Strainers (Nuclear)	Zurn Industries	Sandblast	Carboline Co	Carbozinc II	Self-curing Inorganic Zinc	NONE	NOTE 2	NOTE 6
CP-0028	MS-29b	Strainers (Non-Nuclear)	Emco Industries	"	"	"	"	"	"	NOTE 6
	MS-31	Reflective Insulation								
CP-0032a	MS-32a	Air Compressors & Accessories	Ingersoll-Rand	Solvent Clean SP-1 Hand tool Clean SP-2	Ecodur	5152 A	N.D.		Variplex CG-113 Blue Enamel *	MOBIL Series 12 Enamel
CP-0032b	MS-32b	Air Compressors & Accessories	Worthington	Shotblast Solvent Clean SP-1 Hand tool Clean SP-2	Pruett-Schaeffer	11711	N.D.		Rustoleum 1032 Green Alkyd *	MOBIL 11A 4B Blue Alkyd Enamel
CP-0033	MS-33	Air Dryers	C.M. Kemp Mfg.	LATER	LATER	LATER	LATER			
	MS-34	Diesel Generator Sets								
	MS-35	Exhaustors - Nuclear								
	MS-36	Open								
	MS-37	Spent Fuel & Refueling Cavity Shimmers		STAINLESS STEEL NO PAINTING REQUIRED						
	MS-37a	Fire Protection Sprinkler System		LATER	LATER	LATER	LATER			
	MS-37c	Fire Protection Deluge System		↓	↓	↓	↓			
	MS-37d	Fire Protection On2 System		↓	↓	↓	↓			

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TABLE A-4

 TEXAS UTILITIES SERVICES INC.  
 COMANCHE PEAK STEAM ELECTRIC STATION  
 1980-82 2300 MW INSTALLATION  
 FINISH COATINGS FOR SHOP PRIMED EQUIPMENT

 REPORT NO. AS-31

 SHEET NO. 6 OF 13

 DATE Sept 13, 1977

TUNING P.B. NO.	SPEC. NO.	EQUIPMENT	SELLER	Surface Preparation	Primer Coat *			Intermediate Coat	Finish Coat	FIELD TOUCHUP (PRIMER)
					Manufacturer	Mfrs. Desc.	Generic Type			
	MS-302	Fire Protection Indoor Hose Station								
CP- 0039	MS-39	Polar Crane	Eramco, Inc.	Blast Clean SP-11	Carboline Co	Carbozinc II	Self curing inorganic zinc	NONE	Carboline Co Phenolic 305 Pneumatic	NOTE 6
CP- 0040A	MS-40	Cranes-25 Tons & Over	Eramco, Inc.	Blast Clean SP-6	Carboline Co	Carbozinc II	Self curing inorganic zinc	NONE	" (vacant) NOTE 2 (for coat)	NOTE 6
CP- 0040B	MS-40	Cranes-25 Tons & Over	Stewart Engineering	Sand blast SP-6	Sherwin- Williams	G 74 YC 500	Alkyd	NOTE 1	NOTE 1	NOTE 7
	MS-41A	Misc. Cranes								
CP- 0041B	MS-41B	Containment Access Rotating Platform	Whiting Corp.	Sandblast SP-10	Keeler & Long	7107	Epoxy	NONE	Keeler & Long 7475 Epoxy	Same as Finish
	MS-41C	Misc. Rists								
CP- 0041D	MS-41D	Service Water Intake Struc. Crane	Kranco, Inc.	Blast Clean SP-6	Carboline Co	Carbozinc II	Self curing inorganic zinc	NONE	NOTE 2	NOTE 6
	MS-42	Misc. Handling Equipment								
CP- 0043A	MS-43A	Piping - Nuclear	I.T.T. Grinnell Industrial Piping Inc. NOTE 4							
CP- 0044A	MS-44A	Piping - Non Nuclear	I.T.T. Grinnell Industrial Piping Inc. NOTE 4							
CP- 0045	MS-45	Seismic Snubbers	I.T.T. Grinnell Industrial Piping Inc.	Solvent clean SP-1	N.D.	N.D.	Phosphatized coating	NONE	Product: Technique Pr 201 Epoxy - Butyl Carboline Co Phenolic 305 Pneumatic	NOTE 6
CP- 0046A	MS-46A	Piping Hangers (Nuclear)	I.T.T. Grinnell Industrial Piping Inc.	Blast Clean SP-10	Carboline Co	Carbozinc II	Self curing inorganic zinc	NONE	NOTE 2	NOTE 6
CP- 0046B	MS-46B	Piping Hangers (NonNuclear)	I.T.T. Grinnell Industrial Piping Inc.	"	"	"	"	NONE	NOTE 2	NOTE 6

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TABLE A-4  
TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
1980-82 2300 MW INSTALLATION  
FINISH COATINGS FOR SHOP PRIMED EQUIPMENT

REPORT NO. AS-31  
SHEET NO. 6 OF 13  
DATE Sept 15, 1977

TUBCO P.O. NO.	SPEC. NO.	EQUIPMENT	SELLER	Surface Preparation	Prime Coat *			Intermediate Coat	Finish Coat	Field Touchup (Primer)
					Manufacturer	Mfr's. Desig.	Generic Type			
	MI-47	Boonies-Manlear	Spray Eng. Co.	Stainless Steel-no painting required						
	MI-48	Boonies-Manlear								
CP- 0049	MI-49	Component Cooling Water Heat Exchanger	Struthers Wells Corp.	Sandblast	Carboline Co	Carboline II	Self curing inorganic zinc	NONE	NOTE 2	NOTE 6
CP- 0050	MI-50	Containment Spray Heat Exchanger	Joseph Out & Sons Inc.	Sandblast SP6	"	"	"	"	"	"
CP- 0051	MI-51	Spent Fuel Pool Heat Exchanger	Joseph Out & Sons Inc.	"	"	"	"	"	"	"
CP- 0052	MI-52	Turbine Plant Cooling Water Heat Exchanger	Struthers Wells Corp.	"	"	"	"	"	"	"
	MI-53	Open								
	MI-54	Steam Generator Blowdown Heat Exchanger	Joseph Out & Sons, Inc.	"	"	"	"	"	"	"
	MI-55	# 2 Supply System								
	MI-56	# 2 Supply System								
	MI-57	CO2 Supply System								
	MI-58	Open								
CP- 0059	MI-59	Condenser Tubes	Phelps Dodge Brass Co.	Copper-nickel Alloy-no painting required						
CP- 0060	MI-60	Aux. Condenser	Ingersoll-Rand Company	Shotblast	Mobil Gates Eng.	3TF4 SACo NA62	Heat Resist. Alkyd Asphalt ***	NONE NONE	Mobil 3TF4 NONE	Mobil 3TF4 NONE

\*\*\* base undercoat  
only

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TABLE A-4  
TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
1880-82 2300 MW INSTALLATION  
FINISH COATINGS FOR SHOP PRIMED EQUIPMENT

REPORT NO. AS-31  
SHEET NO. 7 OF 12  
DATE Sept 15, 1977

TWO P.R. NO.	SPEC. NO.	EQUIPMENT	SELLER	Surface Preparation	Prima Coat			Intermediate Coat	Finish Coat	FIELD TOUCHUP (PRIMER)
					Manufacturer	Mfrs. Desig.	Generic Type			
CP-0061	ME-61	Condenser Vacuum & Water Box Priming Pump	Wash Engineering	Shotblast	Pittsburgh Paint	N.D.	Zinc Chromate	NONE	Voltek Corp. 44649 Enamel	MOBIL 50-212 Enamel
	ME-62	Orifice Plates - Nuclear								
	ME-63	Orifice Plates - Non Nuclear								
CP-0064	ME-64	Spent Fuel Pool Demineralizer	Hungerford & Terry	Sandblast	Carboline Co	Carbozinc II	Self curing inorganic EPC	NONE	NOTE 2	NOTE 6
CP-0065	ME-65	Shop Fabricated Tanks Nuclear	Applied Engineering Co.	Blast Clean SP-6	"	"	"	NONE	NOTE 2	NOTE 6
CP-0066	ME-66	Shop Fabricated Tanks Non-Nuclear	A.R.M. Mfg.	Blast Clean SP-6	Carboline Co	"	"	NONE	Carboline Co Phenoline 305	NOTE 6
				" " " "	SKO-Whitman	NA 62	Asphalt	NONE	NONE	NONE
CP-0066	ME-66	Shop Fabricated Tanks - Non-Nuclear	A.R.M. Mfg.	" " SP-6	Koppers	50	Bitumastic	NONE	Koppers Bitumastic 50	NOTE 6
				" " SP-6	Mobil	13-Y-5	Zinc Chromate	NOTE 1	NOTE 1	NOTE 7
CP-0068A	ME-68A	Potable Water Storage Tank	Universal Tank and Iron Works, Inc.	Painting already completed						
CP-0069A	ME-69A	Valve Isolation Tanks - Nuclear	Joseph Out & Sons, Inc.	Sandblast SP-6	Carboline Co	Carbozinc II	Self curing inorganic EPC	NONE	Carboline Co Phenoline 305 Phenolic	NOTE 6
CP-0070	ME-70	Pressure Vessels - Non Nuclear	General American Transportation Corp.	"	"	"	"	NONE	NOTE 2	NOTE 6
CP-0070A	ME-70A	Blowdown System - Pressure Vessels	Richmond Engineering Co.	Stainless Steel - no painting required						
	ME-71A	Expansion Joints - Nuclear								
	ME-71B	Expansion Joints - Non Nuclear								
CP-0072	ME-72	Rubber Expansion Joints for Circ. Water System	O'Neil, Inc.	NONE	Dupont	4462	Special Hydraulic Rubber Coatings	NONE	NONE	NONE
	ME-74	Penetrations Containment	EPG or Gue Chemical	Hand-applied epoxy	Carboline Co	Carbozinc II	Self curing inorganic EPC	NONE	Phenoline 305	NOTE 6

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**TABLE A-4**

 TEXAS UTILITIES SERVICES INC.  
 COMANCHE PEAK STEAM ELECTRIC STATION  
 1800 - W 2300 MW INSTALLATION  
 FINISH COATINGS FOR SIBP PRIMED EQUIPMENT

REPORT NO. AS-31

SHEET NO. 8 OF 13

DATE Sept 15, 1977

TIN CO P.B. NO.	SPEC. NO.	EQUIPMENT	SELLER	SURFACE PREPARATION	PRIME COAT			INTERMEDIATE COAT	FINISH COAT	Field Touch up (Primer)
					MANUFACTURER	MERS. DESIGN	GENERIC TYPE			
CP-0075	MS-75	Circ. Water Valves	Henry Pratt Company	Solvent Clean SP-1 Blast Clean SP-6	Corbit Paint Co.	4 Y 2	Zinc Chromate	NOTE 3	NOTE 3	NOTE 7
CP-0076	MS-76	Main Steam Isolation Valves	Rockwell International	Sand blast	Cheesman-Elliott	H. Degree C 9031	Zinc Rich oil modified	NOTE 1	NOTE 1	NOTE 7
CP-0077	MS-77	Main Steam Safety Valves	Crosby Steam Gate & Valve	Sandblast	Carboline Co.	Carbozinc II	Self curing inorganic zinc	NONE	Carboline Co. Phenolic 500 Phenolic	NOTE 6
CP-0078	MS-78	Main Steam Relief Valves	Fisher Control Co.	Blast Clean SP-6	"	191 Primer	Epoxy-Polyamide	NONE	Carboline Co. 191 FINISH EPOXY POLYAMIDE	NOTE 6
CP-0079	MS-79	Steam Dump Valves	Fisher Control Co.	"	"	"	"	"	"	NOTE 6
	MS-80A	(Non-Nuclear) HVAC Water Chiller								
	MS-80B	HVAC - Water Chillers (Nuclear)								
	MS-81	HVAC - Auxiliary Emergency Coolers								
	MS-82	HVAC - Atmospheric Cleanup Turbine								
	MS-83A	HVAC - Fans (Non Nuclear - BR)								
	MS-83B	HVAC - Fans (Nuclear-BR)								
	MS-84	HVAC - Dampers & Valves								
CP-0086	MS-86	HVAC - Containment Isolation Valves	Posi-Seal International	Sandblast SP-5	Mobil	13-F-12	Self curing inorganic zinc	NONE	NOTE 2	NOTE 7
	MS-87	HVAC - Control Room Air Conditioner								
	MS-88	HVAC - Air Conditioners - General								

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TABLE A-4  
TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
1980-82 2300 MW INSTALLATION  
FINISH COATINGS FOR SHOP PRIMED EQUIPMENT

REPORT NO. AS-31  
SHEET NO. 9 OF 13  
DATE Sept 15, 1977

TUBCO P.O. NO.	SPEC. NO.	EQUIPMENT	SELLER	SURFACE PREPARATION	PRIME COAT			INTERMEDIATE COAT	FINISH COAT	FIELD TOUCHUP (PRIME)
					MANUFACTURER	ANAL. DESIG	GENERIC TYR			
CP- 0089	MS-89	HYAC Cooling Coil	Buffalo Forge	Wire brush SP-2 Power tool SP-3	DAVIS PAINT MFG.	P-280	Zinc dust alkyl	NOTE 1	NOTE 1	NOTE 7
	MS-90	HYAC - Electrical Heating Coils								
CP- 0091	MS-91	HYAC - Automatic Filters	American Air Filter	Galvanized - no painting required						
CP- 0092.1	MS-92A	HYAC - Vanoaxial Fans Bio-Nuclear	Jay Manufacturing	Sandblast	Carteline Co	Carbozinc II	Self curing inorganic zinc	NONE	Carteline Co Plangline 305- Phanglic	NOTE 6
	MS-92B	HYAC - Vanoaxial Fans Nuclear								
	MS-93	Fuel Inspection System								
CP- 0150	MS-150	Pretreatment and Makeup Dem. Water System	Hungerford & Terry	Sandblast	Mobil	13 Y 5	Zinc Chromate	NOTE 3	NOTE 3 (MOBIL Series 84 enamel)	NOTE 7
	MS-151	Open								
CP- 0152	MS-152	Steam Generator Blowdown & Cleanup System	Hungerford & Terry	Sandblast	Carteline Co	Carbozinc II	Self curing inorganic zinc	NONE	NOTE 2	NOTE 6
CP- 0153	MS-153	Secondary Chemical Feed System	Power Specialty Co., Inc.	LATER	LATER	LATER	LATER			
	MS-154	Primary Sampling & Monitoring System								
CP- 0155	MS-155	Secondary Sampling & Monitoring System	Delphi Industries	Sandblast	Andrews	Acid Etch PRIMER	Acid Etch PRIMER	NONE	Pittsburgh P. ANSE 145 X 6 ANSE 6	MOBIL Series 12 Enamel
CP- 0156	MS-156	Chlorination System	Fischer & Porter Co.	Power Tool	Sherwin- Williams	AB 69N1	N.D.	NONE	Sherwin-Williams AB 69N1 PRIMER	MOBIL Series 11 Enamel
	MS-157	Open								

# **Gibbs & Hill, Inc.**

ENGINEERS, DESIGNERS, CONSTRUCTORS

NEW YORK

JOB NO. 2323

TABLE A-4

TEXAS UTILITIES SERVICES, INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
1980-82 2300 MW INSTALLATION  
FINISH COATINGS FOR SHOP FURNISHED EQUIPMENT

REPORT NO. AS-31

SHEET NO. 10 OF 13

DATE SEPT 15, 1977

TAG NO. P. R. NO.	SPEC. NO.	EQUIPMENT	SELLER	SURFACE PREPARATION	PRIME COAT *			INTER-MEDIATE COAT	FINISH COAT	FIELD TOUCHUP (PRIMER)
					MANUFACTURER	MEDIA DESIG	ORGANIC TYPE			
CP-0154B	MB-1504	Open								
CP-0154B	MB-1504	Laboratory Perchloric	Remunco Scientific	Phosphate Wash	Shawin Williams	26 olive	Acrylic	NONE	Stemco will use 26 olive Acrylic	Supplied with Equipment
CP-0160	MB-160	Containment Hydrogen Analyzer	Delph. Industries	Sandblast	Cardinal	N.V.	N.D.	NONE	Pittsburgh Paints Enamels	MOBILE 60312 Enam.
CP-0161	MB-161	Solid Radonate Balar	Stoate Equipment	Sandblast	Kader & Long	7107	Epoxy	NONE	Waters Long 7075 Epoxy	Same as finish
CP-0162	MB-162	Solid Radonate Draining System	Protective Packaging Co.	Sandblast	Carboline Co.	Carboline II	Self curing inorganic Binc	NOTE 1	NOTE 1	NOTE 6
CP-0163	MB-163	Inertness Concrete System	Union Carbide							
CP-0600	MB-600	Control Valves - Bicolor	Fisher Control	Blast Clean SFC	Carboline Co	191 Primer	Epoxy - Polyamide	NONE	Carboline Co 191 Primer Epoxy - Polyamide	NOTE 6
CP-0601	MB-601	Control Valves - Mon Bicolor	Fisher Control	"	"	"	"	NONE	"	"
CP-0603	MB-603	Process Bolanoid Valves								
CP-0604	MB-604	Power Operated Discharge Type Valves								
CP-0605	MB-605	Control Boards	Reliance Electric	Sandblast Phosphate Wash	ALBI Paint	107 A	Epoxy Flame-Retardant	NONE	NOTE 1 Paint 487-5 *	Same as finish
CP-0606	MB-606	Instrument Racks								
CP-0607	MB-607	Open								
CP-0608	MB-608	Open								

**Gibbs & Hill, Inc.**  
ENGINEERS, ARCHITECTS, CONSTRUCTORS

New York

JOB NO. 2323

TABLE A-4

TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
1980-82 2300 MW INSTALLATION

FINISH COATING FOR SHOP PRIMED EQUIPMENT

REPORT NO. A5-31  
SHEET NO. 11 OF 13  
DATE SEP 15, 1977

TRUCK P.B. NO.	INVC. NO.	EQUIPMENT	SELLER
	ME-609	Open	
	ME-611	Analog Control Systems	
	ME-612	Recorders - Multipoint & Large Taking	
	ME-613	Miniature Indicating Recorders	
	ME-614	Pressure Gauges	
	ME-615	Pressure Switches	
	ME-616	Indicating Differential Pressure Switches	
	ME-617	Gauge Glasses	
	ME-618	Flow Indicators	
	ME-619		
CP-0620	ME-620	Level Switches	Magnatrol
	ME-621	Temperature Indicators	
	ME-622	Thermocouples & RTD Assemblies	
	ME-623	Barometric Pressure Transmitter	
	ME-624	Flow Elements	

No Painting Required

TABLE A-4

1. Use any of the following coatings:

<u>Manufacturer</u>	<u>Intermediate</u>	<u>Finish</u>
Ameron	185	2109
Keeler & Long	2001	9104
Mobil	13-R-10	Series 89
Southern Imperial	1215	1201
Tnemec	77-Chempride	Epoxoline 66

Before coating application all surfaces shall be cleaned to remove all surface contaminants such as dirt, grease and oil.

2. Use any of the following coatings:

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<u>Manufacturer</u>	<u>Finish</u>
Ameron	2218
Carboline	Phenoline 305
Keeler & Long	7475
Mobil	Series 89
Southern Imperial	Reactic 1201
Tnemec	Epoxoline 66

3. Use finish coat as recommended by AS-30.

4. a) Pipe shall have surface preparation and be prime coated per specification Nos. 2323-MS-43A, 43B, 44A and 44B, and any DECD's thereto

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- b) Pipe to be insulated shall not receive any intermediate or finish coat
  - c) Pipe not to receive insulation, and located inside the containment shall receive a finish coat of Carboline Company's Phenoline 305
  - d) Pipe not to be insulated located in radioactive area shall receive an intermediate and finish coat per Note 1 above.
  - e) Pipe not to be insulated located in non-radioactive areas shall receive an intermediate and finish coat per Specification No. 2323-AS-30
5. All equipment to be located inside the containment shall be coated in accordance with the Q.A. requirement of Appendix C of this specification.
6. Touchup coating shall be identical to primer.
7. Touchup coating shall be of the same generic type as the primer.

Rev.1

## APPENDIX "B"

### CPSES FINISH COLOR SCHEDULE

NOTE:

This schedule has been prepared as guide only and does not cover the complete scope of work.

The colors indicated are to be similar to the manufacturer's product numbers listed on pages 1 through 5 of this Appendix.

APPENDIX "B"

PRODUCT NUMBERS

<u>COLOR</u>	<u>MANUFACTURER (or Equivalent) AND COLOR NUMBER</u>
White	Keeler & Long 7475
Cream	Keeler & Long E-2-8700 Keeler & Long T-2-8700
Off-white	Keeler & Long T-3-8591 Keeler & Long V-3-8591
Light Gray	Keeler & Long E-2-8928 Keeler & Long T-2-8928
Gray Green	Keeler & Long E-2-8577 Exxon AS 6437
Light Green	Keeler & Long E-2-2338 Exxon AS 6813
Black	Exxon EX 6679 Exxon AS 6433
Light Buff	Keeler & Long E-2-8939 Keeler & Long T-2-8939
Red Orange	Exxon AS 6457
Red	Exxon AS 6825
Yellow	Exxon AS 6827

Note: Exxon has been excluded from the list of approved manufacturers as they no longer manufacture paint.

CPSSES PAINT SCHEDULE

<u>AREA</u>		<u>COLOR</u>
I.	Containment	
1.	Concrete - Walls & Ceilings - Floors	White Light Gray
2.	Steel - Liner - Structural, Stair Stringers and Risers	White Gray Green
3.	Process Piping (Exposed), Pipe Supports Imbeds in Concrete	Light Gray
4.	Cranes - Polar - Other	White Gray Green
5.	HVAC Equipment - Housings	White
6.	Equipment - Pumps, Motors, etc.	Light Green
7.	Elevator - Interior - Doors	Cream Gray Green
8.	Instrument Cabinets	Light Buff
9.	Handrails	Cream
10.	Valves - Uninsulated - Handwheels	Light Gray Black
II.	Auxiliary Building, Fuel Building, Safeguards Building	
1.	Concrete - Walls & Ceilings - Floors	White Light Gray
2.	Steel - Structural, Stair Stringers and Risers	Gray Green
3.	Process Piping (Exposed), Pipe Supports, Imbeds	Light Gray

4.	Cranes	Gray Green
5.	HVAC Equipment	Match Walls
6.	Equipment - Pumps, Motors, etc.	Light Green
7.	Elevator - Interior - Doors	Cream Gray Green
8.	Switchgear, Motor Control Centers, Control Panels, Instrument Cabinets	Light Buff
9.	Handrails	Cream
10.	Valves - Uninsulated - Handwheels	Light Gray Black

### III Control Building

1.	Concrete - Walls in offices, labs, shops, control room, etc., in uncontrolled access areas	Off-white
	- Walls in controlled access areas	White
	- Floors in controlled access areas	Light Gray
2.	Steel - Structural, Stair Stringers and Risers - in controlled access areas - other areas	Gray Green Gray Green
3.	Process Piping (Exposed), Pipe Supports, imbeds - in controlled access areas - other areas	Light Gray Light Gray
4.	HVAC Equipment	Match Walls
5.	Equipment - Pumps, Motors, etc.	Light Green
6.	Switchgear, Motor Control Centers, Control Panels, Instrument Cabinets	Light Buff
7.	Valves - Uninsulated	Light Gray

- Handwheels

IV. Turbine Building

1.	Condensers	Light Green
2.	Control Panels - Miscellaneous	Light Buff
3.	Cranes	Gray Green
4.	Doors, Frames & Trim - Interior	Gray Green
	- Exterior	Gray Green
5.	Electrical Equipment	
	-Transformers	Gray Green
	-Switchgear, Motor Control Centers, Enclosed Bus	Light Buff
	-Isolated Phase Duct (Non-Alum)	Red Orange
6.	Elevators - Doors	Gray Green
7.	Feedwater Heaters - Exposed Steel	Light Green
8.	Handrails - Exterior	Cream
	- Interior	Cream
9.	Pipe Supports, Hangers, Concrete Imbeds	
	- Exterior	Light Gray
	- Interior	Light Gray
10.	Turbine Generators	Gray Green
11.	Structural Steel, Platforms, Stair Stringers & Risers - Exterior	Gray Green
	- Interior	Gray Green
12.	Miscellaneous Equipment - Motors, Pumps, etc.	Light Green
13.	Tanks - Uninsulated	Gray Green
14.	Valves - Uninsulated	Light Gray
	- Handwheel	Black
15.	Start-up Boiler - Miscellaneous Equipment	Light Green

16.	Process Piping (Exposed)	Light Green
17.	Water Treatment Equipment	
	- Pumps, Motors	Light Green
	- Tanks	Gray Green
V.	Miscellaneous and Common Equipment	
1.	Fire Equipment - Hydrants, Hose Enclosures Pumps, Valves	Red
2.	Guard Posts	Yellow
3.	Process Piping - Exposed	Light Gray
4.	Structural Steel, Stair Stringers and Riser, Platforms	
	- Exterior	Gray Green
	- Interior	Gray Green
5.	Tanks - Uninsulated	Gray Green
6.	Valves - Uninsulated	Light Gray
	- Handwheels	Black
7.	HVAC Equipment - Housings	Match Walls
8.	Equipment - Pumps, Motors	Light Green
9.	Interior Walls - Offices, Shops Warehouse, and other miscellaneous buildings	Off-white
10.	Pipe Supports, Hangers, Imbeds in Concrete	Light Gray
11.	Instrument Cabinets	Light Buff

APPENDIX C

QUALITY ASSURANCE FOR COATINGS USED INSIDE THE CONTAINMENT

1.0 SCOPE

- a. This Appendix sets forth the Quality Assurance requirements for protective coatings applied to structures or equipment for the Comanche Peak Steam Electric Station. This appendix will be applicable to both onsite and offsite activities as directed by the owner.

1.1 APPLICATION OF THIS APPENDIX

- a. This Appendix applies to protective coatings and their application to surfaces for Comanche Peak Steam Electric Station as listed in ANSI N101.2 and comprise requirements applicable to Class I coating service level for the nuclear reactor containment facilities.
- b. Class I coating service level applies to systems and components of nuclear facilities within the reactor containment building which are essential (1) to prevent postulated accidents which could affect the public health and safety or (2) to mitigate the consequences of these accidents. The quality assurance for Class I service level shall conform to the requirements of this standard.
- c. Because of the impracticality of imposing all the requirements of this appendix on specific items (requiring only a small quantity of coating material), the Owner, consistent with his Quality Assurance Program, will accept affidavits of certification from vendors attesting to the quality for a shop or field coating. Section 6.10 sets forth requirements for this nonconformance.

2.0 GENERAL REQUIREMENTS

2.1 PURPOSE AND SCOPE

- a. This section defines the general quality assurance requirements necessary for compliance with this Appendix. General requirements shall apply to all other sections of this standard.
- b. The scope includes:
  - 1. Quality Assurance Requirements
  - 2. Quality Assurance Program
  - 3. Quality Control Program
  - 4. Conditions of Work
  - 5. Control Measures for Ambient Conditions
  - 6. References to Other Standards

2.2 QUALITY ASSURANCE REQUIREMENTS

The general quality assurance requirements necessary to meet the purpose of this Appendix shall include a Quality Assurance Program incorporating a Quality Control Program. This program shall be structured to meet the pertinent requirements of 10CFR50 Appendix B, and ANSI N45.2. The procedures established shall be authoritative and mandatory. All deviations from these procedures shall be reviewed by, and shall be subject to approval by, the Owner or his designated representative for protective coatings.

2.3 QUALITY ASSURANCE PROGRAM

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- a. The Quality Assurance Program shall consist of the implementation and documentation, of written policies, procedures, or instructions, to establish quality assurance for the coating materials and the coating manufacturer, the coating applicator, and the coating inspection agency.

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b. Coating Materials and Coating Manufacturer

1. All protective coating materials shall meet the applicable requirements of ANSI 101.2 as evaluated and approved by the Owner or his designated representative.
2. The coating manufacturer shall furnish to the Owner the following:
  - a. A Quality Assurance Program which shall describe his current practices for quality control of the specified coating materials.
  - b. A description of his technical and field service capabilities.
  - c. The recommended application procedures for each coating system supplied by the coating manufacturer. These procedures shall include each substrate to be covered and all methods of applications as covered by Gibbs & Hill Specification 2323-AS-31. This shall include maximum and minimum ambient conditions at which application can be properly made. Clarification of recommended procedures and potential problem area shall be resolved at the site meeting outlined in Section 2.5.b of this Appendix.

c. Coating Applicator - The coating applicator shall furnish a Quality Assurance Program which shall describe his current or proposed practices for application of the specified coatings.

d. Coating Inspection Agency

1. All protective coating material, application and coating materials shall be inspected to meet the applicable requirements of ANSI N101.2. The applicable requirements and level of inspection shall be the sole responsibility of the Owner. The coating inspection agency shall inspect to the requirements and levels as directed by the Owner.
2. The coating inspecting agency shall furnish to the Owner a Quality Assurance Program which will describe its practices for inspection of the specified coatings.

#### 2.4 QUALITY CONTROL PROGRAM

The Quality Control Program shall include shop and/or field control of all the physical measures necessary to insure that the completed coating work meets all requirements set forth by the Owner. Control of all work (shop, field, plant, product, etc.) shall meet the requirements stated in this Appendix.

#### 2.5 CONDITIONS OF WORK

To insure that the purpose of this Appendix and the requirements of the project specification are met, it is essential to comply with the following conditions of work:

- a. During the bid period for supplying the coating materials prior to awarding of the contract, all parties to the coating bids or the coating contract shall understand the conditions of work in the shop and/or field including all interface relationships and responsibilities. (This understanding may be achieved by a meeting of bidders at the project site during the bid period.)
- b. Before the start of the coating work in the shop and/or field, there shall be a shop and/or site meeting if directed by the Owner or his representative. Attendees will be as determined by the Owner.
  1. At this meeting, agreements shall be reached as to the interpretation of levels of acceptance or rejection of the coating work. Each phase of the work, such as receipt and storage of coating materials, equipment to be used, preparation of substrates and/or previously primed surfaces application of each coat of the coating system, degree and extent of inspection and testings, etc., shall be specifically and thoroughly reviewed.
  2. Also at this meeting, or a later meeting, a field demonstration of surface preparation and coating application shall be conducted and an agreement shall be reached regarding the demonstration's conformance with the project specification providing a baseline for future inspection.
    - a) Agreements reached shall be prepared as a quality control document for the Owner by his assigned representative and shall constitute the basis for

inspection and for acceptance or rejection of each phase of the work.

- b) Additional meetings may be held as directed by the Owner for resolution of any problems not covered in previous meetings.

## 2.6 CONTROL MEASURES FOR AMBIENT CONDITIONS

Acceptable measures for control of ambient conditions shall be as defined in this Appendix and the project specification. The applicator's written Quality Control Program shall stipulate the measures to be taken to assure that appropriate controls are fully implemented.

## 3.0 COATING MATERIALS

### 3.1 PURPOSE AND SCOPE

This section defines the scope of quality assurance requirements for the coating materials manufactured and delivered to the shop and/or the field.

The scope includes:

- a. Manufacturing
- b. Product Identity
- c. Labeling of Materials
- d. Sample Retention
- e. Performance Verification of Shop and/or Field-applied Coating Systems
- f. Quality Assurance documentation

### 3.2 MANUFACTURING

The coating manufacturer shall maintain a Quality Assurance Program and shall provide documentation to show the quality of a given coating system as supplied is reasonably identical to the coating system previously qualified under ANSI N101.2. The coating system shall be requalified by the coating manufacturer if there are changes in formulation or end-product properties

which prevent the coating manufacturer from certifying the coating system to ANSI N101.2. Procedures for certification shall be incorporated within the coating manufacturer's Quality Assurance Program.

### 3.3 PRODUCT IDENTITY

- a. The manufacturer shall certify that the product identities of the materials being supplied meet the requirements of the project specification for the intended service. To establish identity, the Owner or his representative shall be furnished with a "Coating Manufacturer's Product Identity Certification" for each batch.
- b. A materials control program shall be maintained to insure the identity of the coating materials as received and as applied, to insure that the coating materials have not been adulterated or altered in any manner from the coating manufacturer's written recommendations, and to assure that no materials which have exceeded their recommended shelf life are applied without authorization by the Owner or his representatives.
- c. Labeling of Materials  
  
Each container shall be labeled with the product designation. The label or container shall bear a batch number or other factory marking, permanently affixed, showing the individual lot or batch designation. If the batch number or other factory marking does not incorporate the date of manufacture, the date shall appear separately on the label or container.
- d. Sample Retention  
  
Retained batch samples from products furnished for the work shall be kept by the coating manufacturer for the stated shelf life but no longer than two years from date of manufacture.
- e. Performance Verification of Shop and/or Field Applied Coating Systems Tests as discussed in ANSI N101.2 will be performed on specimens of each coating system used to verify that the performance of each shop and/or field applied coating system is comparable to that of the same coating system qualified under ANSI N101.2.

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f. Quality-Assurance Documentation

1. Quality Assurance Documentation shall be for Class I coating service level as stated in Sections 3.3a and 3.3b.
2. Appropriate forms for quality assurance documentation will be developed by the coating manufacturer, coating applicator and the coating inspection agency. All applicable forms will be reviewed by the Owner prior to use.

4.0 SURFACE PREPARATION OF SUBSTRATES

4.1

This section defines the quality assurance requirements for the surface preparation of substrates or of previously primed surfaces in the shop and/or field.

4.2

- a. The surface preparation of substrates or of previously primed surfaces shall conform to the applicable requirements of ANSI N101.2 and to the project specification with the exception listed below.
- b. If ANSI N101.2 and the project specification are in conflict, the more stringent requirement will govern.
- c. Inspection methods shall insure that specification requirements for all substrates, including previously primed surfaces are met.
- d. For surfaces as described in Section 1.1.d which arrived at the job site primed but with no finish coat shall be handled on a per case basis as directed by the Owner. Specific areas of prime coat thicknesses and touchup and compatibility of the two coating systems will be addressed by the Owner for each case. The finish coat shall be applied and inspected under the equipment's governing specification and this Appendix.

#### 4.3

Contamination of substrates with matter deleterious to the Coating and its intended function shall be prevented as outlined within the Gibbs & Hill Specification 2323-AS-31. Contamination of substrates shall be addressed at the site meeting, Section 2.5.b., where steps to handle this problem will be set forth.

#### 4.5 QUALITY ASSURANCE DOCUMENTATION

When directed by the Owner, the coating applicator shall report daily on surface preparation conditions encountered during each shift for each area of work. This report shall be verified by the Owner or his representative. Forms for daily reports shall be initially prepared by the coating applicator prior to use.

#### 5.0 APPLICATION OF COATING SYSTEMS

##### 5.1

This section defines the quality assurance requirements necessary for compliance to meet the performance requirements of the coating system.

##### 5.2 APPLICATION PROCEDURES

- a. The coating applicator shall submit to the Owner written application procedures for applying each coating system on each substrate or on each previously coated surface. These procedures shall be consistent with the project specification and coating manufacturer's recommendations. Conflicts between the specification and the manufacturer's recommendations shall be resolved at the site meeting, Section 2.5.b or by the Owner if identified at a later date.
- b. These application procedures shall provide information on the following:
  1. Qualification of application personnel
  2. Receiving, storing, handling, and dispensing of coating materials
  3. Application equipment

4. Application parameters, such as environmental conditions, regulation of equipment, ventilation, cleanliness, viscosity, viscosity control, film-thickness control, number of coats, intercoat requirements such as curing time, and other factors deemed pertinent by the Owner.
5. Field preparation of coating material, such as mixing, thinning, activating, and other pertinent factors.
6. Health, safety, fire, and all other applicable protection requirements
7. Instruments, and their proper use, for measuring relative humidity, temperature, and wet and dry film thickness, for detecting holidays, etc.

#### 5.3 QUALIFICATION OF PERSONNEL

All application personnel shall be qualified in accordance with the coating applicator's qualification procedure which shall be submitted to the Owner or his representative for review.

#### 5.4 QUALITY ASSURANCE DOCUMENTATION

- a. The coating applicator shall generate the forms to document proper receiving, storing, handling and dispensing of painting materials.
- b. Qualifications of application personnel shall be maintained.

#### 6.0 COATING INSPECTION

##### 6.1 PURPOSE AND SCOPE

This section defines the quality assurance requirements for a uniform procedure of inspection to insure that the completed coating work meets the requirements of the project specification.

##### 6.2 GENERAL REQUIREMENTS

- a. Inspection of shop and field coating work shall be performed by qualified personnel to insure that the coating work conforms to the project specifications.

b. Inspection shall include all phases of work which affect the performance of the coating. Routine inspections shall be made and reported for the following:

1. Onsite receipt of coating materials
2. Substrates before and following surface preparation
3. Mixing and preparation of coating materials for application
4. Film characteristics after drying and curing
5. Control of ambient conditions and surface temperatures during all phases of the coating work.

#### 6.3 QUALIFICATION OF COATING INSPECTORS

a. Each inspector assigned to the work shall be qualified. The inspection agency shall include requirements for qualifying the coating inspectors in its Quality Assurance Program. The specific qualifications of a given inspector assigned to the work will be provided to the Owner or his representative. These qualifications shall include his prior training and inspection experience with generic coating system similar to those used for the work in question.

#### 6.4 SCOPE OF INSPECTION

- a. Basis of inspection of coating work shall be per site agreement as stated in Section 2.5.b.
- b. The coating manufacturer shall have access to the material storage areas, the coating work, in the shop or the field, for the purpose of advising the Owner, the coating applicator and the coating inspection agency on all aspects of the coating work.

#### 6.5 STORAGE

Facilities for storage of materials and the storage conditions shall meet the specification requirements.

6.6 COATING MATERIALS AND APPLICATION

- a. Before use, coatings shall be routinely inspected to confirm that they meet the project specification requirements for type and identification of each material.

b. Mixing and Thinning

Mixing and thinning of coatings shall be routinely inspected. Only the type and quantity of converter and thinner recommended by the coating manufacturer shall be used.

c. Application

Each coat of material shall be inspected to specification requirements. Inspection shall determine compliance with specified requirements for cure, surface smoothness, texture, and workmanship.

d. Control of Ambient Conditions

Inspection shall determine compliance of control measures for ambient conditions and surface temperatures compatible with the coating used and consistent with the project specification and the most current coating manufacturer's recommendations.

6.7 SUBSTRATE AND SURFACE PREPARATION

- a. The substrate shall be inspected by the inspection agency and coating applicator to determine its suitability for subsequent coating work. Acceptance criteria shall be as outlined within the governing specification. Unsuitable substrate conditions not corrected by the coating applicator shall be reported to in writing to the Owner or his representative for appropriate action.
- b. The substrate after the specified surface preparation and prior to coating application, shall be inspected for compliance with specified requirements.
- c. The surface of each previously applied coating shall be inspected prior to application of a subsequent coat for compliance with specified requirements.

6.8 DRY-FILM THICKNESS (DFT) OF COATINGS

The specified dry-film thickness of each coat and of the coating system shall conform to the tolerances in accordance with SSPC-PA-2-72P. Any unusually high or low gauge reading that cannot be repeated consistently shall be discarded. Gauges shall be the Elcometer Paint Inspector, a Microtest or similiar Owner (engineer) approved gauge that measures the thickness to the nearest mil. The method for using the gauges to determine thickness shall be per agreement in meeting of Section 2.5.b.

6.9 COATING INSPECTION EQUIPMENT

- a. The accepted standard for determining film thickness for magnetic substrates shall be the DFT measurement: the WFT measurement shall be used for guide purposes only on steel surfaces. The setting of the gauges for the DFT measurement shall be performed on the blast-cleaned or coated surface of the area where the coating work and inspection will be performed. The specified minimum dry-film thickness of each coat and of the coating system shall be determined in accordance with SSPC-PA2. The maximum thickness shall not exceed that specified within the governing specification.
  1. The coating applicator shall furnish a sufficient number of wet-film thickness (WFT) gauges so that his personnel may periodically check the thickness of coatings being applied. The coating inspection agency shall furnish each of its inspectors with similiar WFT gages.
  2. The coating applicator shall furnish his personnel with properly calibrated approved magnetic gauges for checking dry-film thickness. The coating inspection agency shall furnish its inspectors with identical properly calibrated gauges.
  3. Mutually acceptable certified calibration shims shall be used by both the coating applicator and the coating inspection agency in order to insure proper and equal calibration. Calibration of dry-film thickness gages shall be maintained throughout the course of the coating work. Method of calibration shall be as agreed to in the site meeting per Section 2.5.b.
- b. Dry-film thickness on nonmagnetic surfaces shall be determined by measuring the quantity of coating material used

over a measured surface area. The quantity shall be based on the volume solids content of the coating. A WFT gauge may be used to estimate the applied film thickness but must be used immediately after the coating application. Scratch gauges may also be used.

- c. Holidays, skips, and pinholes shall be detected by eye and by the use of a holiday detector. The detector shall be operated at a voltage that will not destroy the integrity of the coating such that it will not perform the requirements of ANSI N101.2. The coating inspection agency shall furnish holiday detectors, scratch gauges, and other special inspection equipment if needed.

#### 6.10 DEVIATIONS AND REMEDIAL ACTIONS

- a. Uncorrected deviations from the Gibbs & Hill Specification 2323-AS-31 or the appropriate governing specification shall be reported by the inspection agency to the Owner or his representative for appropriate action.
- b.
  - 1. Corrective remedial action for deviations shall be in accordance with project specifications and/or per agreements reached in the site meeting Section 2.5.b.
  - 2. Major runs and sags that affect coating system performance, as defined by the site meeting per Section 2.5.b, shall not be acceptable. If they do occur, they shall be removed to the bare substrate or to the previously acceptable coat and then the area shall be recoated if necessary to meet the governing specification requirements. Minor runs or sags, as defined, that do not affect film quality and/or coating system performance are acceptable.
  - 3. Skips and damaged areas shall not be acceptable. Acceptance criteria for holidays shall be defined in the Gibbs & Hill Specification 2323-AS-31 for various film thickness, with the requirements of appropriate NACE designations agreed in site meeting per Section 2.5.b. If any of these deviations or any defective work does occur, as detected visually or by a holiday detector, the defective areas shall be removed,

by suitable means, to the bare substrate or to the previously acceptable coat and shall then be recoated.

- c. Documentation shall be in accordance with requirements set forth in this Appendix for original work. Forms used for quality assurance documentation shall be submitted to the Owner for review.

7.0 QUALITY ASSURANCE DOCUMENTATION

- a. Sufficient quality assurance records and documents shall be maintained to furnish evidence of compliance with the Quality Assurance Procedure.

- b. Maintenance of Documentation

- 1. Copies of all Quality Assurance/Quality Control documentation shall be maintained by the Owner as an integral part of the Quality Assurance Program.
  - 2. Each of the other parties to the coating work shall, as directed by the Owner, maintain copies of that portion of the documentation applicable to his respective part of the work. Copies shall be maintained for a minimum of five years after completion of the coating work, unless otherwise directed by the Owner.

Rev.1

- c. Distribution of documentation shall be specified by the Owner and appropriate distribution shall be shown on each form.

## APPENDIX D

### DEFINITION OF DEFECTS

## DEFINITIONS OF DEFECTS

### 1. PINHOLES

Appearance: Minor discontinuities in coating which expose primer or substrate. NACE T-6F-3 condition "B" for thick films and condition "C" for thin films

Cause: Improper spray techniques; poor gun adjustment; bubbles blown onto wet coating; gun held too close to surface

Remedy: Brush a coat into the pinholed area. Several passes may be required.

Prevention: Adjust air and pot pressure to optimum spray conditions for each coating. Hold gun 8 to 12 inches from surface for conventional spray; 16 to 24 inches for airless spray

### 2. BLISTERING

Appearance: Small, swelled areas like bubbles or pimples; can appear weeks after application

Cause: Water, oil, solvent, air, or dirt trapped under surface. Expansion of vapor from trapped material raises blisters.

Remedy: Sand and refinish damaged areas.

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Specification 2323-AS-31  
Revision 1  
March 15, 1978  
Sheet 2 of 5

- Prevention: Thoroughly clean, treat, and dry surface; keep air lines free of dirt and water; thin coating material properly; allow sufficient time for natural drying between coats (fanning promotes surface drying which can trap moisture).
3. ORANGE PEEL
- Appearance: Dents in surface; resembles orange skin. Moderate amount is acceptable.
- Cause: Droplets of coating dry before they run together; improper spray gun handling; solvent is too fast; wrong gun adjustment; air temperature too high.
- Remedy: Rub smooth with rubbing compound or sand and refinish.
- Prevention: Increase air pressure for air spray; decrease fluid pressure for airless spray; use slower thinner; use gun at proper distance from work.
4. FISHEYES, POOR WETTING
- Appearance: Small openings (fisheyes) in wet film exposing old surface or previous coat.
- Cause: Silicone and other surface contaminants that repel coating.
- Remedy: Remove coating while still wet, clean surface with solvent and refinish.
- Prevention: Properly clean surface; add fisheye preventer if available to coating sprayed over old film containing silicone; keep contaminating waxes, lubricants, and greases from painting area.

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Specification 2323-AS-31  
Revision 1  
March 15, 1978  
Sheet 3 of 5

5. ALLIGATORING

Appearance: Like alligator hide or cracked clay

Cause: Application of a hard coating over a softer coating; continued polymerization and shrinkage of a coating from the interior.

Remedy: Blast off and recoat

Prevention: Select a coating with high adhesion. Never apply hard, tough coating such as an epoxy on softer primers.

6. RUNS

Appearance: Wet coating running down surface in rivulets.

Cause: Too much thinner; extra slow thinner; surface too cold or improperly cleaned; coat is too wet.

Remedy: Remove coating and refinish.

Prevention: Use specified thinners; thoroughly clean surface to be coated; keep surface to be coated at room temperature; properly adjust gun and hold at proper distance from work.

7. SAGS

Appearance: Curtains of coating slipping down surface.

Cause: Coating is too heavy; insufficient drying time between coats; insufficient thinner; poor atomization; gun too close to work; gun out of adjustment.

Remedy: Remove coating and refinish.

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Specification 2323-AS-31  
Revision 1  
March 15, 1978  
Sheet 4 of 5

Prevention:

Adjust air and fluid pressure for air spray; increase fluid pressure or use smaller nozzle for airless spray; properly thin coating; keep gun farther from work.

8. DRY SPRAY

Appearance:

Dust-like surface texture.

Cause:

Usually wrong ambient conditions for application, causing premature solvent flash. Atomization air too high. Spray gun held too far from surface being sprayed, not enough thinner. Improper spray techniques.

Remedy:

Abrade with a wire screen.

Prevention:

Keep atomization air low use 40 psi or less. Keep spray gun within 8" or closer during hot and windy weather. Keep gun parallel to the surface being sprayed.

9. MUDCRACKING

Appearance:

Cracks in surface.

Cause:

A hard dry skin forms over the softer inner layer which contains trapped solvent.

Remedy:

Blast or grind off and recoat.

Prevention:

Adjust spraying procedure to allow solvent to flash off from bottom layers. Limit thickness of inorganic zinc to 6 mils DFT

10. COLOR AND GLOSS NONUNIFORMITY

Appearance:

Milky haze or mist in finish.

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Revision 1  
March 15, 1978  
Sheet 5 of 5

Cause: Condensation of moisture in wet film due to cooling effect produced by thinner evaporation; incompatible thinner.

Remedy: Recoat using slower drying thinner; eliminate humid conditions and recoat.

Prevention: Use retarder or slow-dry thinner; do not paint in hot humid atmosphere; keep surface at room temperature; properly adjust gun; avoid fanning with gun.

#### 11. HOLIDAYS

Appearance: A skip, discontinuity or void in a coating film

Cause: Improper spray techniques

Remedy: Brush a coat into the skipped area and feather onto adjacent coating.  
See 1. PINHOLES.

Prevention: Check lapping, arcing and triggering of applicator.

Note: The remedies noted above are only guidelines and shall not be applicable when repair procedures are available from the coating manufacturer.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

ARMS  
INDEXED

TNH, FILE, ARMS  
(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 588 C

SAFETY RELATED: ☒ YES ☐ NO

1. DESCRIPTION OF CHANGE/DEVIATION/CLARIFICATION

A. APPLICABLE SPEC/~~DESIGN~~ DOCUMENT 2323-AS-31 0 4-15-77  
Rev. Issue Date

B. DETAILS Section 9.2.2 of the referenced specification specifies adhesion tests to be performed on shop-primed equipment, and leaves the frequency of tests to the discretion of the coating inspector. B&R QA has requested preferred guidelines for the frequency and minimum strength of these adhesion tests for their use.

Solution: The following is acceptable:

- 1) 200 psi minimum strength per test.
- 2) A test will consist of three individual dollies tested to failure.
- 3) For large, essentially one-component equipment, one test per 500 L.F. is acceptable.
- 4) For equipment with several components: a) From 1 to 10 items: test 20% of items. b) Over 10 items: test 10% of items.

2. SUPPORTING DOCUMENTATION

- 5) For concrete, 1 test every 1000 S.F. for first 10,000 S.F. of concrete coating; then as directed by the G&H field engineer staff.

**VOID**

JOB NO. 35-1195

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NOV 15 1977  
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3. SIGNATURES

O.B.J./akh 11-17-77

A. APPROVED BY: [Signature] 11/18/77  
G&H Representative Date  
B. APPROVED BY: N/A  
Responsible Engineer Date  
C. APPROVED BY: N/A  
Project Engineer or Engineering Supervisor Date

4. STANDARD DISTRIBUTION

TUSI Dallas (1)	B&R Field (1)
TUSI Field (1)	B&R Houston (1)
TUGCO Site QA (1)	B&R Site QA (1)
G&H New York (1)	B&R Houston QA (1)
G&H Dallas (1)	

5. DOCUMENT CONTROL

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COMANCHE PEAK STEAM ELECTRIC STATION  
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AUTHORIZATION NO. 667

SAFETY RELATED: ☒ YES ☐ NO

INDEXED

1. DESCRIPTION OF CHANGE/DEVIATION/AUTHORIZATION

A. APPLICABLE SPEC/DWG/DOCUMENT X 2323-AS-31

DATE 0 4-15-77  
 Rev. Issue Date

B. DETAILS Table A-3 in Appendix "A" specifies carbozinc 12 for primer coating and carboline No. 288 WB for top coat for use on steel surfaces in radioactive areas outside the Containments. For economy and simplicity, this should be revised to the same coating system as that being used inside the Containments.

Revise the steel painting section for carboline from carbozinc 12 primer No. 288 WB top coat to carbozinc 11 primer with phenoline 305 top coat.

JOB NO. 35-1195

2. SUPPORTING DOCUMENTATION

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3. SIGNATURES OBJ/RMK/ss 12-1-77

A. APPROVED BY: [Signature] 12-2-77  
 G&H Representative Date

B. APPROVED BY: [Signature] 12-2-77  
 Responsible Engineer Date

C. APPROVED BY: [Signature] 12-5-77  
 Project Engineer or Engineering Supervisor Date

4. STANDARD DISTRIBUTION

TUSI Dallas (1)	B&R Field (1)
TUSI Field (1)	B&R Houston (1)
TUGCO Site QA (1)	B&R Site QA (1)
G&H New York (1)	B&R Houston QA (1)
G&H Dallas (1)	

5. DOCUMENT CONTROL

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION(WILL) ~~CHANGES~~ BE INCORPORATED  
IN DESIGN DOCUMENTS.AUTHORIZATION NO. 12-15-77  
SAFETY RELATED: X YES NO1. DESCRIPTION OF CHANGE/ ~~REVISION~~ REVISIONA. APPLICABLE SPEC/ ~~REFERENCE~~ 2323-AS-31 0 5-15-77  
Rev. Issue DateB. DETAILS Table A-2 of Appendix "A" specifies the following Southern Imperial Company coating system for concrete surfaces inside the Containment: No. 3 surfacer, reactive 1201 topcoat. This should be revised to read as follows: NUTEC #11S surfacer, touch-up with NUTEC #11S or NUTEC #11, topcoat of Reactive #1201.The proposed revision is acceptable.

JOB NO. 35-1195

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## 2. SUPPORTING DOCUMENTATION

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## 3. SIGNATURES

O.B.J./akh

12-5-77

A. APPROVED BY: [Signature]

G&amp;H Representative

12-8-77

Date

B. APPROVED BY: [Signature]

Responsible Engineer

12-6-77

Date

C. APPROVED BY: [Signature]

Project Engineer or Engineering Supervisor

12-7-77

Date

## 4. STANDARD DISTRIBUTION

## 5. DOCUMENT CONTROL

TUSI Dallas (1)	B&R Field (1)
TUSI Field (1)	B&R Houston (1)
TUGCO Site QA (1)	B&R Site QA (1)
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IN DESIGN DOCUMENTS.

DATE AUTHORIZATION NO. 732

SAFETY RELATED: ☒ YES ☐ NO

## 1. DESCRIPTION OF CHANGE/DEVIATION/EXPLANATION

A. APPLICABLE SPEC/ENGINEERING 2323-AS-31 0 5-15-77  
Rev. 1 Issue Date 9-30-77  
2323-SS-17

B. DETAILS The interior surfaces of pipe sleeves may be interpreted to require protective coating per section 1.1.C.11 of specification 2323-AS-31, and section 8.1.2.a of specification 2323-SS-17. G&H has clarified that this is not the design intent.

Solution: Revise section 1.1.c.11 of specification 2323-AS-31 to read as follows:

"1.1. Miscellaneous steel (including surfaces abutting concrete, but excluding the following: surfaces against which concrete is to be cast, and the interior surfaces of pipe sleeves)".

Revise section 8.1.2.a of specification 2323-SS-17 to exclude painting of the interior surfaces of pipe sleeves.

JOB NO. 35-1195

## 2. SUPPORTING DOCUMENTATION

GTN-22679

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## 3. SIGNATURES O.D.J./akh

12-9-77

A. APPROVED BY:

G&amp;H Representative

12-12-77  
Date

B. APPROVED BY:

Responsible Engineer

12-12-77  
Date

C. APPROVED BY:

Project Engineer or Engineering Supervisor

12-13-77  
Date

## 4. STANDARD DISTRIBUTION

## 5. DOCUMENT CONTROL

TUSI Dallas (1) B&R Field (1)  
TUSI Field (1) B&R Houston (1)  
TUGCO Site QA (1) B&R Site QA (1)  
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DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATIONARMS  
INDEXED(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 733

SAFETY RELATED: ☒ YES ☐ NO

## 1. DESCRIPTION OF CHANGE/DEVIATION/REVISION

A. APPLICABLE SPEC/ENGINEERING DOCUMENT 2323-AS-31 0 5-15-77  
Rev. Issue Date

B. DETAILS Section 2.2 of Appendix "C" states that all deviations from the established procedures for meeting the governing quality assurance requirements shall be reviewed by, and shall be subject to approval by the owner or his designated representative for protective coating. Therefore, approval of the following deviation is requested: the QA requirements in AS-31 will not be applied to the protective coating operations on the exterior of pipe sleeves where the pipe sleeves protrude from concrete. The coating systems and surface preparation will be as stated in AS-31, and all painting work will be performed after installation of the pipe sleeves.

The proposed deviation has been reviewed, and is acceptable.

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## 2. SUPPORTING DOCUMENTATION

GTN-22679

JOB NO. 35-1195

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DEC 13 1977  
R E C E I V E

## 3. SIGNATURES O.B.J./akh

12-9-77

A. APPROVED BY: [Signature] 12-12-77  
G&H Representative Date

B. APPROVED BY: [Signature] 12-12-77  
Responsible Engineer Date

C. APPROVED BY: [Signature] 12-13-77  
Project Engineer or Engineering Supervisor Date

## 4. STANDARD DISTRIBUTION

## 5. DOCUMENT CONTROL

TUSI Dallas (1) B&R Field (1)  
TUSI Field (1) B&R Houston (1)  
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AUTHORIZATION NO. 877  
DATESAFETY RELATED: X YES    NO1. DESCRIPTION OF CHANGE / ~~NEW AND/OR MODIFIED~~

A. APPLICABLE SPEC / ~~DESIGN DOCUMENT~~ 2323-AS-31 0 5-15-77  
Rev. Issue Date

B. DETAILS The specification requirement of section 6.3.b which states that "all protrusions shall be removed with hammer & chisel" is overly restrictive.

Solution: The following guidelines shall be followed for concrete surface defect repair work:

- 1) For defects protruding approximately  $\frac{1}{2}$ " or less from the smooth concrete surface, grind defects to a smooth or bevelled finish.
- 2) For protrusions greater than  $\frac{1}{2}$ ", repair with dry pack grout or remove protrusion to a smooth or bevelled finish.
- 3) All repair work should be performed to an approximately 10'-0" height from the floor slab. Defects above 10'-0" do not have to be repaired

## 2. SUPPORTING DOCUMENTATION unless essential to the successful application of the concrete coating.

JOB NO. 35-1195

**VOID**

**R E C E I V E D**  
JAN 12 1978  
**R E C E I V E D**

## 3. SIGNATURES

O.B.J./akh

A. APPROVED BY: [Signature] 1-12-78  
G&H Representative Date

B. APPROVED BY: [Signature] 1-11-78  
Responsible Engineer Date

C. APPROVED BY: [Signature] 1-12-78  
Project Engineer or Engineering Supervisor Date

## 4. STANDARD DISTRIBUTION

TUSI Dallas (1)	B&R Field (1)
TUSI Field (1)	B&R Houston (1)
TUGCO Site QA (1)	B&R Site QA (1)
G&H New York (1)	B&R Houston QA (1)
G&H Dallas (1)	

## 5. DOCUMENT CONTROL

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(WILL) ~~(WILL)~~ BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 882

DATE: SAFETY RELATED: ☒ YES ☐ NO1. DESCRIPTION OF CHANGE/ ~~DESIGN CHANGE/DESIGN DEVIATION~~A. APPLICABLE ~~SPEC/DOC~~ DOCUMENT 2323-AS-31, Addendum 1 Rev. 10-11-77 Issue Date

B. DETAILS Note 2 to Table A-4 specifies Carboline finish coat system 288 WB. The Carboline finish coat system being used on the jobsite over inorganic zinc prime coats is Phenoline 305.

Solution: Revise note 2 of the addendum to specify Phenoline 305 instead of 288 WB.

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JAN 12 1978  
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## 2. SUPPORTING DOCUMENTATION

DC/DDA-667

## 3. SIGNATURES

O.B.J./akh

1-9-78

A. APPROVED BY:

G&amp;H Representative

B. APPROVED BY:

Responsible Engineer

C. APPROVED BY:

Project Engineer or Engineering Supervisor

1-12-78  
Date  
1-11-78  
Date  
1-12-78  
Date

## 4. STANDARD DISTRIBUTION

## 5. DOCUMENT CONTROL

TUSI Dallas (1) B&R Field (1)  
TUSI Field (1) B&R Houston (1)  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

ARMS

INDEXED

AUTHORIZATION NO. 887

(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.SAFETY RELATED: <sup>DATE</sup> X YES NO1. DESCRIPTION OF ~~XXXXXXXXXXXX~~ CLARIFICATIONA. APPLICABLE SPEC/~~XXXXXXXXXXXX~~ 2323-AS-31 0 5-15-77  
Rev. Issue DateB. DETAILS Request clarification for extent of concrete coating require-  
ment at areas behind miscellaneous steel attached to the concrete surfaceSolution: For areas where the miscellaneous steel has been attached  
prior to commencement of concrete coating, the coating should be  
applied up to the edges of the steel item. The concrete surface behind  
the attached miscellaneous steel will not be coated, and caulking will  
not be required at the joint.

JOB NO. 35-1195

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JAN 10 1978  
R E C E I V E D

## 2. SUPPORTING DOCUMENTATION

VOID

## 3. SIGNATURES

O.B.J./akh

1-9-78

A. APPROVED BY: T. J. Dillinger 1/9/78  
G&H Representative Date  
B. APPROVED BY: N/A N/A  
Responsible Engineer Date  
C. APPROVED BY: N/A N/A  
Project Engineer or Engineering Supervisor Date

## 4. STANDARD DISTRIBUTION

## 5. DOCUMENT CONTROL

TUSI Dallas (1) B&R Field (1)  
TUSI Field (1) B&R Houston (1)  
TUGCO Site QA (1) B&R Site QA (1)  
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G&H Dallas (1)FOR RECORD ONLY  
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COMANCHE PEAK STEAM ELECTRIC STATION  
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ARMS

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893TNH, ROT, FILE, ARMS  
(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 893

SAFETY RELATED: ☒ YES ☐ NO

## 1. DESCRIPTION OF CHANGE/DEVIATION/CHARACTERISTICS

A. APPLICABLE SPEC/REFERENCE 2323-AS-31

0 5-15-77  
Rev. Issue Date

B. Detail: The electrical panel boxes mounted on the polar crane in the Reactor Building were received with the manufacturer's standard enamel finish. However, Section 3.11.1.a of Spec. 2323-MS-39, Rev. 2, references Spec. 2323-GS-900 for all painting requirements on the polar crane with the exception of electric motors, and classifies the equipment as critical. Section 4.2 of GS-900 then states that these critical items will be coated per the requirements of ANSI N101.2-1972.

Solution: Per Section 2.2 of Appendix C in Spec. 2323-AS-31, deviations from the governing quality requirements may be accepted pending review by the Owner or his designated representative. This will authorize these electrical panel boxes to be accepted "as is" with the standard manufacturer's finish coat pending completion of touch-up with the standard ANSI #61 light gray paint similar to that specified for AC distribution panel-board given in Spec. 2323-ES-10, Rev. 1.

## 2. SUPPORTING DOCUMENTATION

JOB NO. 35-1195

**VOID** **R** **E** **C** **E** **I** **V** **E** **D**  
JAN 12 1978  
**R** **E** **C** **E** **I** **V** **E** **D**

## 3. SIGNATURES

O.B.J./akh

1-10-78

A. APPROVED BY:

*[Signature]*  
G&H Representative

1-12-78

B. APPROVED BY:

*[Signature]*  
Responsible Engineer

Date

1-11-78

C. APPROVED BY:

*[Signature]* For B.J. Murray  
Project Engineer or Engineering Supervisor

Date

1-12-78

Date

## 4. STANDARD DISTRIBUTION

TUSI Dallas (1)	B&R Field (1)
TUSI Field (1)	B&R Houston (1)
TUGCO Site QA (1)	B&R Site QA (1)
G&H New York (1)	B&R Houston QA (1)
G&H Dallas (1)	

## 5. DOCUMENT CONTROL

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ARMS

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IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 907

DATE  
SAFETY RELATED: ☒ YES ☐ NO1. DESCRIPTION OF ~~CHANGE/DEVIATION~~ CLARIFICATIONA. APPLICABLE SPEC/~~ENG/DOCUMENT~~ 2323-AS-31 0 5-15-77  
Rev. Issue Date

B. DETAILS Section 1.1.b of the scope of work for AS-31 states that:

"Application of protective coating to exposed surfaces of the buildings and equipment listed herein, Appendix A. Generally, exposed surfaces shall mean all surfaces of structures and equipment not encased in concrete, masonry or insulation." This has proven difficult to adhere to with regards to equipment items as exposed steel surfaces may become inaccessible after assembly or hidden behind pipes or conduit lines.

Solution: Exposed steel surfaces rendered inaccessible after shop assembly do not require field protective coating. At times, these items may be made accessible by dismantling the equipment or by removing the obstruction. A case-by-case review will be necessary to determine the course of action to be taken since the equipment function and location usually dictate the painting requirements.

2. SUPPORTING DOCUMENTATION

JOB NO. 35-1195

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JAN 16 1978

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3. SIGNATURES

O.B.J./akh

1-12-78

A. APPROVED BY:

G&amp;H Representative

1-13-78

Date

B. APPROVED BY:

Responsible Engineer

1-13-78

Date

C. APPROVED BY:

Project Engineer or Engineering Supervisor

1-13-78

Date

4. STANDARD DISTRIBUTION

TUSI Dallas (1)	B&R Field (1)
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AUTHORIZATION NO. 241

DATE:

SAFETY RELATED: ☒ YES ☐ NO1. DESCRIPTION OF CHANGE/DEVIATIONA. APPLICABLE SPEC/2323-AS-31 0 5-15-77  
Rev. Issue Date

B. DETAILS Areas of high dry film thickness (DFT) have been encountered  
where no visible mudcracking or sags are evident. These protective coating  
areas are acceptable for decontamination purposes provided that the coatings  
are smooth and uniform, and that they meet the minimum adhesion requirements.  
Therefore, repair and rework costs could be reduced if standards were available  
for acceptance of these high DFT areas.

Solution: High DFT areas outside the Containments in protective coating areas  
may be accepted "as is" if the following criteria is met:

(1) coating surface is smooth and uniform (2) no mudcracking or sags are present

2. SUPPORTING DOCUMENTATION (3) coating manufacturer's minimum adhesion  
requirements are satisfied.TELEX - 13240 (ATTACHED)3. SIGNATURES

O.B.J./akh

1-17-78

A. APPROVED BY:

G&amp;H Representative

2-6-78  
Date

B. APPROVED BY:

Responsible Engineer

2-6-78  
Date

C. APPROVED BY:

Project Engineer or  
Engineering Supervisor

JOB NO. 35-1

2-6-78  
Date4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
 G&H New York (1)  
 G&H Dallas (1)

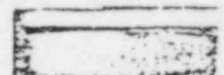
B&R Field (Original) (1)  
 B&R Site QA (1)

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OBA

TUGCO GRSE

20 INFOMASTER 1-005217N032 02/01/78

TLX CARBOLIN STL 3

TLX 13240 ST LOUIS MISSOURI

FWA 9108908660 TUGCO GRSE

ATTENTION BENNETT JONES

TLX 13240 9:45 2/1/78

ATTENTION BENNETT JONES

REF COMMANCHE PEAK

THIS IN REFERENCE TO YOUR QUESTION CONCERNING EXCESSIVE FILM  
THICKNESS OF PHENOLINE 305 OVER CARBO ZINC II IN NON QA  
AREAS. EXCESSIVE FILM THICKNESS WILL NOT BE DERIMENTAL NOR AFFECT  
DECONTAMINATION IF YOU HAVE GOOD ADHESION, NO MUDCRACKING, NO ROUGH  
AREAS, MINIMUM RUNSAND SAGS, NO MISSED AREAS, AND GOOD  
SURFACE SMOOTHNESS  
CHARLES WIEGINS  
CARBOLINE ST LOUIS

1022 EST

TUGCO GRSE

Rec'd 9:45 (JW)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

ARMS

INDEXED  
964(WILL) (~~XXXXXXXXXX~~) BE INCORPORATED

AUTHORIZATION NO. \_\_\_\_\_

SAFETY RELATED: ☒ DATE YES ☐ NO1. DESCRIPTION OF CHANGE/~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~A. APPLICABLE SPEC/~~XXXXXXXXXXXX~~ 2323-AS-31 0 5-15-77  
Rev. Issue Date

B. DETAILS The inspection requirements of AS-31 apply to cable tray supports and to protective concrete coatings above 6'-0" where the surfacer is deleted. This necessitates considerable rework on the cable tray supports due to the welded connections used, and the quality requirements cannot be satisfied for the concrete coating without the surfacer.

Solution: Section 2.2 of Appendix C allows deviations from the quality assurance requirements upon approval by the Owner. This will extend approval to delete the inspection requirements of AS-31 for cable tray supports outside the Containments and for areas of

## 2. SUPPORTING DOCUMENTATION

protective concrete top coating where the surfacer has been deleted.

TWX-1241

GTT-1925

JOB NO. 35-1195

**VOID**

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JAN 27 1978

RECEIVE

## 3. SIGNATURES

O.B.J./akh

A. APPROVED BY:

G&amp;H Representative

Date

B. APPROVED BY:

Responsible Engineer

Date

C. APPROVED BY:

Project Engineer or  
Engineering Supervisor

Date

## 4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)B&R Field (Original) (1)  
B&R Site QA (1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION(WILL) <sup>TNH CLM FILE ARMS</sup> ~~BE~~ INCORPORATED

AUTHORIZATION NO. 1011

SAFETY RELATED: ☒ YES ☐ NO1. DESCRIPTION OF CHANGE/REVISIONA. APPLICABLE SPEC/~~REFERENCE~~ 2323-AS-31 0 5-15-77  
Rev. Issue DateB. DETAILS Information regarding application work is documented  
by the B&R QA/QC department; the daily report from the coating  
applicator is redundant for jobsite coating work. The daily  
report is not required from vendors for their coating work.

Solution: Delete section 5.4.c of Appendix "C".

**VOID**  
JOB NO. 35112. SUPPORTING DOCUMENTATIONRECEIVED  
FEB 06 1978  
RECEIVED3. SIGNATURES O.B.J./akh 1-30-78A. APPROVED BY: [Signature] 2-6-78  
G&H Representative Date  
B. APPROVED BY: [Signature] 2-2-78  
Responsible Engineer Date  
C. APPROVED BY: [Signature] 2-6-78  
Project Engineer or Engineering Supervisor Date4. STANDARD DISTRIBUTIONTUGCO Site QA (1) B&R Field (Original) (1)  
G&H New York (1) B&R Site QA (1)  
G&H Dallas (1)

FILE, ARMS, CLM

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATIONARMS  
INDEXED(WILL) (~~XXXXXX~~) BE INCORPORATED

AUTHORIZATION NO. 1012

SAFETY RELATED: <sup>DATE</sup> X YES      NO1. DESCRIPTION OF CHANGE/~~DEVIATION~~A. APPLICABLE SPEC/~~XXXXXX~~ 2323-AS-31 0 5-15-77  
Rev. Issue DateB. DETAILS Areas are present outside the Containments where the  
surfacers will be applied above 6'-0".

Solution: Revise the last sentence in Section 8.2.d to read as follows: "Above 6'-0" height, omit surfacer and apply topcoat only except where noted otherwise on the Room Finish Schedule drawings; also, surfacer will be applied to full height on block walls scheduled to receive protective coatings.

JOB NO. 35-1195

## 2. SUPPORTING DOCUMENTATION

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**VOID**

## 3. SIGNATURES

O.B.J./akh

1-30-78

A. APPROVED BY: [Signature] 2-2-78  
G&H Representative Date

B. APPROVED BY: [Signature] 2-2-78  
Responsible Engineer Date

C. APPROVED BY: [Signature] 2-2-78  
Project Engineer or Engineering Supervisor Date

## 4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)

B&R Field (Original) (1)  
B&R Site QA (1)

TNH, FILE, CLM, ARMS

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATIONARMS  
INDEXED

(WILL NOT) (WILL NOT) BE INCORPORATED

AUTHORIZATION NO. 1028

SAFETY RELATED: ☒ YES ☐ NO1. DESCRIPTION OF ~~EXAMINATION~~/CLARIFICATIONA. APPLICABLE SPEC/~~REFERENCE~~ 2323-AS-31 0 5-15-77  
Rev. Issue DateB. DETAILS Frequency of DFT tests is not clear for concrete  
coating inspection.Solution: Frequencies of tests should parallel the guidelines  
given in SSPC-PA2-73T. DFT tests using the Tooke Gage or  
other scratch gages should be used only for coating thickness  
verifications where required.

JOB NO. 35-1195

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FEB 21 1978  
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## 2. SUPPORTING DOCUMENTATION

VOID

3. SIGNATURES O.B.J./akh 2-1-78

A. APPROVED BY: [Signature] 2/2/78  
G&H Representative DateB. APPROVED BY: N/A  
Responsible Engineer DateC. APPROVED BY: N/A  
Project Engineer or  
Engineering Supervisor Date

## 4. STANDARD DISTRIBUTION

TUGCO Site QA (1)	B&R Field (Original) (1)
G&H New York (1)	B&R Site QA (1)
G&H Dallas (1)	

SPEC/FILE/ARMS

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

DATE

AUTHORIZATION NO. 1313

(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.SAFETY RELATED DOCUMENT: X YES NO

## 1. DESCRIPTION OF CHANGE/DEVIATION/QUARTANTION

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 0 4-15-77  
Rev. Issue Date

B. DETAILS PROBLEM: Section 6.3.b. states that all foreign matter shall be removed prior to application of concrete protective coatings. This is overly restrictive for small intact wood splinters and the wood fuzz residue left over after removal of large wood chips.

SOLUTION: For areas outside the Containments scheduled to receive protective coating, wood "splinters" and "fuzz" may be left in place and coated over where not removed by water and air blasting. Wood "chips" should be removed.

This was discussed with the coating manufacturer, and it was confirmed that the decontamination function of the coating would not be impaired. The definition of wood "splinters" versus wood "chips" has been discussed with the QC inspectors, and a working definition agreed upon.

JOB NO. 35-1195

## 2. SUPPORTING DOCUMENTATION

RECEIVED  
MAR 21 1978  
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## 3. SIGNATURES OBJ/ss re-done 3/21/78

A. APPROVED BY: [Signature] 3-21-78  
G&H Representative DATEB. APPROVED BY: [Signature] 3-21-78  
Responsible Engineer DATE

## 4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&R Field (Original) (1)  
B&R Site QA (1)

PEC, FILE, ARMS, CJS

COMANCH 1 AK STEAM ELECTRIC STATION  
DESIGN CHG. / DESIGN DEVIATION AUTHORIZATION(WILL) ~~INXXXXXX~~ BE INCORPORATED  
IN DESIGN DOCUMENTS.AUTHORIZATION NO. 1318  
~~INDEXED~~ REV. 1SAFETY RELATED DOCUMENT: X YES NO1. DESCRIPTION OF CHANGE/DEVIATION/CLAIM/COMMENTA. APPLICABLE SPEC/~~DOCUMENT~~ 2323-AS-31 0 4-15-77  
Rev. Issue Date

\*\* THIS DOCUMENT SUPERSEDES AND VOIDS DC/DDA-1318.

B. DETAILS PROBLEM: Section 6.3.b. states that all foreign matter shall be removed prior to protective concrete coating application by steam cleaning with detergent or by scrubbing. However, survey marks on concrete which used felt-tip ink markers are not removed by cleaning, and have to be ground off. Request approval to coat over these marked areas and ~~various~~ numerous other identifying marks from pencil lead, and grease pencil. Rev. 1Rev. 1 SOLUTION: Protective concrete coating may be applied over the ink and other markings described above on areas outside the Containments only. This was discussed with the coating manufacturer, and was found acceptable based on preliminary results of DBA tests for ink markers. Pencil markings will be limited to thin lines. Any large areas of pencil shall be removed before applying coating.2. SUPPORTING DOCUMENTATIONRev. 13. SIGNATURES 1100/06 OBJ/ss 4-13-78A. APPROVED BY: [Signature] 4-13-78  
G&H Representative DATEB. APPROVED BY: Mike Birch 4-19-78  
Responsible Engineer DATE4. STANDARD DISTRIBUTIONTUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
ESR Field (Original) (1)  
ESR Site QA (1)

JOB NO. 35-1133

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SPEC /FILE/ARMS/CJS COMANCHE PEAK STEAM ELECTRIC STATION  
 DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

(WILL) (WILL) BE INCORPORATED  
 IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 1460

SAFETY RELATED DOCUMENT: ☒ YES ☐ NO

1. DESCRIPTION OF CHANGE/DEVIATION/CLARIFICATION

A. APPLICABLE SPEC/DOCUMENT 2323-AS-31 0 4-15-77  
 Rev. Issue Date

B. DETAILS REF: SPEC PARA. 9.2.3.6.3.  
Page 13 of AS-31 requires repairing pinholes in the concrete  
 surfaces prior to topcoating where pinholes exceed condition "B"  
 of NACE-T-6F-3. Request change to repair of pinholes after top-  
 coating.

SOLUTION: Page 13 of AS-31 will be revised to remove the  
 requirement of repairing pinholes in the concrete surfaces since  
 these pinholes are sealed by the topcoat. Major non-conformities  
 in the surfaces will be repaired as required.

2. SUPPORTING DOCUMENTATION

JOB NO. 35-1195

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3. SIGNATURES OBJ/ss 4-4-78

A. APPROVED BY: [Signature] 4-4-78  
 G&H Representative DATE

B. APPROVED BY: [Signature] 4/4/78  
 Responsible Engineer DATE

4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
 G&H New York (1)  
 G&H Dallas (1)  
 B&R Field (Original) (1)  
 B&R Site QA (1)

COMANCHE PEAK STEAM ELECTRIC STATION  
TNH, FILE, ARMS, CS DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

(WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 1612 C

DATE  
SAFETY RELATED DOCUMENT: ☒ YES ☐ NO

1. DESCRIPTION OF CHANGE/DEVIATION/CLARIFICATION

A. APPLICABLE SPEC/DOC/DOCUMENT 2323-AS-31 1 3-15-78  
Rev. Issue Date

B. DETAILS PROBLEM: Request clarification if protective coating is  
required for the pipe sleeves shown on sections 6-6 and 7-7 on drawing  
2323-S1-0549 and 2323-S2-0549.

SOLUTION: Per section 1.1.c.12 of AS-31, interior surfaces  
of pipe sleeves are excluded from the scope of protective coating.  
Painting is not required as these areas will not be decontaminated,  
and the pipe sleeves are not subjected to moist or immersion service  
conditions.

2. SUPPORTING DOCUMENTATION

**VOID**

3. SIGNATURES OBJ/ss 5-4-78

A. APPROVED BY: D. J. Jellinger 5/4/78  
G&H Representative DATE

B. APPROVED BY: B. Jones 5/4/78  
Responsible Engineer DATE

4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&R Field (Original) (1)  
B&R Site QA (1)

JOB NO 35-1195

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MAY 06 1978  
R E C E I V E

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION  
TNH, FILE, ARMS  
(WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 1615

DATE  
SAFETY RELATED DOCUMENT: ☒ YES ☐ NO

1. DESCRIPTION OF CHANGE/DEVIATION/CLARIFICATION

A. APPLICABLE SPEC/AD/DOC/DOCUMENT 2323-AS-31 1 3-15-78  
Rev. Issue Date

B. DETAILS PROBLEM: Section 4.0.a. states that the required storage conditions will be plainly marked on the containers of coating materials delivered to the jobsite. This information is not provided by all coating manufacturers on their labels. Please advise if the manufacturers will have to revise their labels to comply with this requirement.

SOLUTION: The jobsite quality control on coating containers satisfactorily monitors the storage of these containers to the extent that the requirement of having the storage requirements on the container labels may be waived for coating materials received by B&R. Section 4.0.b. states that the containers will be stored in an area meeting the manufacturer's storage recommendations, and compliance with Section 4.0.b. may be achieved by reference to the manufacturer's data package without loss of quality control.

2. SUPPORTING DOCUMENTATION

3. SIGNATURES OBJ/ss 5-4-78

A. APPROVED BY: [Signature] 5-4-78  
G&H Representative DATE

B. APPROVED BY: [Signature] 5/4/78  
Responsible Engineer DATE

4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&R Field (Original) (1)  
B&R Site QA (1)

JOB NO. 35-1195

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

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DESIGN DOCUMENTS.

AUTHORIZATION NO. 1785

SAFETY RELATED DOCUMENT: ☒ YES ☐ NO

1. DESCRIPTION OF CHANGE/DEVIATION/CLARIFICATION

A. APPLICABLE SPEC/DOC/DOCUMENT	2323-AS-51	1	5-15-78
	2323-MS-46A	1	7-28-75
		Rev.	Issue Date

B. DETAILS Request protective coating requirements for the shim plates for the Containment Spray piping supports.

SOLUTION: The shim plates will not be subject to decontamination, and most of the surface area of the shims will not be exposed. The function of the coating applied to these shims will be for protection against corrosion. Therefore, these shims should be sandblasted and coated with two coats of Carbozinc 11<sup>only</sup>. Tack welding will be required after positioning the shims; these tack welded areas will require repair and repriming with the Carbozinc 11.

JOB NO. 35.1105

2. SUPPORTING DOCUMENTATION

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JUN 01 1978  
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VOID

3. SIGNATURES OBJ/ss 5-31-78

A. APPROVED BY: [Signature] G&H Representative Date 5-31-78

B. APPROVED BY: [Signature] Responsible Engineer Date 5/31/78

4. STANDARD DISTRIBUTION

TUGCO Site QA	(1)
G&H New York	(1)
G&H Dallas	(1)
B&B Field (Original)	(1)
B&B Site QA	(1)

COMANCHE PEAK STEAM ELECTRIC STATION  
SPEC, FILE, ARMS, CJS DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

WILL) (WILL) NOT BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 1986

SAFETY RELATED DOCUMENT: ☒ YES ☐ NO

1. DESCRIPTION OF CHANGE/DEVIATION/CLARIFICATION

A. APPLICABLE SPEC/DOCUMENT 2323-AS-31 1 3-15-78  
Rev. Issue Date

B. DETAILS The concrete coating supplier has indicated that application of the Nutec #11/Reactic #1201 coating system over embedded wood splinters and wood "fuzz" which could not be removed by the waterblasting procedure prescribed in section 6.3.d would not be detrimental to the performance of the coating system. Field Elcometer testing was requested, and the wood particles would be considered non-deleterious if the pull test values exceeded 500 psi. After testing, the lowest test strength was 600 psi, and the average strength of all tests was 749 psi. Request approval to permit concrete coating application over these wood particles inside the Containments. (CONTINUED ON PAGE 2)

2. SUPPORTING DOCUMENTATION

BRF-8472; VBR-7494

JOB NO. 35-1195

RECEIVED  
JUN 30 1978  
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3. SIGNATURES OBJ/ss 6-29-78

A. APPROVED BY: [Signature]  
G&H Representative

B. APPROVED BY: [Signature]  
Responsible Engineer

C. APPROVED BY: [Signature] N/A  
Vendor Duly Authorized Representative  
(Title)

DATE

DATE

DATE

4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&R Field (Original) (1)  
B&R Site QA (1)

VOID

SOLUTION: Based on the test results transmitted by BRF-8472 the coating manufacturer's requirement of 500 psi has been satisfied. Delete the words, "outside Containment", in the second sentence of Section 6.3.2.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

SPEC, FILE, ARMS, GLC, LEH  
(~~Will~~) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 2283

SAFETY RELATED DOCUMENT yy YES NO

1. DESCRIPTION OF CHANGE/DEVIATION/CLARIFICATION

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-30 0 10/29/76  
2323-AS-31 1 3/15/78  
Rev Issue Date

B. DETAILS Request clarification of the color requirements for the 6" base on concrete walls. Also request clarification of allowable overlap of the light grey topcoat on concrete floors onto the white topcoat on concrete walls.

SOLUTION: In areas where light gray topcoat is specified on concrete floors, the walls should also be painted approximately 6" above finished floor with the light gray topcoat.

**VOID**

2. SUPPORTING DOCUMENTATION

3. SIGNATURES OBJ/sp

9/23/78

A. APPROVED BY: Bennett Jones  
G&H Representative

10/2/78  
Date

B. APPROVED BY: N/A  
Responsible Engineer

—  
Date

4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&R Field (Original) (1)  
B&R Site QA (1)

JOB NO. 35-1195  
**R** E C E I V E **D**  
OCT 5 1978  
R E C E I V E

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

(WILL) ~~NOT~~ BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 2932-REV.1

SAFETY RELATED DOCUMENT X YES    NO

1. DESCRIPTION OF CHANGE/DEVIATION/REVISION

A. APPLICABLE SPEC/~~DOCUMENT~~ 2323-AS-31 1 3-15-78  
NOTE: THIS DOCUMENT SUPERSEDES AND VOIDS DC/DDA-2932. Rev Issue Date

B. DETAILS Request revision of Section 6.2.e to permit sandblasted steel to stand overnight provided no rust bloom is present before priming. This is in accordance with the coating manufacturer's recommendations, and will assist the field painting schedule.

SOLUTION: Revise Section 6.2.e as follows:

"6.2.e: The prime coat shall be applied as soon as possible after the blasting preparation is complete. Generally, the time elapsed between blast cleaning and primer application shall not exceed eight hours. In all cases, the criteria of paragraph 9.2.3b2 shall apply."

Revise paragraph 9.2.3b2 as follows:

"9.2.3b2: Surface preparation of steel - the following conditions, if observed, must be corrected before coating application.

Foreign Contaminants	: Complete removal is required
Welds and Edges	: Smooth with no weld splatter
Blast Profile	: Must conform to SSPC standards
Rust or Rust Bloom	: Complete removal by blast cleaning is required.

2. SUPPORTING DOCUMENTATION

DECD-S-1245

NRC Report #78-12

3. SIGNATURES OBJ/ss 12-13-78

A. APPROVED BY: [Signature]  
G&H Representative

B. APPROVED BY: [Signature]  
Responsible Engineer

12/14/78  
Date

12/13/78  
Date

4. STANDARD DISTRIBUTION

TUGCO Site OA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&R Field (Original) (1)  
B&R Site OA (1)

JOB NO. 35-1195

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DEC 18 1978  
R E C E I V E D

CJS, FILE, ARMS, LEH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (~~WILL NOT~~) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 2979

SAFETY RELATED DOCUMENT ☒ YES ☐ NO

1. DESCRIPTION: DESIGN CHANGE ☒ YES ☐ NO

A.	APPLICABLE SPEC/ <del>OWS</del> /DOCUMENT	2323-AS-30	0
		2323-AS-31	1
			REV.

B. DETAILS Pipe hangers are marked with the building's name that they will be installed in. This presents difficulties in determining whether a hanger receives an AS-30 or an AS-31 coating in Safety-related areas outside the Containments. Further identification of the pipe hangers during fabrication or coating the pipe hangers after installation would both be costly.

SOLUTION: Pipe hangers located outside the Containments in the Fuel, Auxiliary and Safeguard Buildings will be coated with the Carbozinc 11 primer and Phenolinc 305 topcoat, but will not be subject to AS-31 inspection requirements.

This will provide a decontaminable surface, and allow coating of the hangers prior to installation. Section 1.1.c.9 of AS-31, and Sections 1.0. and 1.p of Appendix 'A'

2. SUPPORTING DOCUMENTATION of AS-30 will be revised accordingly.

3. SIGNATURES: OBJ/ss 11-15-78

A. APPROVED BY: [Signature]  
G&H Representative

B. APPROVED BY: [Signature]  
Responsible Engineer

11/15/78  
Date

11/15/78  
Date

4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
G&H-New York (1)  
TUGCO Site QA (1)  
B&R Site QA (1)

JOB NO. 35-1195

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NOV 17 1978  
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SPEC, FILE, ARMS, LEH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION~~XXXXXX~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 4894SAFETY RELATED DOCUMENT X YES      NO1. DESCRIPTION:A. APPLICABLE SPEC/~~XXXXXXXXXX~~ 2323-AS-31 REV. 1

B. DETAILS During welding of the instrument racks to MCC channels outside of the Containment, extensive damage is caused to the "Q" coatings applied to the embed channel. After final placement of the racks, many areas on the channel are inaccessible to future repair or decontamination. Request that all MCC channels which are required to receive protective coating outside of the Containment be deleted from the "Q" program.

SOLUTION: The above request for deleting the "Q" requirements for MCC channels outside the Containment is acceptable; however, in order to stop corrosion, an attempt shall be made to apply a prime and finish coat in areas which are rendered accessible.

2. SUPPORTING DOCUMENTATION3. SIGNATURES: GDM/ss 6-12-79A. APPROVED BY: R. E. Lewis

GSH Representative

6-12-79  
DateB. APPROVED BY: Gordon MacPhee RHW

Responsible Engineer

6-12-79  
Date4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
GSH New York (1)  
GSH Dallas (1)  
TUGCO Site QA (1)  
B&R Site QA (1)  
FSDC Site (1)

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JOB NO. 35-1195

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(X) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 5031

SAFETY RELATED DOCUMENT X YES    NO

1. DESCRIPTION:

A. APPLICABLE SPEC ~~XXXXXXXXXXXX~~ \* 2323-AS-31 REV. 1

B. DETAILS Request that the electrical items listed below which are to be installed outside the Reactor Buildings 1 & 2 be exempt from AS-31 guidelines due to problems involved during sandblasting and coating.

- 1) conduit supports
- 2) 2" clips
- 3) unistrut holders and angles
- 4) instrument backing plates

SOLUTION: The items listed above which are located in areas outside the Containment Buildings will be coated with Carbozinc 11 primer and Phenoline 305 topcoat, but will not be subject to AS-31 requirements. This will allow a decontaminable surface area.

2. SUPPORTING DOCUMENTATION

3. SIGNATURES: GDM/ss 6-27-79

A. APPROVED BY:

GDM Representative

6-27-79  
Date

B. APPROVED BY:

Responsible Engineer

6-27-79  
Date

4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
G&H New York (1)  
G&H Dallas (1)  
TUGCO Site QA (1)  
B&R Site QA (1)  
FSDG Site (1)

JOB NO. 35-1195

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JUN 28 1979  
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SPEC, NAW, TUGCO

FIGURE 1.

Page 1 of 2

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WILL) (~~XX XXXXX~~) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 5171 REV. 1

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTI N:

A. APPLICABLE SPEC/~~XXXXXXX~~ 2323-AS-31 REV. 1

B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-5171 REV. 0.

Problems exist in maintaining traceability on "Q" primer and/or seal coat which is shop coated on common stock steel without unique numbers. Once the subject steel is sent to a designated laydown area and then to a building for use, the primer and/or seal coat cannot be traced to the original application with respect to batch number and identification needed under a "Q" program. Request revision to section 6.2.6.4 of Appendix "C" to the above applicable specification to permit final acceptance of primer or seal coat to be made in the field after erection of the specific stock material.

SOLUTION: Revise Section 6.2.6.4, Gibbs and Hill Specification 2323-AS-31

Appendix "C" to read as follows: Film characteristics after drying and curing.

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/psw

9-18-81

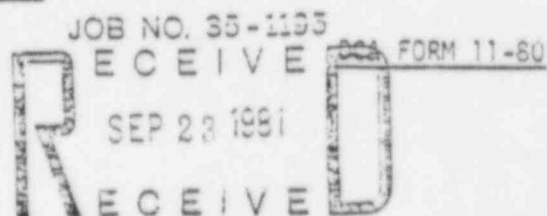
A. ORIGINATOR: Mark Wells DATE 9-18-81

B. DESIGN REPRESENTATIVE: DM Kissinger DATE 9-21-81

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)



excluding common stock steel without unique numbers.

The following guidelines shall be maintained on items which are governed as described above:

- (1) Common stock steel to receive protective coating is to be shop-blasted and primed per AS-31 standards.
- (2) Inspection of blast shall be in accordance with AS-31.
- (3) Upon acceptance of blast, common stock items shall be primed and allowed to dry sufficiently to prevent easy damage, and then transferred to laydown area.
- (4) Shop seal-coated common stock items shall be transferred to laydown areas, following sufficient curing to prevent coating damage.
- (5) Inspection for final coating acceptability shall not be given for common-stock steel prior to the items permanent location.
- (6) All repair and finish coating on "Q" coated common stock shall be per AS-31 requirements.

spec, file, arms, leh, tugco

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~XXXXXXXXXX~~ BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 5193

SAFETY RELATED DOCUMENT ☒ YES ☐ NO

## 1. DESCRIPTION:

A. APPLICABLE SPEC/~~DESIGN DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS Areas exist on exterior surfaces of Vendor Primed Valves for inside Containment use which cannot be coated/inspected in accordance with Gibbs & Hill Specification 2323-AS-31 appendix "C". Request that clarification be given concerning this matter.

SOLUTION: After review, valves located inside Containment #1 and #2 shall be coated per the following guidelines:

- 1) All valves located in Reactor Building #1 and #2 which are attached to pipes 4" and under shall be deleted from AS-31 requirements.
- 2) Valves located in Reactor Building #1 and #2 will be coated (4" and under) per AS-30 requirements up to the first field weld/connection on the existing pipe when placing valve. Primer and finish coat material types shall be as per AS-31.

## 3. SIGNATURES: GDM/ss 7-19-79

A. APPROVED BY: RB Williams 7-19-79  
G&H Representative Date

B. APPROVED BY: London MacFarland 7-19-79  
Responsible Engineer Date

## 4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
G&H New York (1)  
G&H Dallas (1)  
TUGCO Site QA (1)  
B&R Site QA (1)  
FSDG Site (1)

**VOID**

JOB NO. 35-1193

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SPEC, FILE, ARMS, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~WILL~~ BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 5620SAFETY RELATED DOCUMENT X YES      NO1. DESCRIPTION:A. APPLICABLE SPEC/~~NO/INTEXT~~ 2323-AS-31 REV. 1B. DETAILS Request authorization to change the AS-31 color re-  
quirements for the pipe chase walls from the existing Reactic 1201  
White Topcoat to 1201 Mist Gray.SOLUTION: Due to the pipe chase areas being lower  
than the existing finish floor, the floor and pipe chase area color  
requirements should be similar in order to unify the coating system.  
All coating requirements shall be maintained per AS-31. The above  
solution is therefore acceptable.2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM/ss 9-11-79A. APPROVED BY: *P. B. Williams*

G&amp;H Representative

9-11-79  
DateB. APPROVED BY: *John M. P. Rie*

Originating Engineer

9-11-79  
Date4. STANDARD DISTRIBUTION:B&R Field (Original) (1)  
G&H New York (1)  
G&H Dallas (1)  
TUGCO Site QA (1)  
FSUG Site (1)

JOB NO. 25-1103

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SEP 12 1979  
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SPEC, SPEC, FILE, ARMS, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION~~(X)~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 6384SAFETY RELATED DOCUMENT X YES    NO1. DESCRIPTION:A. APPLICABLE SPEC/~~DOC~~/DOCUMENT 2323-AS-31a REV. 1  
2323-AS-30 0B. DETAILS Inside Containment #1 and #2, request permission  
to delete AS-31 requirements on all clevises and "U" clamps under  
2" inches due to the limited area, threaded bolt connections,  
and inaccessible areas.SOLUTION: Due to the size and shape of the clevises  
and "U" clamps, areas exist that cannot be inspected per AS-31  
guidelines, therefore shall be coated under AS-30; however, AS-31  
coatings shall be applied.2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM/ss 1-3-80A. APPROVED BY: R.B. Williams 1-3-80  
G&H Representative DateB. APPROVED BY: London MacDermott 1/3/80  
Originating Engineer Date4. STANDARD DISTRIBUTION:B&R Field (Original) (1)  
G&H New York (1)  
G&H Dallas (1)  
TUGCO Site QA (1)  
FSUG Site (1)

JOB NO. 35-1103

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**R** **RECEIVE** **D**

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(XXXX) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 7531 Rev.2

This revision voids and supersedes  
DCA 7531 Rev. 1.SAFETY RELATED DOCUMENT X YES NOORIGINATOR: CPPE X ORIGINAL DESIGNER       

## 1. DESCRIPTION:

A. APPLICABLE ~~XXXX/DWG/DRAWING~~ 2323-AS-31 REV. 1B. DETAILS Request clarification on rotating platform & polar crane girders and  
brackets, for nut, bolt and shim plate coating requirements for RB #1 & 2.SOLUTION: Bolt connections and shim plates shall be coated under AS-30 require-  
ments; however, AS-31 coating materials will be used. This will eliminate having to  
sandblast existing nuts, bolts and shim plates thus damaging existing coating material.

## 2. SUPPORTING DOCUMENTATION

**VOID**3. SIGNATURES: JDS/dt

6/18/80

A. APPROVED BY:

James A. Allen  
Design Representative18 June 80  
Date

B. APPROVED BY:

John D. Smith  
Originator18 June 80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)

JOB NO. 35-1195

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JUN 18 1980  
**RECEIVED**

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION~~XXXXX~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 7571

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 1. DESCRIPTION:

A. APPLICABLE SPEC/DWG/~~XXXXXX~~ 2323-AS-31 REV. 1

B. DETAILS Two "Torque Lift" equipment lifts for the Reactor Buildings are improperly coated in accordance with AS-31 requirements. Due to the configuration of the equipment and the hardware mounted on it (motors, hydraulic system, etc) sandblasting and coating the entire surface area per AS-31 will not be possible.

SOLUTION: Exterior exposed surface areas will be re-coated per AS-31 requirements; however, due to the nature of the equipment (handrails, checkered plate, etc.) QC inspection will be waived. Surfaces beneath the equipment which will not be exposed and where sandblasting could damage hardware should be left as-is.

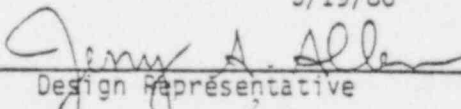
## 2. SUPPORTING DOCUMENTATION

**VOID**

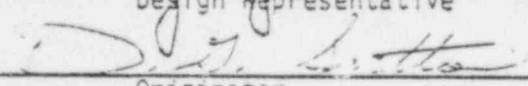
## 3. SIGNATURES: DGS/dt

5/19/80

A. APPROVED BY:

  
Design Representative5/19/80  
Date

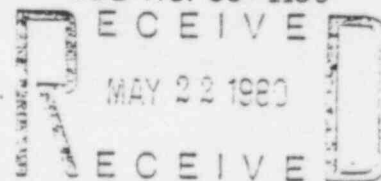
B. APPROVED BY:

  
Originator5/19/80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)

JOB NO. 35-1195



COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 7805

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 1. DESCRIPTION:

A. APPLICABLE SPEC/~~ENGINEERING~~ 2323-AS- 31 REV. 1

B. DETAILS On the spray piping hangers above elevation 947' in Reactor Containment Bldg. there are areas which are inaccessible to coating and inspection per AS-31 requirements. See attached sketch for location of typical inaccessible areas.

SOLUTION: Typical areas noted on attached sketch are inaccessible per paragraph 1.1 B of Spec. AS-31. Therefore, these small areas shall be deleted from coating and inspection requirements. The remaining area shall be coated and inspected per AS-31.

## 2. SUPPORTING DOCUMENTATION

**VOID**

## 3. SIGNATURES: JDS/dt

6/11/80

A. APPROVED BY:

Design Representative

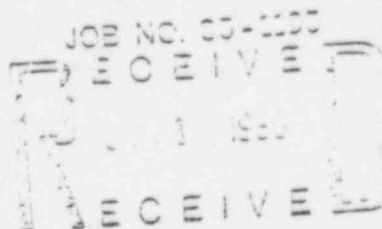
Date

B. APPROVED BY:

Originator

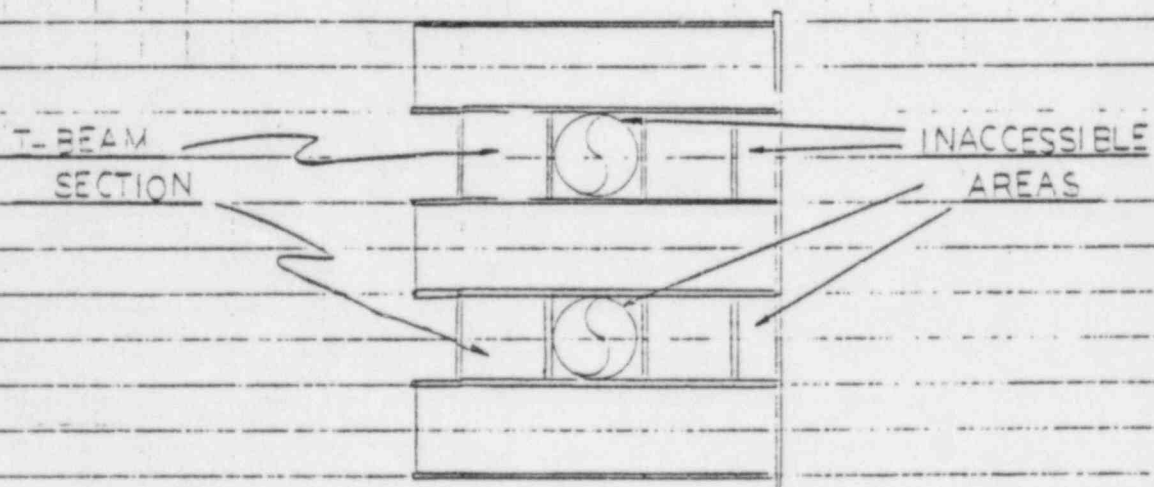
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)

DCA 7805

PG. 2 OF 2



TYP PIPE SUPPORT  
ELEVATION VIEW

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(XXXXXX)~~ BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 8053

1. SAFETY RELATED DOCUMENT: XX YES        NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER       

3. DESCRIPTION:

A. APPLICABLE SPEC ~~XXXXXX~~ 2323-AS-31 REV. 1B. DETAILS Clarification is requested for section 9.2.3 of above applicable specification. Solution: Change 1st paragraph of section 9.2.3 of as follows.

The service of competent inspectors shall be furnished to ensure compliance with the coating manufaactures requirements and the requirements set forth within this specification for all phases of the coating activities for inside containment structures and a documented final inspection of the cured coating in areas covered by this specification outside containment structures. The contractors coating department shall be responsible for compliance with the manufactures requirements and those set forth herein for all in-process coating activities in areas covered by this specification which are outside containment structures.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/sgf

11-16-81

A. ORIGINATOR: Mark L. Lella DATE 11-16-81B. DESIGN REPRESENTATIVE: RM Kissen DATE 11-16-816. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

JOB NO. 35-1195

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (XXXXXX) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 8114

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 1. DESCRIPTION:

A. APPLICABLE SPEC/ ~~XXXXXX~~ 2323-AS-31 REV. 1

B. DETAILS Para. 3.0 b Add item #8 to read: Swedish pictorial standards SSPC-

VIS-1-67T

## 2. SUPPORTING DOCUMENTATION

**VOID**3. SIGNATURES: JDS/dt 7/22/80  
Civil EngineeringA. APPROVED BY: John D. Smith Design Representative7-22-80  
DateB. APPROVED BY: John D. Smith Originator22 July 80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Technical Services for Original Designer (if CPPE originated) (1)

JOB NO. 35-1195

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (~~WILL NOT~~) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9122

1. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER     

## 3. DESCRIPTION:

A. APPLICABLE SPEC/~~2323-AS-31~~ 2323-AS-31 REV. 1B. DETAILS      In 2323-AS-31 appendix "B" under CPSES Paint Schedule,  
Area I, containment, add to the listed items the following:

#11. Weld Plate Embeds. ---- White

Reason for change: 2323-AS-31 Paint Schedule does not specify color for weld  
plate embeds.**VOID**

## 4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/bgf 11-20-80

A. ORIGINATOR: Mark Wells DATE 11/20/80B. DESIGN REPRESENTATIVE: RM Kissinger DATE 11-20-806. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

## 7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)JOB NO. 35-1197  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXXXX (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9129

1. SAFETY RELATED DOCUMENT: XX YES        NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER       

## 3. DESCRIPTION:

A. APPLICABLE SPEC/~~DATE/REVISION~~ 2323-AS-31 REV. 1B. DETAILS In Containment Building 1 and 2, request that clevis clamp and hanger rod 5/8" or smaller be removed from AS-31 criteria.

SOLUTION: Due to the small diameter of the above rods, all clevis clamp and hanger rod 5/8" or smaller shall be coated under AS-30 guidelines; however, AS-31 coatings shall be used.

## 4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/bgf 11-21-80

A. ORIGINATOR: Mark Wells for DATE 11/21/80B. DESIGN REPRESENTATIVE: RM Kissinger DATE 11-21-806. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

## 7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

DCA FORM 11-80

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SPEC, HAH, TUGCO (2), AM (4)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OII \_\_\_\_\_  
: II \_\_\_\_\_  
: III X

(WIOD) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 9143 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES \_\_\_\_\_ NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

**VOID**

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31

B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-9143 Rev. 0.

Pipe Whip and Moment Restraints & Steam Generator supports in  
Containment Buildings are coated prior to installation. Request that  
AS-31 coating requirements on nuts, washers and anchor bolts for these  
restraints & supports be deleted.

SOLUTION: To prevent damage of existing coating on the above items,  
coating shall be per AS-30 guidelines utilizing AS-31 coating  
material. The said nuts, washers and anchor bolts will be  
subject to a final visual OC inspection. Surface preparation  
shall be a minimum SSPC-SP6.

35-1195  
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4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: HW/sgf 2-2-83

A. ORIGINATOR: Mark Wells DATE 2-2-83  
B. DESIGN REPRESENTATIVE: CRKooton DATE 2-3-83

6. VENDOR TRANSMITTAL REQUIRED: YES \_\_\_\_\_ NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9231

1. SAFETY RELATED DOCUMENT: ☒ YES ☐ NO
2. ORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐
3. DESCRIPTION:

A. APPLICABLE SPEC/~~DESIGN~~ 2323-AS-31 REV. 1

B. DETAILS In Reactor Building I & II, El. 887', AZ61<sup>0</sup> and 127<sup>0</sup>, there are 48" Isolation Valves for the HVAC System. During storage and installation the shop coat received damage necessitating repair and recoating of valve. Areas exist on the valve operating mechanism which are inaccessible for proper surface preparation as required by AS-31. Request that the valve operator be deleted from AS-31 requirements.

SOLUTION: Due to the inaccessibility and possibility of damage to valve components, the operator portion of the valve shall be coated under AS-30 guidelines using AS-31 specified coatings.

**VOID**

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/bgf 12-8-80

A. ORIGINATOR: *Mark Wells* <sup>SEA</sup> <sub>12-8-80</sub> DATE 12/8/80B. DESIGN REPRESENTATIVE: *RM Kiss* DATE 12/8/80

6. VENDOR TRANSMITTAL REQUIRED: YES ☐ NO ☒

7. STANDARD DISTRIBUTION:

DCA FORM 11-80

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

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## FIGURE 1.

Page 1 of 1

SPEC, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION~~(XXX)~~ (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9360

1. SAFETY RELATED DOCUMENT: XX YES        NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER       

## 3. DESCRIPTION:

A. APPLICABLE SPEC/~~XXXXXXX~~ 2323-AS-31 REV. 1

B. DETAILS In Reactor Building #1 on elev. 808' and on el. 860' there are Cable Tray Supports which have been finish coated that have carbon steel bolt connectors that have not been coated per AS-31 requirements. Request that AS-31 coating requirements be deleted on the above bolt connections. Cable Tray Supports involved are as follows: El. 808 - #5824; El. 860 - #5471 & #5460, & 5457, & 5432, & 2371, & 5515, & 5513, & 5517, & 5518.

SOLUTION: Due to the small area of coating involved and to minimize damage to existing AS-31 coating surrounding these bolt connections, the bolt connection on the above Cable Tray Supports shall be removed from AS-31 coating requirements. The bolt connections shall be prepared for coating utilizing SSPC-SP-2 surface preparation and coated with AS-31 coatings.

## 4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/bgf 12-22-80A. ORIGINATOR: Mark Wells DATE 12/22/80B. DESIGN REPRESENTATIVE: Pravin Patel DATE 12-73-806. VENDOR ACTION: REQUIRED        N/A XX

## 7. STANDARD DISTRIBUTION:

DCA FORM 10-80

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9634

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS In RBI, the carbon steel studs and nuts which attach the electrical penetration assembly header plates to the flange, face are not coated per AS-31 requirements. Due to possible damage to the header plate and to electrical components, request that AS-31 requirements on the above studs and nuts be deleted.

SOLUTION: Due to possibility of damage to electrical components and the high cost of disassembly of the electrical penetration assembly, the said studs and nuts shall be coated under AS-30 guide lines. However, AS-31 specified coatings shall be used.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/bgf 2-11-81

A. ORIGINATOR: Mark Wells DATE 2/11/81B. DESIGN REPRESENTATIVE: RM K. S. S. S. DATE 2-11-81

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

DCA FORM 11-80

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

JOB NO. 35-1193

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9917 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA 9917 REV. 0.  
In Containment #1 & #2, there are Safety restraint cables forconduit and lighting fixtures which are attached to eye hooks, small bent orflat plate, and small angle clips. Due to the size and configuration of theseattachments, inspection per AS-31 appendix C nor unique identification can beestablished for these attachments. Request coating guidelines for these items.Solution: Due to the details as stated above, the subject attachments forSeismic restraint cables on conduit and lighting fixtures shall be coated underAS-30 guidelines utilizing AS-31 specified coatings. QC inspection shall not benecessary however surface preparation shall be as near as possible to SSPC-SP-10.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/sgf

2-8-82

A. ORIGINATOR: Mark Wells DATE 2-8-82B. DESIGN REPRESENTATIVE: W. H. Kiser DATE 2-10-82

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

DCA FORM 11-80

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)  
Westinghouse-Site (1)

JOB NO. 35-1195  
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FEB 11 1982  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9927

1. SAFETY RELATED DOCUMENT: XX YES        NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER       

## 3. DESCRIPTION:

A. APPLICABLE SPEC/ ~~XXXXXXX~~ 2323-AS-31 REV. 1B. DETAILS In RBI at AZ279-284, elev. 905-1052 & at AZ 286-292, elev. 905-1066

there are two conduit runs that the 3/4" bolt connections on the supports have not been coated to AS-31 requirements. SSPC-SP-10 surface preparation, without damaging existing coating, is possible by replacing existing bolts with coated ones; however, the bolts have no unique number for Q shop coating traceability.

Request that the above bolt connections be removed from AS-31 coating requirements.

SOLUTION: Due to the above problem, shop coating shall be performed on replacement bolt connections for the above conduit runs under AS-30 coating requirements.

## 4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/bgf 4-6-81

A. ORIGINATOR: Mark Wells DATE 4-6-81B. DESIGN REPRESENTATIVE: RMK DATE 4-6-816. VENDOR TRANSMITTAL REQUIRED: YES        NO XXX

## 7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

JOB NO. 35-1195

DCA FORM 11-80

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APR 07 1981  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

ARMS

( ~~WILL~~ ) (WILL NOT) BE INCORPORATED

AUTHORIZATION INDEXED 1072

SAFETY RELATED DATE X YES NO1. DESCRIPTION OF ~~CHANGE/DEVIATION/~~ EXEMPTIONA. APPLICABLE SPEC/~~EXEMPTION~~ 2323-AS-31 0 4-1-77  
Rev. Issue DateB. DETAILS The containment liner from elevation 805'-6" to elevation 808'-0" receives elastic joint filler per section E-E on drawing 2323-S2-0319. From azimuth 130° to 250°, the rotofoam was installed prior to final acceptance of the protective coating. Minor repair work on scratches remained.Solution: The coating is acceptable "as is ". This area is inaccessible for decontamination purposes, and will be sealed off with a bond breaker and sealant to prevent moisture from causing corrosion of the liner plate.

JOB NO. 35-1195

## 2. SUPPORTING DOCUMENTATION

RECEIVE  
FEB 0 1978  
RECEIVE  
VOID

## 3. SIGNATURES

O.B.J./akh

2-6-78

A. APPROVED BY:

G&H Representative2-7-78  
Date

B. APPROVED BY:

Responsible Engineer2-6-78  
Date

C. APPROVED BY:

Project Engineer or Engineering Supervisor2-7-78  
Date

## 4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)B&R Field (Original) (1)  
B&R Site QA (1)

TNH, FILE, ARMS

COMANCHE PEAK STEAM ELECTRIC STATION ARMS  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION INDEXED

(WILL) (WILL NOT) BE INCORPORATED

AUTHORIZATION NO. 1244-REV. 1  
DATESAFETY RELATED: ☒ YES ☐ NO1. DESCRIPTION OF ~~CHANGE/DEVIATION/CORRECTION~~A. APPLICABLE SPEC/~~DOCUMENT~~ 2323-AS-31 0 4-15-77  
Rev. Issue Date\*\* THIS DOCUMENT VOIDS AND SUPERSEDES DC/DDA-1244  
B. DETAILS PROBLEM: The polar crane rail girders were protectively coated, but during rework on the crane rail the coating in several areas has been removed. These areas are: (1) scratches resulting from shifting the crane rail, and (2) original weld areas for the rail clip tie-down brackets which were ground smooth.

SOLUTION: The areas under the crane rail and tie-down brackets do not require protective coating. Damaged areas on the crane girders which will be exposed after assembly will be repaired as required.

## 2. SUPPORTING DOCUMENTATION

JOB NO. 35-1195

RECEIVED  
MAR 14 1978  
VOID

## 3. SIGNATURES OBJ/ss 3-10-78

A. APPROVED BY: [Signature] 3-14-78  
G&H Representative Date  
B. APPROVED BY: [Signature] 3-13-78  
Responsible Engineer Date  
C. APPROVED BY: [Signature] 3/13/78  
Project Engineer or Engineering Supervisor Date

## 4. STANDARD DISTRIBUTION

TUGCO Site QA (1) B&R Field (Original) (1)  
G&H New York (1) B&R Site QA (1)  
G&H Dallas (1)

TNH, FILE, ARMS.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

ARMS

WIDE/MS

(WNOO) (WILL NOT) BE INCORPORATED

AUTHORIZATION NO. -1261

SAFETY RELATED: <sup>DATE</sup> X YES NO1. DESCRIPTION OF CHANGE/DEVIATION/CLARIFICATIONA. APPLICABLE SPEC/~~ENX~~~~ENX~~~~ENX~~ 2323-AS-31 0 4-15-77  
Rev. Issue Date

B. DETAILS PROBLEM: In the Reactor Buildings, rotofoam was used for the compressible filler between the top of concrete walls and the underside of the floor slab. Does this rotofoam receive protective coating?

SOLUTION: The compressible filler will not be coated. If, during application of the concrete coating on the ceiling and walls, paint is accidentally placed on the rotofoam, it does not require removal.

JOB NO. 35-1195

RECEIVED  
MAR 09 1978  
RECEIVED

VOID

2. SUPPORTING DOCUMENTATION3. SIGNATURES OBJ/ss 3-8-78A. APPROVED BY: [Signature] 3/8/78  
G&H Representative DateB. APPROVED BY: N/A  
Responsible Engineer DateC. APPROVED BY: N/A  
Project Engineer or Engineering Supervisor Date 3-8-784. STANDARD DISTRIBUTION

TUGCO Site QA	(1)	B&R Field (Original)	(1)
G&H New York	(1)	B&R Site QA	(1)
G&H Dallas	(1)		

Spec, file, arms

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION(WILL) XXXXXXXX TO BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 1393

SAFETY RELATED DOCUMENT: X YES NO1. DESCRIPTION OF CHANGE XXXXXXXXXXXXXXXXXXXXXXXXA. APPLICABLE SPEC XXXXXXXXXXXXXX 2323-AS-31 0 3-15-77  
Rev. Issue Date

B. DETAILS PROBLEM: Section 6.9.b of Appendix C states in part that "Dry-film thickness on non-magnetic surfaces shall be determined by measuring the quantity of coating material used over a measured surface area." WFT gauges and scratch gauges are mentioned only for estimating purposes. As these gauges are acceptable methods of determining dry-film thickness, request permission to use these for final DFT readings also.

SOLUTION: Revise Section 6.9.b. of Appendix C to read as follows: \_\_\_\_\_

- "Dry-film thickness on non-magnetic surfaces shall be determined by any of the following methods:
- 1) Measuring the quantity of coating material used over a measured surface area;
  - 2) WFT gauges, but the gauge must be used immediately after coating application;
  - 3) Scratch gauges."

2. SUPPORTING DOCUMENTATION

JOB NO. 35-1195

R E C E I V E  
MAR 23 1978  
R E C E I V E

3. SIGNATURES OBJ/ss 3-23-78A. APPROVED BY: [Signature] 3-23-78  
G&H Representative DATEB. APPROVED BY: [Signature] 3/23/78  
Responsible Engineer DATE4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
DSM Field (Original) (1)  
B&R Site QA (1)

VOID

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

ARMS  
INDEXED

File ARMS, GLC  
(Will NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 2272

SAFETY RELATED DOCUMENT: ☒ YES ☐ NO

1. DESCRIPTION OF CHANGE/DEVIATION/CLASSIFICATION

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 1 3-15-78  
Rev. Issue Date

B. DETAILS During painting of frames for the 10 removable block walls in the G-A wall and the wall 11'-6" west of G-A, above elevation 862'-6" in the Auxiliary Bldg. paint overspray accumulated on the frame surfaces which will be in contact with the concrete. Nelson studs attached to the frames do not have a coating of paint. Reference paragraph 1.1.c.12

SOLUTION: Paint on the face of these frames in contact with concrete is not critical; therefore, the frames are acceptable as is.

2. SUPPORTING DOCUMENTATION

VOID

3. SIGNATURES RBW/ss 8-8-78

A. APPROVED BY: [Signature] 8-8-78  
G&H Representative DATE

B. APPROVED BY: [Signature] 8-8-78  
Responsible Engineer DATE

C. APPROVED BY: NA  
Vendor Duly Authorized Representative (Title) DATE

4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&R Field (Original) (1)  
B&R Site QA (1)

JOB NO. 35-1195

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

ARMS  
INDEXED

SPEC. FILE ARMS, CS  
(WILL NOT) BE INCORPORATED  
DESIGN DOCUMENTS.

AUTHORIZATION NO. 2293

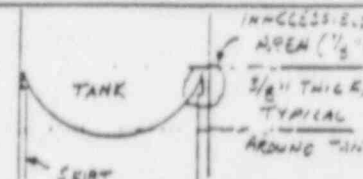
SAFETY RELATED DOCUMENT: X YES NC

1. DESCRIPTION OF CHANGE/EXPLANATION/CLARIFICATION

A. APPLICABLE SPEC/DWG/REQUIREMENT 2323-AS-31 1 3-15-78  
Rev. Issue Date

B. DETAILS During repair of the coating on the Waste Gas Decay Tanks, tag numbers TBX-GHATGD-001 through -010, an area between the bottom of the tank and the inside surface of the skirt was encountered where the primer could not be repaired. This area varies from 1/8" thick to 3/8" thick. Please advise of the necessary repair work.

SOLUTION: Per Section 1.1.b, paragraph 3, these inaccessible exposed steel surfaces are generally not protectively coated pending review by the field engineer. This equipment has been researched, and the area involved may be primed over the existing substrate condition. The prime coat is intended for sealing purposes only, and will not meet AS-31 protectively coatings requirements.



2. SUPPORTING DOCUMENTATION

3. SIGNATURES OBJ/ss 8-11-78

A. APPROVED BY: Bennett Jones  
G&H Representative

B. APPROVED BY: N/A  
Responsible Engineer

C. APPROVED BY: N/A  
Vendor Duly Authorized Representative  
(Title)

**VOID**

8/11/78  
DATE

DATE

DATE

4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&R Field (Original) (1)  
B&R Site QA (1)

JOB NO. 35-1195  
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AUG 14 1978  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

GLC, FILE, ARMS CS  
(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.

AUTHORIZATION NO. 2356

SAFETY RELATED DOCUMENT: ☒ YES ☐ NO

1. DESCRIPTION OF CHANGE/DEVIATION

A. APPLICABLE SPEC/DOCUMENT 2323-AS-31 1 3-15-78  
Rev. Issue Date

B. DETAILS Outside the Containment Buildings, request permission to apply specification 2323-AS-30 coatings to electrical cable tray hangers in areas designated as Note 5 rooms per drawings 2323-A1-0537 and -0538. As this will consist of approximately seven rooms, the total surface area of coatings affected is minor. This approval would assist the field construction effort by simplifying requirements for hanger coatings.

SOLUTION: The change proposed above is acceptable. Specification AS-31

will be revised as follows: "Section 1.1.c.5. - Structural Steel (excluding electrical cable tray hangers located outside the Containment Buildings)."

2. SUPPORTING DOCUMENTATION

JOB NO. 35-1195  
RECEIVE

AUG 23 1978

RECEIVE

3. SIGNATURES OBJ/ss 8-21-78

A. APPROVED BY: [Signature] 8-21-78  
G&H Representative DATE

B. APPROVED BY: [Signature] 8/21/78  
Responsible Engineer DATE

C. APPROVED BY: N/A  
Vendor Duly Authorized Representative (Title) DATE

4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&A Field (Original) (1)  
B&A Site QA (1)

**VOID**

CONROCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATION

GLC, FILE, ARMS CS  
(WILL) (WILL NOT) BE INCORPORATED  
DESIGN DOCUMENTS.

DATE  
AUTHORIZATION NO. 2393

SAFETY RELATED DOCUMENT: ☒ YES ☐ NO

1. DESCRIPTION OF CHANGE/DEVIATION/CLARIFICATION

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 1 3-15-78  
Rev. Issue Date

B. DETAILS Request permission to protectively coat the concrete floor in room 62E with white topcoat rather than the light gray topcoat as called for in Appendix "B". This would assist the construction schedule as the light gray concrete coating is not on-site. (Room 62E is in the Safeguard Building #1).

SOLUTION: The proposed deviation in color for the floor in room 62E is acceptable. This elevation 785'-6" floor will be covered at elevation 790'-6" by metal grating, and will not adversely affect the desired aesthetics of the finish schedule.

2. SUPPORTING DOCUMENTATION

3. SIGNATURES OBJ/ss 8-23-78

A. APPROVED BY: [Signature]  
G&H Representative

8-23-78  
DATE

B. APPROVED BY: [Signature]  
Responsible Engineer

8/23/78  
DATE

C. APPROVED BY: N/A  
Vendor Duly Authorized Representative  
(Title)

DATE

VOID

4. STANDARD DISTRIBUTION

TUGCO Site QA (1)  
G&H New York (1)  
G&H Dallas (1)  
B&R Field (Original) (1)  
B&R Site QA (1)

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FILE, ARMS, LEH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE/DESIGN DEVIATION AUTHORIZATIONARMS  
INDEXED~~XXXXXX~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS.AUTHORIZATION NO. 2951  
DATE 3-15-77SAFETY RELATED DOCUMENT X YES NO1. DESCRIPTION OF CHANGE/DEVIATION/ELABORATIONA. APPLICABLE SPEC/~~REFERENCE~~ 2323-AS-31 1 3-15-77  
Rev. Issue DateB. DETAILS The eleven lighting panels located in Reactor Building #1 shown on drawing 2323-E1-0942-02, were received on site and were galvanized. Per drawing 2323-E1-1800, Sheet 111, these panels were to receive special finish, which implies an AS-31 category coating. However, to reblast and repaint the panels would destroy these thin-walled carbon steel panels. Request approval to leave the galvanizing on the panel surface; apply a tie coat of carboline 1037 WP (wash primer) and apply the Phenoline 305 topcoat. The inside mounting surface and all exterior surfaces would be painted in this manner; the inside surface of the panel cans will be left galvanized.SOLUTION: The proposed method of coating the lighting panels is acceptable.2. SUPPORTING DOCUMENTATIONGTT-3064; TWX-10,473

JOB NO. 351195

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NOV 17 1978

3. SIGNATURES OBJ/ss 11-8-78A. APPROVED BY: [Signature]  
G&H RepresentativeB. APPROVED BY: [Signature]  
Responsible Engineer11/15/78  
Date11/13/78  
Date4. STANDARD DISTRIBUTIONTUGCO Site QA (1)  
G&H New York (1)  
B&R Field (Original) (1)  
B&R Site QA (1)

FILE, ARMS, LEH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONARMS  
INDEXED~~XXXX~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSDATE: \_\_\_\_\_  
AUTHORIZATION NO. 2988SAFETY RELATED DOCUMENT X YES \_\_\_\_\_ NO1. DESCRIPTION: DESIGN CHANGE YES X NOA. APPLICABLE SPEC/~~SWX/DOEMX~~ 2323-AS-31 1  
REV.

B. DETAILS The containment liner located between azimuth 80° and 105° in Containment #2, elevation 819'-6-3/4" thru 860'-0" has been rendered inaccessible to QA final inspection due to setting of a permanent steel form within 4" of the containment liner. The containment liner has received one prime coat of Carbozinc 11 with a 305 topcoat per AS-31. The permanent steel form was coated with two coats of Carbozinc 11.

SOLUTION: Documentation of the coating application, in accordance with the requirements of AS-31, behind the steel form has been verified by the QA department. Due to the permanent steel form being secured, the area behind the form, between the liner and form has been declared inaccessible. As permitted by Section 2. SUPPORTING DOCUMENTATION 1.1.b of AS-31, this will advise that the area described above has been reviewed, and is declared inaccessible. The final inspection on the carbon steel liner area and on the permanent steel form is not required.

3. SIGNATURES: GDM/ss 11-16-78A. APPROVED BY: [Signature]  
G&H Representative11-22-78  
DateB. APPROVED BY: [Signature]  
Responsible Engineer11-16-78  
Date4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
G&H-New York (1)  
TUGCO Site QA (1)  
B&R Site QA (1)

**VOID**

JOB NO. 35-1195

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONARMS  
INDEXED(WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 355

SAFETY RELATED DOCUMENT X YES NO1. DESCRIPTION: DESIGN CHANGE YES X NOA. APPLICABLE SPEC/~~WORK~~ DOCUMENT 2323-AS-31 1  
REV.B. DETAILS Request authorization to delete the protective coating  
located on the walls and overhead in the electrical chase located  
east of AS wall, elevation 807', between 1'-3" south of 7.7S to  
3-S.SOLUTION: Due to the possibility of contamination  
leaking into the electrical chase from 310' elevation, protective  
coatings shall be applied per AS-31 to the electrical chase floor  
and six inches up the walls. Coatings shall be applied to the walls  
and overhead area which come within one foot of the electrical  
chase hatches on 310'-0" elevation to assure that decontamination2. SUPPORTING DOCUMENTATION requirements can be satisfied.3. SIGNATURES: GDM:ss 12-14-78A. APPROVED BY: Bhugary 12/27/78  
G&H Representative DateB. APPROVED BY: Godwin MacIver 12-14-78  
Responsible Engineer Date4. STANDARD DISTRIBUTION:B&R Field (Original) (1)  
G&H-New York (1)  
TUGCO Site QA (1)  
B&R Site QA (1)

JOB NO. 35-1195

R E C E I V E D  
DEC 28 1978  
R E C E I V E D

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

~~WILL~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 3270-REV.2

SAFETY RELATED DOCUMENT X YES NO

1. DESCRIPTION:

A. APPLICABLE SPEC ~~XXXXX~~ 2323-AS-31 REV. 1

NOTE: THIS DOCUMENT SUPERSEDES AND VOIDS DCA-3270-REV.1.

B. DETAILS Request authorization to delete inspection of surface preparation on hand worked weld areas in Containment 1 and 2 elevation 950'-7" to 947'-7", Azimuth 0° - 360°. Inspection shall be deleted for the areas located behind the Polar Crane bus-bar along with the bus-bar bracket.

Areas located on the backside of the Polar Crane girder, against the Containment liner and Polar Crane girder joints and bracket pockets shall be void to QA inspection on Carbozinc 11 primer and 305 topcoat application. Lower weld areas located on the front and backside of bottom girder flange will also be deleted from primer and topcoat inspection.

SOLUTION: Due to the location of the Polar Crane girders, girder pockets, and bus-bar brackets, decontamination of these areas are not required, but the coatings shall conform to the minimum 200 psi requirements per AS-31. The proposed changes are therefore acceptable.

The design change (DCA-3270-REV.2) shall not alter the disposition of NCR C-677 issued on 7-1-77.

2. SUPPORTING DOCUMENTATION

3. SIGNATURES: GDM/ss 4-24-79

A. APPROVED BY: [Signature]

GSM Representative

Date

B. APPROVED BY: [Signature]

Responsible Engineer

4/24/79  
Date

**VOID**

4. STANDARD DISTRIBUTION:

B&R Field (Original)  
GSM New York  
GSM Dallas  
TUGCO Site QA  
B&R Site QA  
FSDG Site

JOB NO. 35-1195

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BROWN & ROOT, INC.  
ENGR. & ARCHT. DIVISION

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

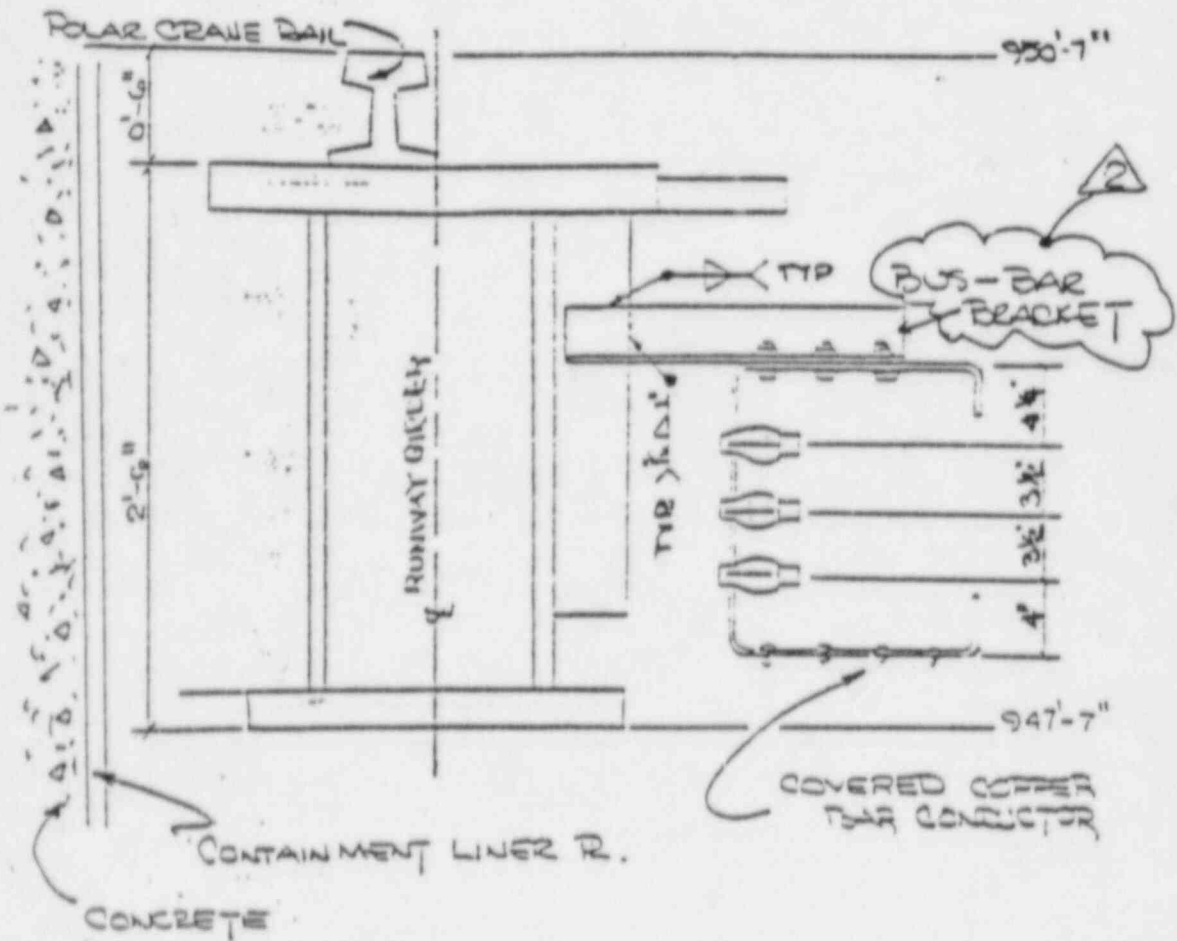
CLIENT \_\_\_\_\_ JOB NO. \_\_\_\_\_

SUBJECT \_\_\_\_\_

BASED ON \_\_\_\_\_ DRAWING NO. \_\_\_\_\_

COMPUTER \_\_\_\_\_ CHECK'D BY \_\_\_\_\_ DESIGNED BY \_\_\_\_\_ DATE \_\_\_\_\_ 19\_\_

DC/ODA-3270 SHT. 2 OF 4





BROWN & ROOT, INC.  
ENGINEERING DIVISION

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

CLIENT \_\_\_\_\_

SUBJECT \_\_\_\_\_

BASED ON \_\_\_\_\_

COMPUTER \_\_\_\_\_

CHK'D. BY \_\_\_\_\_

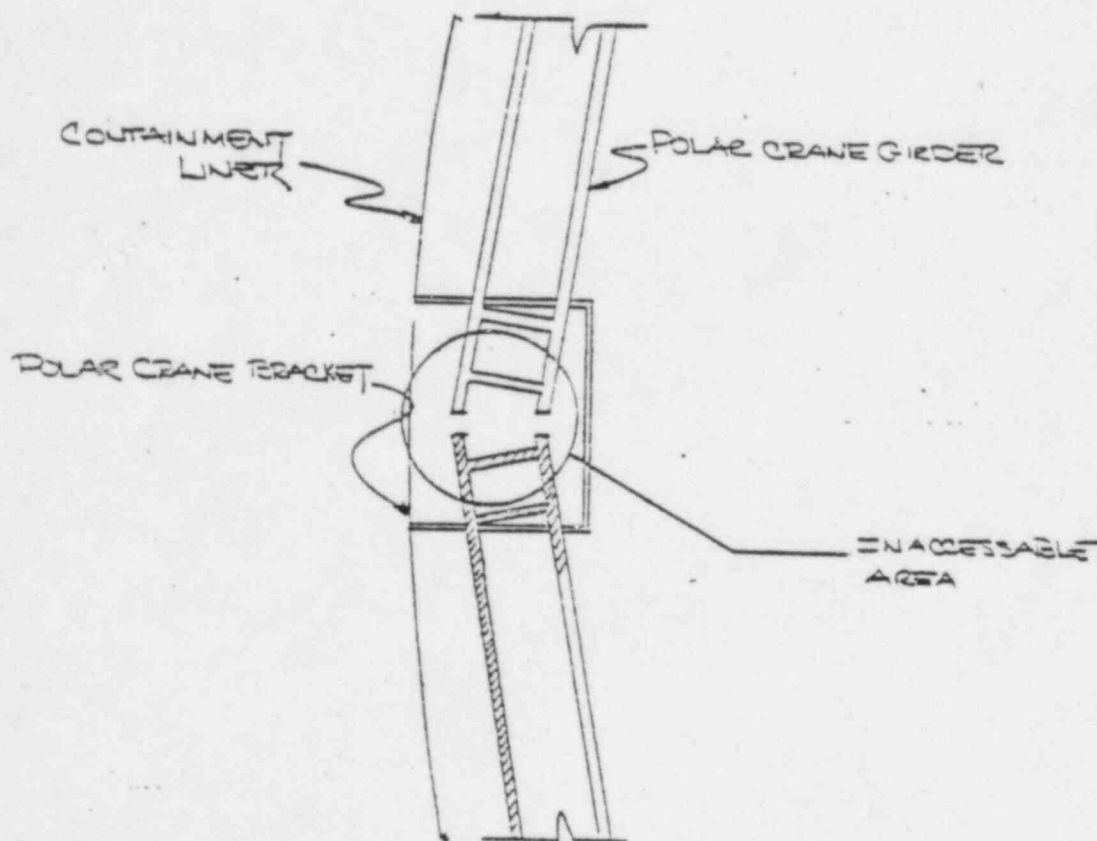
APP'D. BY \_\_\_\_\_

DATE \_\_\_\_\_

19\_\_\_\_

DC/DDA #3270 SH-3C-4

POLAR CRANE GIRDER & BRACKET





BROWN & ROOT, INC.  
ENGINEERING DIVISION

SHEET NO. \_\_\_\_\_ OF \_\_\_\_\_

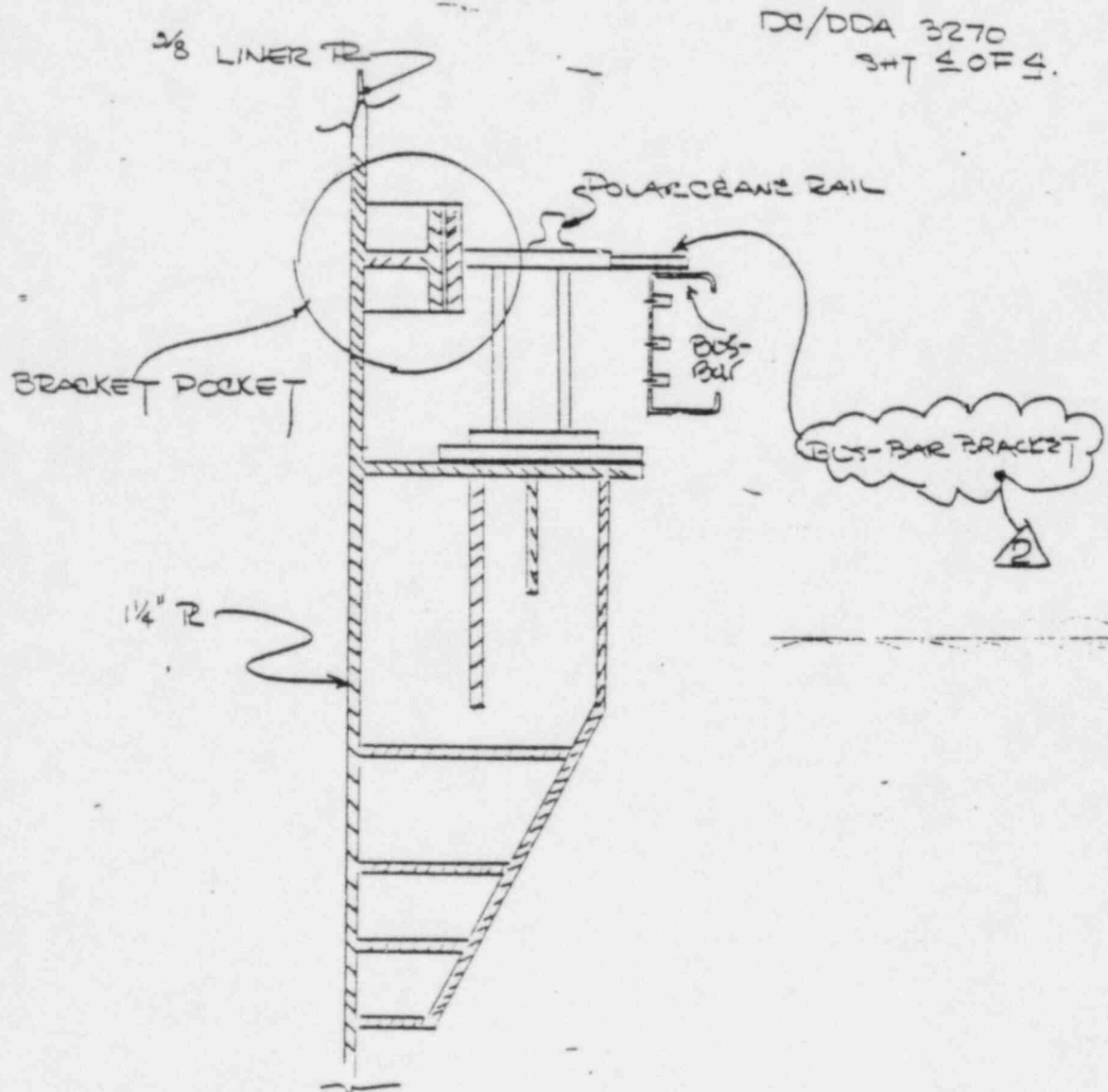
CLIENT \_\_\_\_\_ JOB NO. \_\_\_\_\_

SUBJECT \_\_\_\_\_

BASED ON \_\_\_\_\_ DRAWING NO. \_\_\_\_\_

COMPUTER \_\_\_\_\_ CHK'D BY \_\_\_\_\_ APP'D BY \_\_\_\_\_ DATE \_\_\_\_\_ 19\_\_\_\_

# POLAR CRANE GIRDER BRACKET



FILE, ARMS, LEH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONARMS  
INDEXED(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 3557

SAFETY RELATED DOCUMENT YES X NO

1. DESCRIPTION: DESIGN CHANGE YES X NO

A. APPLICABLE SPEC/DOCUMENT 2323-AS-31 1  
REV.

B. DETAILS Due to the availability of Southern Imperials 1201 white topcoat with respect to Carbolines white 305 topcoat, request authorization to change the topcoat requirements for the cable tray hangers and supports in Room 133 of the Control Building elevation 807'-0". This change will incorporate the use of Southern Imperials 1201 topcoat in place of the 305 topcoat over the existing Carbozinc 11 primer.

SOLUTION: Southern Imperials 1201 topcoat is recommended over steel primed with inorganic zinc primer. The proposed change is therefore acceptable as long as minimum adhesion is obtained per AS-31.

2. SUPPORTING DOCUMENTATION

VOID

3. SIGNATURES: GDM/ss 2-6-79

A. APPROVED BY: [Signature] 2-6-79  
GDM Representative DateB. APPROVED BY: [Signature] 2-6-79  
Responsible Engineer Date

4. STANDARD DISTRIBUTION:

BGR Field (Original) (1)  
GSH-New York (1)  
GSH-Dallas (1)  
TUGCO Site QA (1)  
BGR Site QA (1)  
FSDG/Site (1)

JOB NO. 35-1195  
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FEB 07 1979  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 4640, Rev. 1

SAFETY RELATED DOCUMENT ☒ YES ☐ NO1. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

\*THIS DOCUMENT VOIDS AND SUPERCEDES DCA #4640, REV. 0.

B. DETAILS In Containment #1 & #2, request authorization to declare the  
1/4" carbon steel cavity liner and orifice plate assemblies, elevation 824'-0" -  
833'-0", inaccessible.SOLUTION: Due to the carbon steel cavity liner being placed within 4" of  
the reactor core insulation, the coating requirements for the liner prior  
to the initial setting shall be per AS-31 standards and void to QA inspection  
after placement due to inaccessibility.The orifice plates, stiffeners, and associated supports from elevation 824'-0-1/2" -  
829'-9-1/2" shall be coated per AS-31 and will not be subject to final QA  
(cont. on page 2)2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM:pew 7-2-79

A. APPROVED BY:

G&amp;H Representative

Date

B. APPROVED BY:

Responsible Engineer

Date

4. STANDARD DISTRIBUTION:B&R Field (Original) (1)  
G&H New York (1)  
G&H Dallas (1)  
TUGCO Site QA (1)  
B&R Site QA (1)  
FSDG Site (1)

JOB NO. 35-1195

RECEIVED  
JUL 03 1979  
RECEIVED

inspection on coating requirements.

All damaged areas on the cavity liner and orifice plate assemblies which are rendered accessible to brush touch-up shall be recoated and exempt from AS-31 criteria.

FILE, ARMS, TU/CO, LEH

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION~~XXXX~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 4753-REV.1SAFETY RELATED DOCUMENT X YES      NO1. DESCRIPTION:A. APPLICABLE ~~DESIGN DOCUMENT~~ 2323-AI-0409 REV. 8

NOTE: THIS DOCUMENT SUPERSEDES AND VOIDS DCA-4753.

B. DETAILS Areas exist in Rooms #22, 26, 27, 28, and 30 which  
are either inaccessible or which would be impossible to decon-  
taminate at a later date, but require protective coating per  
AS-31. Request that authorization be given to delete the final  
QA inspection on the items listed below:

ROOM #22: Personnel Decontamination1) floor, wall, and ceiling expansion joints.2) door and frame assembly T-25.3) concrete block expansion joints

(CONTINUED ON PAGE 2)

2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM/ss 6-13-79A. APPROVED BY: *R. E. Lewis*

G&amp;H Representative

6-15-79  
DateB. APPROVED BY: *Robert MacPail*

Responsible Engineer

6-13-79  
Date4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
 G&H New York (1)  
 G&H Dallas (1)  
 TUGCO Site QA (1)  
 B&R Site QA (1)  
 PSDG Site (1)

JOB NO. 35-1195  
 RECEIVE  
 JUN 16 1979  
 RECEIVE

ROOM #26: Janitors Closet

- 1) door and frame assembly T-35.
- 2) concrete block expansion joints.

ROOM #27: Laundry Room

- 1) floor, wall and ceiling expansion joints.
- 2) door and frame assembly T-36.
- 3) pass thru window from laundry into the personnel decontamination room.
- 4) wood shelving and storage bins.
- 5) concrete block expansion joints.

ROOM #29: Cold Lab

- 1) door and frame assembly T-38.

ROOM #30: Hot Laboratory

- 1) door and frame assembly T-39.

- 2) pipe chase.

SOLUTION: The above solution is acceptable.



COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 4843

SAFETY RELATED DOCUMENT ☒ YES ☐ NO

## 1. DESCRIPTION:

A. APPLICABLE SPEC/~~DOC/DOCUMENT~~ 2323-AS-31 REV. 1B. DETAILS Inside surfaces of the carbon steel anchor bolt brackets  
on the Boric Acid Storage Tanks, as shown on the attached view, are in-  
accessible for protective coating application per AS-31 tolerances.SOLUTION: Per Section 1.1b of AS-31, these areas shall be  
considered inaccessible; however, in order to prevent corrosion, an attempt  
will be made to apply the prime and finish coats per AS-31 requirements.  
No QC inspection will be required after application.**VOID**

## 2. SUPPORTING DOCUMENTATION

## 3. SIGNATURES: GDM/ss 6-5-79

A. APPROVED BY:

GDM Representative

6-6-79  
Date

B. APPROVED BY:

Responsible Engineer

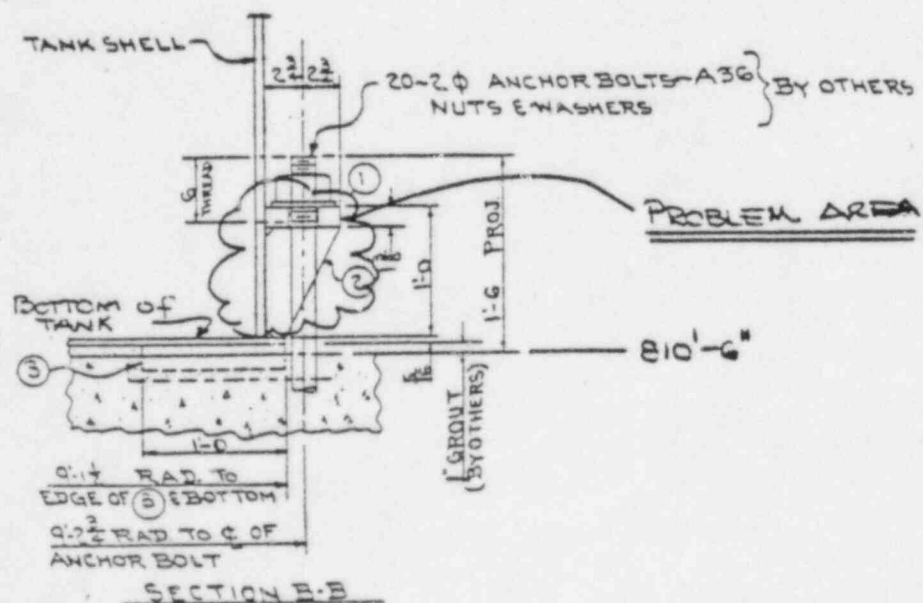
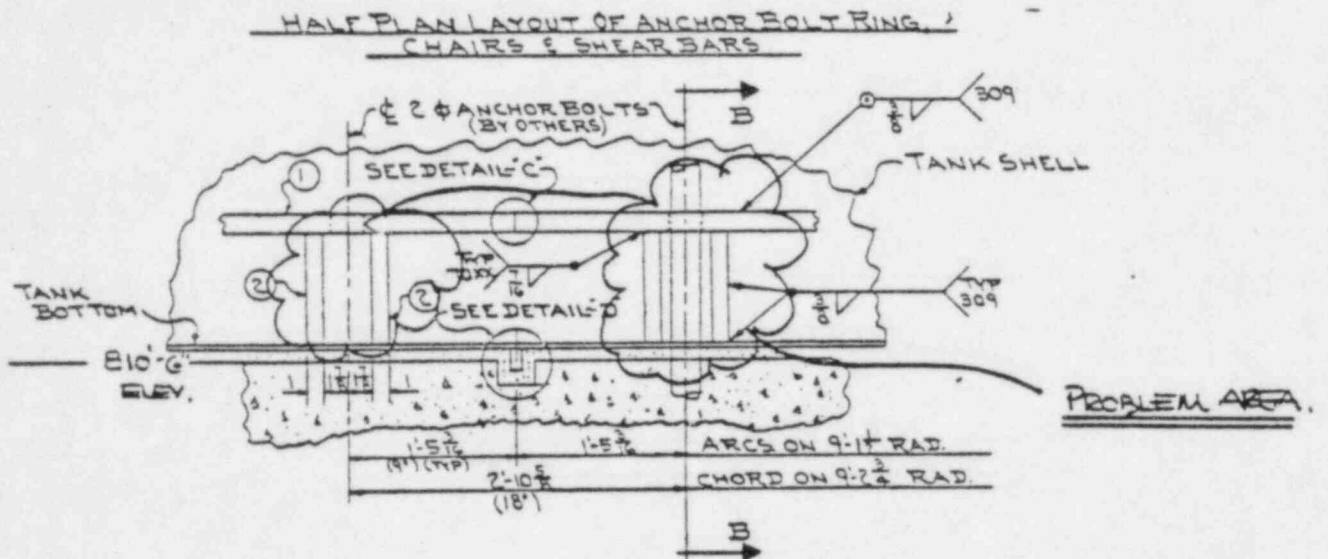
6-5-79

JOB NO. 354195

## 4. STANDARD DISTRIBUTION:

BSR Field (Original) (1)  
GSH New York (1)  
GSH Dallas (1)  
TUGCO Site QA (1)  
BSR Site QA (1)**RECEIVE**  
JUN 06 1979  
**RECEIVE**

# BORIC ACID STORAGE TANK ANCHOR BOLT RING 810'-0" AUXILIARY BLDG.



SPEC, HAK, TUGED

FIGURE 1.

Page 1 of 1

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 4926, REV. 1

1. SAFETY RELATED DOCUMENT: X YES        NO
2. ORIGINATOR: CPPE X ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DRAWING 2323-AS-31 REV. 1

B. DETAILS THIS REVISIONS VOIDS AND SUPERSEDES DCA-4926, REV. 0.

Repainting of the six (6) Pre-Access Air Filtration units exterior surfaces, for Reactor Building #1 and #2 is required due to an unacceptable vendor coating. During sandblasting the areas listed below cannot be blasted within AS-31 requirements.

(1) Weld imperfections which cause recessed areas and deep pits.

(2) Areas located behind and under the exterior support angle.

(3) Areas at steel joint and intersections where small amounts of vendor coating remains. Request that the above areas be deleted from AS-31 Inspection requirements.

SOLUTION: Due to the small amount of area involved the above areas shall be coated without QC Inspection, all remaining exterior surface shall remain under AS-31 Inspection and coating requirements.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/psw

A. ORIGINATOR: Mark Wells DATE 6/11/81

B. DESIGN REPRESENTATIVE: R. M. Kissinger DATE 6-11-81

6. VENDOR TRANSMITTAL REQUIRED: YES        NO X

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

JOB NO. 35-1195 DCA FORM 11-80  
**RECEIVE**  
JUN 10 1981  
**RECEIVE**

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

~~XXXXX~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 4966

SAFETY RELATED DOCUMENT X YES    NO

## 1. DESCRIPTION:

A. APPLICABLE SPEC ~~XXXXX~~ 2323-AS-31 REV. 1

B. DETAILS Request that the reactor vessel column supports and areas directly behind the column on the carbon steel liner, Reactor Building #2, elevation 819' - 825', be deleted from the QA final inspection on protective coating requirements per AS-31. (See attached sheet for details)

SOLUTION: During placement of the reactor vessel column supports, extensive damage was done to the primer and finish coat. Many areas which are damaged will be permanently covered by the column supports or be rendered inaccessible. Future decontamination of this area will be unlikely and thus a visual inspection on the topcoat will be adequate by the QA dept.

prior to setting of the vessel supports. After the vessel supports are in place, all areas rendered accessible by brush, will be touched up with 305 topcoat in order to prevent future corrosion.

## 3. SIGNATURES: GDM/ss 6-19-79

A. APPROVED BY:

GGH Representative

B. APPROVED BY:

Responsible Engineer

**VOID**6-19-79  
Date6-19-79  
Date

## 4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
GGH New York (1)  
GGH Dallas (1)  
TUGCO Site QA (1)  
B&R Site QA (1)  
FSDG Site (1)

JOB NO. 35-1195

**R** E C E I V E **D**  
JUN 21 1979  
R E C E I V E

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (XXXXXX) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 7973 Rev. 1 ΔThis revision voids and supersedes  
DCA 7973 Rev. 0.SAFETY RELATED DOCUMENT X YES NOORIGINATOR: CPPE X ORIGINAL DESIGNER       

## 1. DESCRIPTION:

A. APPLICABLE Specification Δ 2323-AS-31 REV. 1 Δ

Δ B. DETAILS PROBLEM: The 8 fans: CP1-VAFNBL-01, 02, 03 and 04 and CP2-VAFNBL-  
01, 02, 03 and 04 are not primed in accordance with AS-31. The zinc that has been ap-  
 plied appears to have been applied over an existing paint. (probably a standard shop  
 paint). The zinc is mud-cracking and flaking off. Request permission to coat as fol-  
 lows: 1st remove the loose, flaking and mud cracking zinc. 2nd solvent wipe according  
 to SSPC-SP-1. 3rd apply Mobil Chromox 13-R-50 as a tie primer to permit top coating  
 as       . SOLUTION: The recommended solution is acceptable. Due to the inaccessibi-  
 li- areas of these blower housings and motor supports, all work done will be on a  
 "best effort" basis and QC final inspection will not be required.

## 2. SUPPORTING DOCUMENTATION

## 3. SIGNATURES:

JDS/dt

7/30/80

Civil Engineering

A. APPROVED BY:

Design Representative

B. APPROVED BY:

Originator

## 4. STANDARD DISTRIBUTION:

ARMS (Original)

(1)

Quality Engineering

(1)

Technical Services for Original Designer (if CPPE originated)

JOB NO. 35-1195

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AUG 04 1980

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX: OEI \_\_\_\_\_

: II \_\_\_\_\_

: III XX(WILL) (~~WILL~~) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 8115 Rev. 21. SAFETY RELATED DOCUMENT: XX YES \_\_\_\_\_ NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_

3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-8115 Rev. 1.

PROBLEM: There exists several areas in Reactor Building #1 and #2 that are inaccessible for coating and inspection per AS-31 requirements. These areas include concrete faces and liner plate and are as follows:

- 1) The concrete faces of the elevator housing and adjacent liner plate.
- 2) The face of columns 15, 16, 2, 1, and 3 adjacent to the liner plate and the liner plate @ EL. 851' and above.

SOLUTION: Prepare and coat these areas on a "best effort" basis with materials specified in AS-31. Final QC inspection shall not be required.

4. SUPPORTING DOCUMENTATION:

35-1195  
RECEIVED

SEP 08 1983

5. APPROVAL SIGNATURES: TK/sgr

A. ORIGINATOR: MW/Thompson

9-7-83

DATE 9/5/83B. DESIGN REPRESENTATIVE: CR HootonDATE 9/8/83

6. VENDOR TRANSMITTAL REQUIRED: YES \_\_\_\_\_ NO \_\_\_\_\_ XX \_\_\_\_\_

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-QA Spec. Spvr. (1) DCA FORM 11-80  
(1) Civil Engineering (1) Admin. Rev 7-82  
(1)  
(1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WIXXXN5TX BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 8150

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 1. DESCRIPTION:

A. APPLICABLE SPEC/~~UNO/DOCKXETXX~~ 2323-AS-31 REV. 1

B. DETAILS In room #249 @ E1. 820' east wall and Rm #261 E1. 824' west and south wall, there are areas that can not be coated to AS-31 requirements because conduit and other electrical equipment renders portions of these walls inaccessible for coating and inspection.

SOLUTION: The areas in question will be cleaned and coated using AS-31 materials. This work will be done on a "best effort" basis and final QC inspection shall not be required.

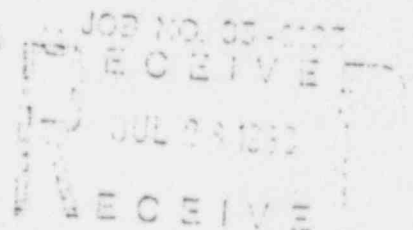
## 2. SUPPORTING DOCUMENTATION

3. SIGNATURES: JDS/dt 7/25/80

A. APPROVED BY: [Signature]  
Design Representative25 July 80  
DateB. APPROVED BY: [Signature]  
Originator25 July 80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Technical Services for Original Designer, (if CPPE originated)



COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 8189

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 1. DESCRIPTION:

A. APPLICABLE SPEC/REQUIREMENT 2323-AS-31 REV. 1

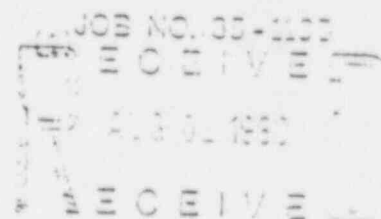
B. DETAILS On elevation 810' in Safeguards 1 there are two equipment stands for T&X-GHREE1-01 that have been installed prior to coating the floor. Also, there are inaccessible areas on the stands themselves. SOLUTION: Coat the areas that are inaccessible on a "best effort" basis using AS-31 specified coatings. No final QC inspection shall be required.

## 2. SUPPORTING DOCUMENTATION

3. SIGNATURES: JDC/dt 7/31/80  
Civil EngineeringA. APPROVED BY: Jimmy A. Allen Date 7/31/80  
Design RepresentativeB. APPROVED BY: [Signature] Date 31 July 80  
Originator

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Technical Services for Original Designer (if CPPE originated)



HAH, TUGCO, SPEC

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 8232SAFETY RELATED DOCUMENT XX YES NOORIGINATOR: CPPE XX ORIGINAL DESIGNER       1. DESCRIPTION:A. APPLICABLE SPEC/~~ENVIRONMENT~~ 2323-AS-31 REV. 1

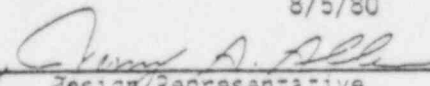
B. DETAILS In Reactor Building #1 some Carboline Phenoline 305 color #C800 was inadvertently applied to the liner. Phenoline 305 color #Q800 should have been applied. The shade difference is minor. The affected areas are as follows:

(1) E1 + 955' Az 30°-35°; Az 45°-50°; Az 60°-65° and Az 85°-90° (2) E1. +995' +- 1005' Az 235°-245°.

SOLUTION: The material applied is acceptable.2. SUPPORTING DOCUMENTATION3. SIGNATURES: JDS/dt

8/5/80

A. APPROVED BY:

  
 Design Representative

8/5/80  
 /Date

B. APPROVED BY:

  
 Originator

8/5/80  
 /Date
4. STANDARD DISTRIBUTION:

ARMS (Original)

(1)

Quality Engineering

(1)

Technical Services for Original Designer (if CPPE originated)

JOB NO. 35-1195

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

~~CHANGES~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 8484

SAFETY RELATED DOCUMENT XX YES NOORIGINATOR: CP'E XX ORIGINAL DESIGNER

## 1. DESCRIPTION:

A. APPLICABLE SPEC/REQUIREMENT 2323-AS-31 REV. 1

B. DETAILS The Analyzer and Sample Conditioning Panel, CP1-SSPAS-01 located in room 115 of the Auxiliary Building has been set prior to protectively coating the floor. Sufficient clearance does not exist to permit application of protective coating per AS-31 guidelines. Solution: The area beneath the equipment shall be coated with 1201 only. This application will not be inspected on a "Q" basis.

## 2. SUPPORTING DOCUMENTATION

## 3. SIGNATURES: DGS/dt

9/23/80

A. APPROVED BY:

Richard M. Kissinger  
Design Representative9-23-80  
Date

B. APPROVED BY:

D. A. Sutter  
Originator9/23/80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original)

(1)

Quality Engineering

(1)

Technical Services for Original Designer (if CPPE originated)

(1)

JOB NO. 33-1195

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SEP 25 1980

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 8616

SAFETY RELATED DOCUMENT XX YES NOORIGINATOR: CPPE XX ORIGINAL DESIGNER

## 1. DESCRIPTION:

A. APPLICABLE ~~3REX~~DWG/~~3REX~~MENT 2323-AS-31 REV. 1

B. DETAILS Due to surface preparation methods employed under AS-31 requirements, extensive damage may result to internal components of the main electrical terminal box on crane #TBC-SHS-CMC-01.

SOLUTION: Surface preparation shall be under AS-30 requirements, however AS-31 coatings will be used. Q.C. inspection will not be necessary.

## 2. SUPPORTING DOCUMENTATION

## 3. SIGNATURES: MW/dt

9/26/80

A. APPROVED BY:

Richard M. Kissner  
Design Representative9-29-80  
Date

B. APPROVED BY:

Mark Wells  
Originator9/29/80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original)

Quality Engineering

Technical Services for Original Designer (if CPPE originates)

(1)  
(1)

JOB NO. 35-1195

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OCT 01 1980  
RECEIVED

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 8640

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 1. DESCRIPTION:

A. APPLICABLE SPEC/DRAWING/REVISION 2323-AS-31 REV. 1

B. DETAILS In RB1, below the pressurizer tank at AZ 45<sup>0</sup> El. 854', there are twelve open eyebolts welded to the reinforcement sleeve. Due to the close proximity of the Pressurizer Immersion Heater Terminals and the size of the eyebolts, request coating under AS-31 requirements be removed. SOLUTION: The twelve eyebolts shall be deleted from AS-31 requirements and placed under AS-30 requirements, however AS-31 coatings shall be used.

## 2. SUPPORTING DOCUMENTATION

## 3. SIGNATURES: MW/dt

9/30/80

A. APPROVED BY:

Richard M. Kissinger  
Design Representative9-30-80  
Date

B. APPROVED BY:

Mark Wells  
Originator9/30/80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original)

(1)

Quality Engineering

(1)

Technical Services for Original Designer (if CPPE originates)

JOB NO. 35-1195

RECEIVED  
OCT 01 1980  
RECEIVED

SPEC, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONXXXXXX (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 8685

SAFETY RELATED DOCUMENT XX YES NO

ORIGINATOR: CPPE XX ORIGINAL DESIGNER

## 1. DESCRIPTION:

A. APPLICABLE SPEC/DESIGN/REVISION 2323-AS-31 REV. 1

B. DETAILS On E1. 808' RBI there are two sections of HVAC duct. #CPES-1-7 and SBD-16-CRCS-1-12, that are embedded in concrete. Some areas above, beside, and behind the duct have less than 6" working clearance. Request that these areas be deleted from the scope of AS-31. SOLUTION: The areas shall be coated under AS-30 guidelines using coatings specified in AS-31 for that area. QC Inspection will not be necessary.

## 2. SUPPORTING DOCUMENTATION

## 3. SIGNATURES: MW/dt

10/8/80

A. APPROVED BY:

Design Representative

10-8-80  
Date

B. APPROVED BY:

Originator

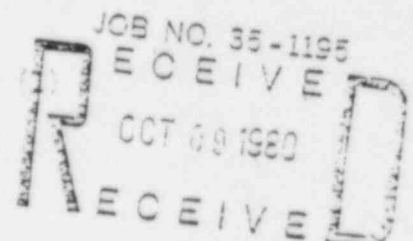
10-12-80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)

Quality Engineering (1)

Technical Services for Original Designer (if CPPE originated)



COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9045

1. SAFETY RELATED DOCUMENT: XX YES NO

2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER

## 3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS In RBI at el. 828' - 832', there are two areas that have limited

work clearance between HVAC duct and concrete, preventing surface preparation and coating of the concrete under AS31 guidelines. Areas are on the column side and behind duct #RMD1, joints 15 and 16 at 186°; behind duct #SMD2, joints 15, 16, and 17 at 180°. Solution: the two areas shall be deleted from coating and inspections under AS-31 criteria. However, the areas shall be cleaned and coated using AS-31 coatings under AS30 guidelines.

## 4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/bgf 11-11-80

A. ORIGINATOR: *Mark Wells* DATE 11/11/80B. DESIGN REPRESENTATIVE: *R.M. Kissinger* DATE 11/12/80

6. VENDOR ACTION: REQUIRED N/A

## 7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

JOB NO. 03-112-DCA FORM 10-80

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9430

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/~~TECHNICAL SPECIFICATION~~ 2323-AS-31 REV. 1

B. DETAILS On E1. 810'-6", 831'-6", and E1. 852'-6" of Auxiliary Building,

there are ventilation openings that cannot be coated to AS-31 requirements per paragraph

1.1B. Request that openings at the following locations be deleted from AS-31 requirements

1) E1. 810'-6" 2' W. of FA X 2' S of 6A

2) E1. 810'-6" 2' W of FA X 9' S of 6A

3) E1. 831'-6" 2' W of FA X 2' S of 6A

4) E1. 831'-6" 2' W of FA X 9' S of 6A

5) E1. 852'-6" 4' W of FA X 10' S of 6A

6) E1. 852'-6" 4' W of FA X 5' S of 5A.

SOLUTION: Due to the close proximity of the HVAC duct through these openings,  
the openings shall be coated on a best effort basis under AS-30 guidelines.

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/bgf 1-8-81

A. ORIGINATOR: Mark Wells DATE 1-8-81

B. DESIGN REPRESENTATIVE: RM Keeney DATE 1-8-81

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

DCA FORM 11-80

JOB NO. 03-1100  
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JAN 03 1981  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9642 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPECIFICATION/DOCUMENT 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA 9642 REV. 0.

In RBI, problems exist with coating the support frames for lighting fixtures which are attached to the polar crane support brackets. These brackets have a "Q" shop coat of primer which was applied before installation. However, HVAC duct work was installed in close proximity to the above support frames rendering all but the top portion of many inaccessible for finish coat per AS-31 requirements. Request that all but the top two feet of the following hangers be coated under AS-30 guidelines:

Hanger E7886, E7887, E7888, E789, E7890, E7891, E7892

SOLUTION: On the above listed hangers, only the top two feet shall be subject to AS-31 guidelines. The remainder of the hanger shall be coated under AS-30 guidelines utilizing AS-31 specified coatings.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES:
- W:jb

February 24, 1981

A. ORIGINATOR: [Signature] DATE 2-24-81B. DESIGN REPRESENTATIVE: [Signature] DATE 2-25-81

6. VENDOR TRANSMITTAL REQUIRED: YES
- 
- NO
- XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)

JOB NO. 35-00435-80

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 MAR 02 1981  
 RECEIVED

SPEC, SPEC, HAK, TUGCO

FIGURE 1.

Page 1 of 1

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 9885

1. SAFETY RELATED DOCUMENT: XX YES        NO

2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER       

3. DESCRIPTION:

A. APPLICABLE SPEC/~~XXXXXX~~ 2323-MS-44B 2323-AS-31 REV. 3  
1

B. DETAILS The leak chase system in Reactor Bldg. #1 & #2 have 1/4" Ø and 1/2" Ø  
schedule 80 piping stubups approximately 4" to 8" above the el. 808'-0" floor slab.  
Due to the small diameter of the piping, reducers, nipples, ells, plugs & couplings  
used in the assembly of the test plug apparatus, the system cannot be inspected per  
the requirements of specification AS-31 or ANSI N5.12 and N101.2. Therefore, this  
system will be painted per specification 2323-AS-30 requirements, but will be coated  
with AS-31 material. The leak chase system is shown on dwg. 2323-M1-0512-01 and  
-M2-0512-01 (Sections E-E & F-F); -M1-0512-02 & -M2-0512-02 (Section D-D);  
-M1-0512-02 & -M2-0512-02 (Sect. B-B); 2323-S1-0512 & -S2-0512 (Sect. 6-6).

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: OBJ/bgf 3-27-81

A. ORIGINATOR: O.B. Jones DATE 3/27/81

B. DESIGN REPRESENTATIVE: DM Kissinger DATE 3-27-81

6. VENDOR TRANSMITTAL REQUIRED: YES        NO X

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

JOB NO. 39-1105 DCA: 52RM 11-80

**R** **RECEIVED** **D**  
MAR 27 1981  
**R** **RECEIVED** **D**

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 10,364

1. SAFETY RELATED DOCUMENT: XX YES        NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER       

3. DESCRIPTION:

A. APPLICABLE SPEC/~~XXXXXXXXXX~~ 2323-AS-31 REV. 1

B. DETAILS Areas located on the lower portion of the Emergency Air Lock in  
Containment I and II are inaccessible for coating in accordance with the above  
specification. Request that the areas under question be removed from AS-31  
requirements. Sol: The shaded areas shown in Section A. and B. of Page 2 of this  
Document shall be coated under AS-30 guidelines, however, AS-31 coatings shall be used

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/psw

6/4/81

A. ORIGINATOR: Mark Wells

DATE

6-4-81B. DESIGN REPRESENTATIVE: PM Keston

DATE

6-4-816. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

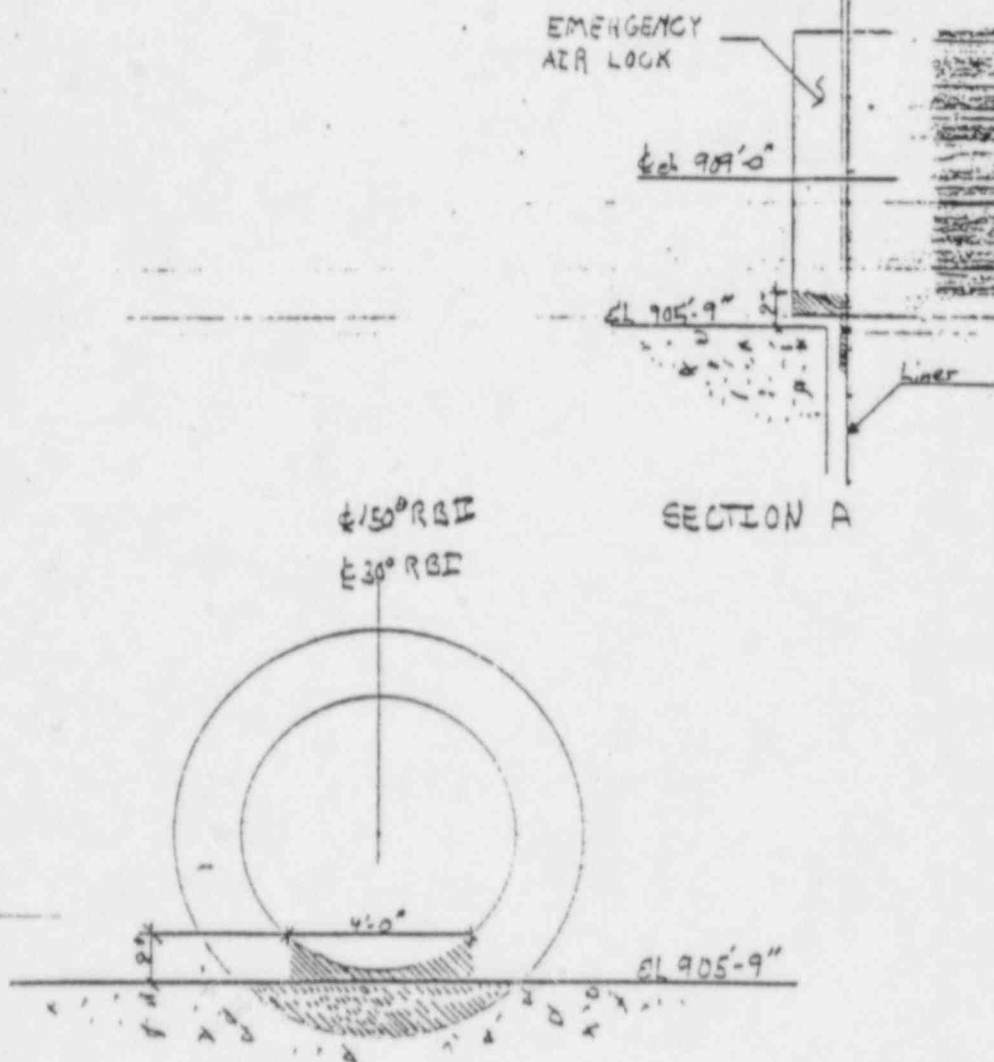
7. STANDARD DISTRIBUTION:

DCA FORM 11-80


ARMS (Original) (1)  
Quality Engineering (1)  
TC for Orig. Design. (1)

JOB NO. 35-1195

**R** **RECEIVED** **D**  
JUN 05 1981  
**RECEIVED**



EMERGENCY AIR LOCK  
SECTION 3

<b>Brown &amp; Root, Inc.</b>		HOUSTON, TEXAS		CONT. NO. 35-1195
TITLE _____ OWNER _____ TEXAS UTILITIES SERVICES LOCATION OF PROJECT _____ GLEN F. TEXAS				DWG. NO. DCA-10,364 PAGE 2 of 2
DRAWN BY	CHECKED	APPROVED	DATE	SHT. /

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(XXXXXX)~~ BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 10,782 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

- A. APPLICABLE SPEC/DWG/DOC/TEXT 2323-AS-31 REV. 1
- B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-10,782 Rev. 0.

In RBI #2 the Containment Sump Pump Housings were not vendor coated with a coating which meets ANSI 101-2 criteria. Due to the limited area of coating and the impracticability of disassembly, request the pumps be coated under AS30 requirements.

Solution: The exposed carbon steel surfaces of the subject pumps shall be coated under AS30 requirements; however, a minimum of 1 mil profile shall be obtained and coatings used shall be AS31 specified coatings. This document affects the following Pumps (1) CPI-WPAPCS-01 (2) CPI-WPAPCS-02 (3) CPI-WPAPCS-03 (4) CPI-WPAPCS-04 (5) CPI-WPAPRS-01 (6) CPI-WPAPRS-02 (7) CP2-WPAPCS-1 (8) CP2-WPAPCS-2 (9) CP2-WPAPCS-3 (10) CP2-WPAPCS-4 (11) CP2-WPAPRS-02 (12) CP2-WPAPRS-01

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgf

5-12-82

- A. ORIGINATOR: *Mark C. Wells*

DATE 5-12-82

- B. DESIGN REPRESENTATIVE: *R. M. T. S. S. S. S.*

DATE 5-13-82

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

DCA FORM 11-80

ARMS (Original)  
Quality Engineering  
TS for Orig. Design.  
Westinghouse-Site

(1)  
(1)  
(1)  
(1)

JOB NO. 35-1195

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MAY 13 1982  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 10,786

**VOID**

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/EQUIPMENT 2320-AS-31 REV. 1

B. DETAILS In Reactor I there are three pipe hangers which are located partially behind HVAC Ductwork rendering them partially inaccessible per section 1.1b of the above specification. The hangers are as follows: VA-1-005-027-C82R, VA-1-005-025-C82R, VA-1-005-024-C82R, and at elevation 912, 922 and 931 respectively. Request the inaccessible areas be coated on a best effort basis under AS-30.

Sol: The inaccessible areas, shown as shaded areas on attached drawing, shall be removed from AS-31 coating and Inspection requirements and coated on a best effort basis. All remaining portions shall be coated under full AS-31 requirements.

4. SUPPORTING DOCUMENTATION: MW:kss 8-12-81

## 5. APPROVAL SIGNATURES:

A. ORIGINATOR: *Mark C. Hall* DATE 8/12/81B. DESIGN REPRESENTATIVE: *PM Kissinger* DATE 8/18/81

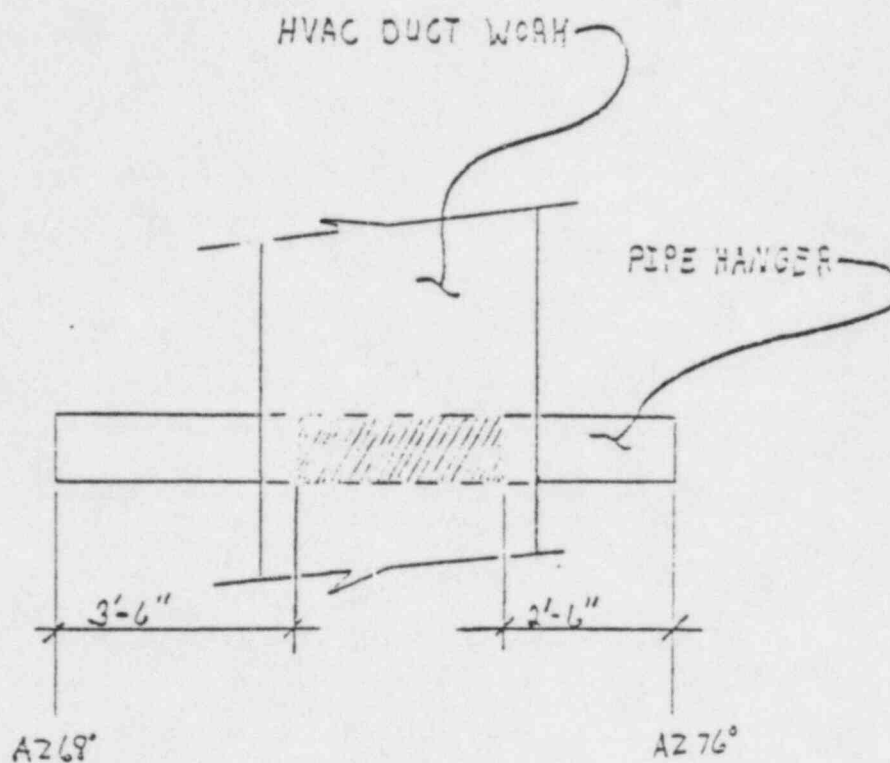
6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

## 7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

DCA FORM 11-80

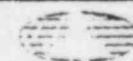
JOB NO. 35-1195  
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AUG 19 1991  
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HANGER \* VA-1-005-027-C82R EL 912'  
HANGER \* VA-1-005-028-C82R EL 922'  
HANGER \* VA-1-005-024-C82R EL 921'

Brown &amp; Root Inc.

HOUSTON, TEXAS



CONT. NO  
33-1125

TITLE		
OWNER	TEXAS UTILITIES SERVICES INC.	
LOCATION OF PROJECT	C. R. J. E. S.	GREEN ROSE, TEXAS

0-6-70

DRAWN BY

CHECKED

APPROVED

DATE

1. 5-7

SPEC, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION~~XXXXXX~~ (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTSDCA NO. 11,016

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/~~XX~~~~XX~~~~XX~~ 2323-AS-31 REV. 1

B. DETAILS In Containment Building 1, Room 153, the sump pit which contains the reactor cavity sump pumps was inadvertently topcoated without inspection as required by Appendix C Section 6.7C of the above referenced specification. The Nutek 11S, to which the Reactic 1201 topcoat was applied, was inspected and applied on 8/10/81. On 8/11/81, approximately 32 hours following application of the 11S, the sump pit was coated utilizing a portion of the 1201 topcoat which was mixed for the containment sump drains on el. 810'. Material used was Batch #2879-E042 for Base; Batch #2880-E042 for Cure; and Batch #2450-H212 for thinner. Inspection of each previously applied coating, prior to topcoating, is for detection of contaminants and deleterious substrates which could affect the adhesion and performance of the topcoat. Adhesion testing was requested by site engineering and performed by site P.C.Q.C. personnel. The test yielded no coating failure with glue

4. SUPPORTING DOCUMENTATION:**VOID**5. APPROVAL SIGNATURES: MW/psw

9-15-81

A. ORIGINATOR: Mark WellsDATE 9-15-81B. DESIGN REPRESENTATIVE: RM KingDATE 9-15-816. VENDOR TRANSMITTAL REQUIRED: YES        NO XX7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)

JOB NO. 00-1103

DCA FORM 11-80

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9-15-81

failing at 200 to 700 PSI with an average of 500 PSI. Request the requirement for substrate inspection, by P.C.Q.C., prior to topcoating be waived for the Reactor 1 sump pit located in Room 153.

Solution: Due to the results of the adhesion testing, and the acceptable general appearance of the coating, the substrate inspection prior to topcoating shall be waived; however all other inspections and documentation requirements shall remain for the subject sump.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WILL) (~~WILL NOT~~) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 11,231 Rev. 2

1. SAFETY RELATED DOCUMENT: XX YES      NO CHANGE INDEX: OEI

2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER      : II

3. DESCRIPTION:      : III XX

A. APPLICABLE SPEC/ ~~DWG/DOCUMENT~~ 2323-AS-30 0  
2323-AS-31 REV. 1

B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-11,231 Rev. 1.

In level II coating areas, because of variance in coating requirements, some steel items are to receive coatings per AS-31 full height and some only a few feet or inches. To unify coating requirements of steel items in level II areas, request the subject steel be coated under AS-30 rather than AS-31 requirements.

SOLUTION: To unify coating requirements on steel outside Containment structure, all steel in level II coating areas shall be coated under AS-30 requirements however AS-31 specified coatings shall be utilized.

4. SUPPORTING DOCUMENTATION:     

**VOID**

5. APPROVAL SIGNATURES: MW/sgf 8-4-82  
A. ORIGINATOR: Mark Wells DATE 8/4/82

B. DESIGN REPRESENTATIVE: CR Hooton DATE 8/5/82

6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)  
Vendor Dwg. Update Group (1)

JOB NO. 35-1195  
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**R** **RECEIVE** **D**

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (~~XXXXXXX~~) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 11,232

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/~~XXXXXXX~~ 2323-AS-31 REV. 1B. DETAILS In areas which are to be coated under the above specification,

there are many bearings which, because of size and possible damage to the  
bearing itself, cannot be coated in accordance with AS-31 requirements.

Request bearing-housings be coated under AS-30 requirements. Sol: Bearing  
housings which the associated bearing has a 3½" bore or less shall be coated  
under AS-30 requirements. Bearing housings which the associated bearing is  
greater than 3½" shall be coated under AS-31 requirements up to 1" from the  
edge of the bearing raceway. The remaining 1" area shall be coated under  
AS-30 requirements.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/ajs

October 9, 1981

A. ORIGINATOR: Mark Wells DATE 10-9-81B. DESIGN REPRESENTATIVE: RM Lissner DATE 10-9-81

6. VENDOR TRANSMITTAL REQUIRED: YES
- 
- NO
- XX

7. STANDARD DISTRIBUTION:

DCA FORM 11-80

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

JOB NO. 35-1195  
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OCT 12 1981  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(WILL)~~ BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 11,400, Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/~~DCA/DOCUMENT~~ 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA 11,400 Rev. 0.

Clarification is requested for vendor supplied shop-primed or  
finished equipment which is to receive a patch adhesion test per section 9.1C  
and section 9.22 in above specification.

SOLUTION: Items cited for installation in Reactor I or II which are to  
receive on site receipt adhesion and patch tests shall be governed under the  
following guidelines.

See page 2 of 2

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/sgf

11-3-81

A. ORIGINATOR: Mark WellsDATE 11-3-81B. DESIGN REPRESENTATIVE: RM KissingerDATE 11-4-81

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

JOB NO. 35-1195 DCA FORM 11-80  
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NOV 05 1981  
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- (1) Large vendor supplied items such as cranes, platforms and other large equipment shall receive on site receipt adhesion testing and inspection.
- (2) Valves which have a testable surface area in excess of 20 sq. ft. shall be tested upon receipt.
- (3) Receipt of items such as hand rails or small valves which would normally not be subject to adhesion testing shall not receive said test.
- (4) Miscellaneous steel and pipe hanger material which is vendor primed to meet jobsite QA/QC standards need not have adhesion testing performed upon site receipt.
- (5) Equipment which is supplied with a coating that is not qualified for nuclear service at CPSES shall be reviewed by the Project Civil Engineer or his designee before on site receipt adhesion testing is performed.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XXX

(WILL) (WILLXNOT) BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 11,421 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

**VOID**

- A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1
- B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-11,421 Rev. 0.

Clarification is requested for Section 9.2.1, 5th sentence involving  
proximity to edges.

SOLUTION: Change 5th sentence to read as follows. Due to the inaccuracy  
of determining film thickness at edges, appreciable surface  
curvatures and other geometrical discontinuities, items such  
as handrails, gratings, stairs, sway-struts, checker plate,  
etc., shall be subject to inspection as stated in 9.2.3 with the  
exception of the dry film thickness.

35-1195  
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4. SUPPORTING DOCUMENTATION:

JUL 29 1983

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/sgr

7-29-83

- A. ORIGINATOR:

*Mark Wells*DATE 7-29-83

- B. DESIGN REPRESENTATIVE:

*CR Horton*DATE 7-29-83

6. VENDOR TRANSMITTAL REQUIRED: YES
- 
- NO
- XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site(1) Peter Bush-QA Spec. Spvr. (1) DCA FORM 11-80  
(1) Civil Engineering (1) Admin. Rev 7-82  
(1)  
(1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(WILL)~~ BE INCORPORATED IN DESIGN DOCUMENTSDCA NO. 11,752 Rev. 2

1. SAFETY RELATED DOCUMENT: xx YES        NO
2. ORIGINATOR: CPPE xx ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC ~~OR DOCUMENT~~ 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-11,752 Rev. 1See Attached.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/sgf

1-12-82

A. ORIGINATOR: Mark W. WellerDATE 1-12-82B. DESIGN REPRESENTATIVE: RMH 1585DATE 1-12-82

6. VENDOR TRANSMITTAL REQUIRED: YES        NO xx

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)  
 Westinghouse-Site (1)

JOB NO. 35-1195

DCA FORM 11-80

**R** **RECEIVE** **D**  
 JAN 13 1982  
**R** **RECEIVE** **D**

In the above applicable specification, clarification is requested on section 9.2.2 paragraph (C) regarding the "one test per 500 linear feet" requirement.

Solution: Change paragraph (C) under section 9.2.2 as follows: For large essentially one-component equipment, one test per 500 square feet of area shall be required.

Add the following after the last paragraph in section 9.2.2: Areas of failed coating shall be localized and removed. The area shall then be coated in accordance with the coating manufactures instructions. If the results of numerous test areas indicate unsuitable substrate or coating interface adhesion, the owner or his representative may then increase the percentage of test areas required.

SPEC, HAH, TUGCO

FIGURE 1.

Page 1 of 2

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

~~(XXXX)~~ (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 12,111 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-12,111 Rev. 0.

See Attached

**VOID**

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgf

1-27-82

A. ORIGINATOR: M. Ashwell DATE 1-27-82

B. DESIGN REPRESENTATIVE: CR Hooton DATE 1-27-82

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)  
Westinghouse-Site (1)

JOB NO. 35-1195

DCA FORM 11-80

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JAN 28 1982  
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To aid in certification of existing protective coatings which do not have complete documentation as required by Appendix C of the above applicable specification, request guidelines for performing adhesion testing on these areas and items.

Solution: As a minimum, guidelines for adhesion testing on areas as stated above shall be as follows:

- (1) For large essentially one component equipment or areas with large surface areas such as rooms or liner plate: One test per each 500 square feet of surface area.
- (2) Supports such as cable tray, conduit pipe, etc.: Test 10 percent of supports considered.
- (3) Miscellaneous and embedded steel: One test in each 500 linear feet.

Areas and/or items which are inaccessible because of installation of permanent items or equipment, and items, due to their size and/or configuration, that will not accomodate an Elcometer adhesion tester, shall not be subject to said adhesion testing.

Areas of failed coating shall be localized and removed. The area shall then be recoated in accordance with the coating manufactures instructions and governing procedures.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 12,145 Rev. 3

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/CWG/DOCUMENT 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-12,145 Rev. 1.

Clarification is requested on acceptable coating thickness of coatings when performing "backfit" inspections on areas with discrepant or lack of documentation. SOLUTION: When inspections are performed in accordance with established backfit inspection procedures, acceptable primer thickness shall be .0015 in. to .007 in.. No minimum topcoat thickness shall be specified however, the topcoat shall provide full "hiding" properties of the primer. Maximum combined thickness of primer and topcoat average shall be .013 in. with maximum spot check of .015 in..

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- 4.
- SUPPORTING DOCUMENTATION:

AUG 18 1983DOCUMENT CONTROL

- 5.
- APPROVAL SIGNATURES:
- MW/sgr

8-18-83A. ORIGINATOR: Mark WellsDATE 8-18-83B. DESIGN REPRESENTATIVE: CR HootonDATE 8-18-83

- 6.
- VENDOR TRANSMITTAL REQUIRED:
- YES
- 
- NO
- XX

- 7.
- STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site(1) Peter Bush-QA Spec. Spvr. (1) DCA FORM 11-80  
(1) Civil Engineering (1) Admin. Rev 7-82  
(1)  
(1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX:CEI  
: II  
:III XX

(WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 12,374 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES NO

2. ORIGINATOR: CPPE ORIGINAL DESIGNER

3. DESCRIPTION:

A. APPLICABLE SPEC, ~~XX~~ DOCUMENT 2323-AS-31 REV. 1

B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-12,374 Rev. 0.

In Reactor Building Unit 1 and 2 numerous Richmond inserts exist embedded in the concrete. Request guidelines for coating the exposed face of these inserts. Solution: The exposed face of the inserts shall be primed with inorganic zinc primer and topcoated with Imperials Nutec 1201 topcoat.

Although not required, a skim coat of Nutec 11S or 11 may be applied over the zinc primed insert to facilitate construction. Due to the size and configuration of these inserts, coating activities shall be performed in accordance with 2323-AS-30 coating specification. When performing this coating activity, tie in area around the insert face shall be a maximum of 1/2" into previously coated surface.

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgf

11-2-82

A. ORIGINATOR: Mark Wells

DATE 11/2/82

B. DESIGN REPRESENTATIVE: CR Horton

DATE 11/3/82

6. VENDOR TRANSMITTAL REQUIRED: YES NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)  
Civil Engineering (1)

JOB NO. 33-1183  
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NOV 04 1982  
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DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 12,421 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-12,421 Rev. 0.See attached sheet.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/sgf

2-19-82

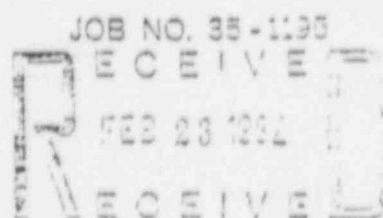
A. ORIGINATOR: Mark Wells DATE 2-19-82B. DESIGN REPRESENTATIVE: RM Kissinger DATE 2-19-82

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

DCA FORM 11-80

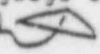
ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)  
 Westinghouse-Site (1)



To aid in certification of existing seal or finish coated areas or items which do not have adequate documentation as required by appendix C of the above applicable specification, request guidelines for performing film thickness readings on these areas or items.

Solution: As a minimum, guidelines for film thickness measurements shall be as follows:

(1) Scratch tests shall be performed by the use of a Mark II Tooke inspection gauge or equal.

(2) When performing scratch tests on coated steel items, readings of total film thickness shall be compared to readings taken with a calibrated Microtest pull off gauge or equal. The compared readings shall not vary by more than 0.5 mil. 

(3) Quantity of scratch tests shall be as follows:

- (a) Items <sup>or</sup> areas involving 10 sq. ft. or more in surface area shall have five scratch tests performed, evenly spaced over the given area, on each 100 sq. ft. of affected area. A minimum of five tests shall be performed on the specific area or item.
- (b) Items or areas involving less than 10 sq. ft. shall have only sufficient tests performed to substantiate existing coating thickness.
- (c) Areas or items which would not be subject to DFT readings with magnetic pull-off gauges, because of geometrical discontinuities or appreciable surface curvature, shall not be subject to scratch testing.
- (d) Areas or items which will not accomodate the use of a Tooke Tester, due to installation of equipment or the configuration of the item, shall not be subject to said test.
- (E) In the event a reading is found outside the procedural acceptable limits, additional readings shall be taken to determine the extent of unacceptable coating thickness.

*SPEC, HAH, TUGCA*COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(WILL/NOT)~~ BE INCORPORATED IN DESIGN DOCUMENTSDCA NO. 12,571

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE        ORIGINAL DESIGNER XX
3. DESCRIPTION:

A. APPLICABLE SPEC/~~OR DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS To provide finish coating type required for exterior o  
equipment provided with MS-83B, revise table A-4, sheet 8 of 13 of the above  
applicable specification per the attached.

4. SUPPORTING DOCUMENTATION:DECD-S-2592**VOID**5. APPROVAL SIGNATURES: MW/sgf

3-5-82

A. ORIGINATOR: *T. Mark Wells* DATE 3-5-82B. DESIGN REPRESENTATIVE: *DMK1580y* DATE 3-8-826. VENDOR TRANSMITTAL REQUIRED: YES        NO XX7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)  
 Westinghouse-Site (1)

JOB NO. 35-1195

DCA FORM 11-60

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 MAR 06 1982  
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TAB' 4-4  
TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
1980-82 2300 MW INSTALLATION  
FINISH COATINGS FOR SHOP PRIMED EQUIPMENT

REPORT NO. AS-31  
SHEET NO. 8 OF 13  
DATE SEPT. 15, 1977

TUGCO "O. NO.	SPEC. NO.	EQUIPMENT	SELLER	SURFACE PREPARATION	PRIME COAT*	INTERMEDIATE COAT	FINISH COAT	FIELD TOUCH UP (PRIMER)
					MANUFACTURER	GEN. DESIG.	GENERIC TYPE	
P- H075	MS-75	Circ. Water Valves	HENRY PRATT CO.	SOLVENT CLEAN- SP-6	Carbit Pt. Co.	4Y2	ZINC CHROMATE	NOTE 3
P- H076	MS-76	Main Steam Isola- tion Valves	Rockwell International	Sand blast	Heesman- Illiott	Hi-Degree C 9031	Zinc rich oil modified	NOTE 1
P- H077	MS-77	Main Steam Safety Valves	Cosby Steam Gage & Valve	Sand blast	Carholine Co.	Carbozinc 11	Self curing Inorganic Zinc	NOTE 7
P- H078	MS-78	Main Steam Relief Valves	Fisher Control Co.	Blast Clean SP-6	"	191 Primer	Epoxy-Poly- omide	NONE
P- H079	MS-79	Steam Pump Valves (NON NUCLEAR)	Fisher Control Co.	"	"	"	"	"
	MS- H08A	IVAC Water Chiller (Nuclear)						
	MS- H08B	IVAC Water Chiller						
	MS-81	IVAC Auxiliary Eng. Coolers						
	MS-82	IVAC Atmospheric Cleanup Trains						
	MS- H3A	IVAC - Fans (Non- Nuclear Safety R.						
P- H08	MS- H3B	IVAC-Fans (Nuclear)	Buffalo Forge Co.	Blast Clean SP-6	Wisconsin Prot. Coating	Plasite 7122	Epoxy	NONE
		CPX-VAFNCB-01, 02		Solvent Clean SP-1 Power	Dereka Metal	Primer No. 505	Alkyd	NOTE 1
		CPX-VAFNCB-03, 04		Tool SP-3	Dupont	473-975	Alkyd	NOTE 3
		CP1-VAFNCB-04, 05		"				
		CP2-VAFNCB-04, 05						
		CPC-VAFNWV-02 Thru-09						
		CPX-VAFNCD-05 Thru-24		"	"	"	"	NOTE 1
		CPX-VAFNID-01 Thru-04						NOTE 1
		CP1-VAFNID-07 Thru-12						NOTE 7
		CP2-VAFNID-07 Thru-12						
	MS-H4	IVAC-Dampers & Valves						
P- H086	MS-86	IVAC-Cont. Isola- tion Valves	Posi-Seal Inter- national	Sandblast SP-5	Mohil	13-F-12	Self curing Inorganic Zinc	NONE
	MS-87	IVAC-Control RH. Air Conditioner						
	MS-88	IVAC-Air Conditioner	Mer-Control					

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(WILL)~~ BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 12,794

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS When applying concrete coatings and using wet film thickness  
gauges, problems have arisen in obtaining accurate film thickness readings when  
performing coating repair on areas of 2 sq. in. or less or scratches which are less  
than 1/4 in. in width. Request clarification on substantiating coating thickness on  
these areas. Solution: When performing surfacer and/or topcoat repair work, and  
the damaged area is 2 sq. in. or less in size, or the damage is a scratch 1/4 in. in  
width or less, regardless of length, substantiating or recording film thickness on  
the damaged area repair shall not be required. All applicable inspections and  
documentation, other than the above, shall be maintained.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/sgf

3-25-82

A. ORIGINATOR: M. A. Walker DATE 3-25-82B. DESIGN REPRESENTATIVE: W. M. Fitzgerald DATE 3-26-82

6. VENDOR ~~731~~ REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)  
 Westinghouse-Site (1)

JOB NO. 35-1195  
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 3-26-1982  
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DCA FORM 11-80

SPEC, HAH, TUGCO, AM(4)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 12,966

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/~~WAC/DOCL/XXXX~~ 2323-AS-31 REV. 1

B. DETAILS In Reactor Building #1 and #2 numerous shim plates, which are less than 1/4" in thickness, are used in conjunction with conduit attachments and supports. Due to the limited thickness of these plates and their size, many of which are less than 3" x 4", damage occurs to these plates when stamping a unique coating code number used for maintaining traceability of coated items. Request clarification of coating requirements on the subject shim plates. Solution: When coating shim plates which are less than 1/4" in thickness and less than 12 in<sup>2</sup> in size, no unique number shall be stamped into the surface. Without the unique number, however, traceability of the item for QC Documentation cannot be maintained, therefore, coating shall be performed under AS-31 Guidelines without QC inspection or documentation.

4. SUPPORTING DOCUMENTATION:
- 
- 

**VOID**  
4-13-82

5. APPROVAL SIGNATURES: MW/sgf

A. ORIGINATOR: Mark Wells DATE 4-13-82B. DESIGN REPRESENTATIVE: CMK DATE 4-13-82

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

DCA FORM 11-80

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

{1}

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX:CEI \_\_\_\_\_  
: II \_\_\_\_\_  
:III XX(WILL) (~~WILL NOT~~) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 13,140 Rev. 2

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/~~ENG~~/DOCUMENT 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-13,140 Rev. 1.See attached.**VOID**35-1195  
RECEIVED

FEB 01 1983

DOCUMENT CONTROL

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgf

2-21-83

A. ORIGINATOR: Mark Wells DATE 2-21-83B. DESIGN REPRESENTATIVE: CR Houston DATE 2-21-83

6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

APMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site  
Civil Engineering

(1) Ron Michels-QA Spec. Spvr. (1) DCA FORM 11-80  
(1) Admin. Rev 7-82  
(1)  
(1)  
(1)

1 In Reactor Building Unit 1 & 2, pipe supports & various electrical and equipment supports have areas which due to installation configuration of the supports or equipment an SSPC-SP10 or equal surface preparation cannot be achieved. This SSPC-SP10 or equal surface preparation cannot be achieved due to limited access to the specific area or inaccessibility per paragraph 1.1b. Request clarification of coating in these areas.

SOLUTION: Items and/or areas which are not inaccessible per paragraph 1.1b of AS-31, but due to the installation configuration of the support or item, the required SSPC-SP10 surface preparation cannot be met shall be considered as limited access areas. Typical limited access areas are as shown on the attached drawing.

All steel installed in the Reactor Buildings which is governed under AS-31 coating requirements is, as a minimum, shop primed prior to installation. The non previously AS-31 primed steel is therefore, limited primarily to weld and field cut locations.

In limited access areas, SSPC-SP10 or equal should be maintained if possible, however, SSPC-SP-6 or equal surface preparation shall be the minimum acceptable.

2 Except for the above, coating application and documentation in limited access areas shall be as presently required by AS-31. Areas on supports typified by shaded areas on the attached drawing shall be considered inaccessible per Paragraph 1.1b of AS-31. Areas which conduit, cable tray, instrumentation equipment, and various miscellaneous items and equipment, cover or come in contact with supports or backings are typical inaccessible areas per paragraph 1.1b of AS-31. Surface preparation and coating on inaccessible areas shall be on a best effort basis. QC inspection on inaccessible areas is not required.

**NOTES:**

1. LIMITED ACCESS AREAS SHOWN ARE DESIGNATED BY HATCHED AREAS.

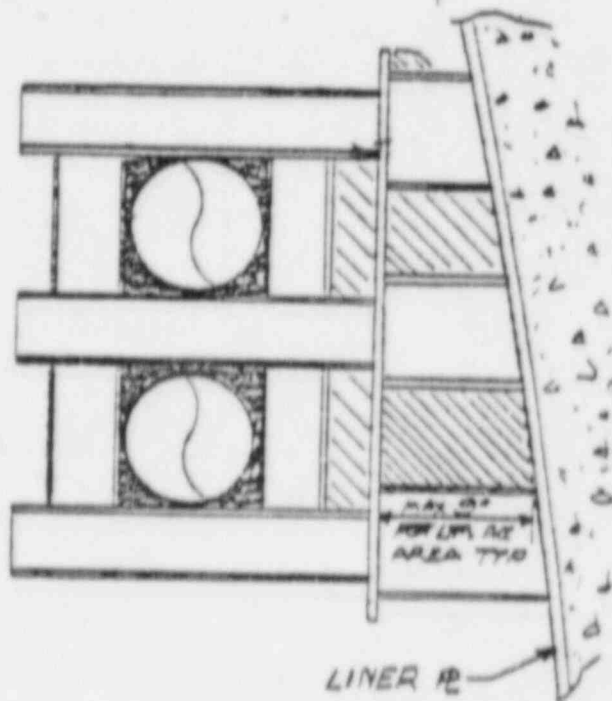
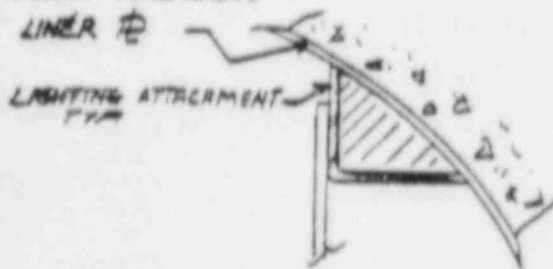
2. LIMITED ACCESS SHOWN ARE TYPICALS; OTHER SIMILAR CONFIGURATIONS MAY ALSO BE LIMITED ACCESS.

3. SHADED AREAS REPRESENT WALKABLE AREAS & SHALL BE PREPARED & COATED ON A BEST EFFORT BASIS.

CONC WALL  
TYP

TYP WALKABLE AREA FOR  
SUPPORTS

9" TYP



**Brown & Root, Inc.**

HOUSTON, TEXAS



CONT. NO.

35-1196

TITLE

OWNER

LOCATION OF PROJECT

TEXAS UTILITIES SERVICES, INC.

G.P.S.E.S.

GLEN ROSE, TEXAS

OWB NO.

DCA 13/40 R2  
PS 3 OF 3

DRAWN BY

CHECKED

APPROVED

DATE

INT.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(WILL)~~ BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 13,171

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2223-AS-31 REV. 1

B. DETAILS        In Reactor Building Unit 1 and 2 the pipe supports for the horizontal Containment spray piping at elevation 1021'-6" and above, have been finish coated white to facilitate construction activities. Pipe supports are presently scheduled to receive light gray finish coat. Request clarification on color requirements of the above supports. Solution: In Unit 1 and 2 Containment the above subject pipe supports shall be scheduled to receive finish coat color white rather than previously specified light gray.

**VOID**

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sqf

5-5-82

A. ORIGINATOR:

*Mark Wells*

DATE

*5-5-82*

B. DESIGN REPRESENTATIVE:

*CR Hooton*

DATE

*5-6-82*

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

DCA FORM 11-80

ARMS (Original)  
Quality Engineering  
TS for Orig. Design.  
Westinghouse-Site

(1)  
(1)  
(1)  
(1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: CEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 13,388 Rev. 5

1. SAFETY RELATED DOCUMENT: XX YES \_\_\_\_\_ NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT: 2323-S1-0500 2323-AS-31- REV. 4

B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-13,388 Rev. 5.

1 1/2", 2, and 2 1/2" anchor bolts that are unused which interfere with pipe, pipe support or insulation may be cut flush with the wall or slab to relieve interference. Bolts marked for use with supports shall not be cut without approval of the responsible engineer.

In Unit 1 and common structures, the above anchor bolts if not utilized at the time of room turnover, may be removed by cutting flush with the wall or slab.

In areas which require protective concrete coatings, cut bolts shall be primed with inorganic zinc primer prior to application of concrete coatings. Coatings shall be applied in accordance with 2323-AS-30 specification.

4. SUPPORTING DOCUMENTATION:

**VOID**35-1107  
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AUG 19 1983

5. APPROVAL SIGNATURES: MW/sgr

DOCUMENT CONTROL  
8-19-83

A. ORIGINATOR: Mark Wells DATE 8-12-83

B. DESIGN REPRESENTATIVE: CR Heaton DATE 8-19-83

6. VENDOR TRANSMITTAL REQUIRED: YES \_\_\_\_\_ NO \_\_\_\_\_ XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-QA Spec. Spvr.  
(1) Civil Engineering  
(1)  
(1)

(1) DCA FORM 11-80  
(1) Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX: OET

: II

: III XX(WILL) ~~(WILL)~~ BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 13,429 Rev. 2

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/~~CWC~~/DOCUMENT# 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-13,429 Rev. 1.Revise the second sentence of Section 6.2.b as follows:

Weld spatter shall be removed by grinding or sandblasting to the extent  
required to obtain an acceptable surface for coating. Section 9.2.3.2 revise  
criteria for welds & edges to state "smooth, with weld spatter removed to the  
extent required to obtain an acceptable surface for coating".

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/sgf 11-11-82
  - A. ORIGINATOR: Mark Wells DATE 11-11-82
  - B. DESIGN REPRESENTATIVE: CL Horton DATE 11-11-82

6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design (1)  
 Westinghouse-Site (1)  
 Civil Engineering (1)

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 13,456

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DCWG/DOCUMENT 2323-AS-31 REV. 1B. DETAILS 1/4 inch diameter holes in embedded strip plates were used

to bolt plates to concrete forms for concrete placement. After removal of  
formwork, bolts remain in holes or bolt is missing with concrete filling the  
hole.

SOLUTION: Subject areas shall be coated the same as the remainder of the plate.Areas of the 1/4" diameter holes shall not be subject to inspection per AS-31.

- 4.
- SUPPORTING DOCUMENTATION:

**VOID**

- 5.
- APPROVAL SIGNATURES:
- CRH/sgf 5-26-82

A. ORIGINATOR: CRH/sgf DATE 5-26-82B. DESIGN REPRESENTATIVE: CRH/sgf DATE 5-26-82

- 6.
- VENDOR TRANSMITTAL REQUIRED:
- YES
- 
- NO
- XX

- 7.
- STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)  
 Westinghouse-Site (1)

DCA FORM 11-80

JOB NO. 35-1195

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(WILL)~~ BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 13,640

1. SAFETY RELATED DOCUMENT: ☒ YES ☐ NO
2. ORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐
3. DESCRIPTION:

A. APPLICABLE SPEC/~~DESIGN~~ DOCUMENT 2323-AS-31 REV. 1

B. DETAILS Request clarification to the requirement of grinding all edges as stated in paragraph 6.2b. Solution: The requirement for grinding all edges, protrusions, and peaks to a rounded contour is required on all fabricated and completed items. However, bulk steel which have rough cut ends or edges, and which will be used for separating into smaller units for fabricating specific assemblies need not have the edges smoothed, prior to and for shop coating under the guidelines AS-31.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/sgf

6-15-82

A. ORIGINATOR: M. L. Miller DATE 6-15-82B. DESIGN REPRESENTATIVE: R. M. King DATE 6-15-82

6. VENDOR TRANSMITTAL REQUIRED: YES ☐ NO ☒

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)  
 Westinghouse-Site (1)

JOB NO. 35-1195 DCA FORM 11-60

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 13,867

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC ~~XXXXXX~~ 2323-AS-31 REV. 1B. DETAILS In Reactor Building Unit 1 & 2 numerous "Pipe Bumpers" are  
to be used which the interior and exterior are coated per AS-31 requirements.Problems exist with inspections of the coating on the interior of the pipe  
which is greater than 5 ft. in length due to inaccessibility.Solution: Pipe Bumpers located in Unit 1 or 2 Reactor Building shall be  
coated per AS-31 coating and inspection requirements with the following exceptions:(1) Area located on the interior which is greater than 2 1/2 ft. from pipe  
bumper end openings. Note: Interior of pipe bumper greater than 2 1/2 ft. from  
each end opening shall be coated under AS-30 requirements, however, AS-31  
specified coatings shall be utilized.

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgf

A. ORIGINATOR: *Mark Wells* DATE 7/8/82B. DESIGN REPRESENTATIVE: *CRooten* DATE 7/8/82

6. VENDOR TRANSMITTAL REQUIRED: YES
- 
- NO
- XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)

Quality Engineering (1)

TS for Orig. Design. (1)

Westinghouse-Site (1)

Vendor Dwg. Update Group (1)

JOB NO. 35-1195

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## FIGURE 1.

Page 1 of 1

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (~~XXXXXXXX~~) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 13,923

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1  
2323-AS-30 0

B. DETAILS Weld plate embeds which are rendered unusable by the Project

Civil Engineer or his designee, shall receive red topcoat rather than the specified  
light gray or white. Red topcoat shall be applied as soon as possible following  
rendering the embed unusable.

4. SUPPORTING DOCUMENTATION:

**VOID**

5. APPROVAL SIGNATURES: MW/sgf

7-14-82

A. ORIGINATOR: Mark Wells DATE 7/14/82

B. DESIGN REPRESENTATIVE: CRK Hooton DATE 7/14/82

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

DCA FORM 11-80

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)  
 Westinghouse-Site (1)  
 Vendor Dwg. Update Group (1)

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## FIGURE 1.

Page 1 of 1

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~XXXXXX~~ BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 13,994

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC. ~~DWG/DRAWING~~ 2323-AS-31 REV. 1

B. DETAILS Revise Section 8.2I as follows: Each coat applied may be a  
different color or shade from the preceding coat to aid in determining the uniformity  
and coverage of the coating. When a white finish coat is specified, as a minimum,  
the final two coats shall be white.

**VOID**

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgf

7-22-82

A. ORIGINATOR: Mark Wells DATE 7-22-82B. DESIGN REPRESENTATIVE: RM Kissen DATE 7-23-82

6. VENDOR TRANSMITTAL REQUIRED: YES        NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design. (1)  
 Westinghouse-Site (1)  
 Vendor Dwg. Update Group (1)

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 JOB NO. 35-1195  
**R** **RECEIVE** **D**  
 JUL 26 1982  
**R** **RECEIVE** **D**

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(WILL/XXX)~~ BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 14.2061. SAFETY RELATED DOCUMENT: XX YES NO CHANGE INDEX:OEI2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER :II3. DESCRIPTION: :III XX

A. APPLICABLE SPEC/TWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS At temperatures above 100°F, readings with nonmercury

filled thermometers in Psychrometers cannot be taken. Request guidelines

for determining dew point and acceptable coating conditions above 100°F.

SOLUTION: At temperatures above 100°F, if accurate wet-bulb readings can

be taken, utilize the accurate wet-bulb reading and a dry bulb reading of

100°F. The 100°F dry-bulb reading utilized under the above conditions will

yield a conservative dew point and relative humidity.

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgf

8-18-82

A. ORIGINATOR: Mark WellsDATE 8/18/82B. DESIGN REPRESENTATIVE: CR HootonDATE 8/18/826. VENDOR TRANSMITTAL REQUIRED: YES NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site  
Vendor Dwg. Update Group(1)  
(1)  
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JOB NO. 35-1195

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Admin. Rev 7-82

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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WILL) (~~WILL NOT~~) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 14,279

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/ ~~ENGINEERING~~ 2323-AS-31 1  
2323-AS-30 REV. 0

B. DETAILS Due to excessive quantities of light green topcoat, revise

Appendix B paint schedule as follows:

Section IV Turbine Building, Item No. 3 change to read: Cranes other than  
Operating Deck Gantry cranes, color-gray green. Operating Deck Gantry cranes,  
color-light green.

Section V Miscellaneous and Common Equipment, add Item No. 12. Cranes other  
than Turbine Building Operating Deck and Circulating Water Operating Deck  
Gantry cranes, color-gray green. Turbine Building & Circulating Water  
Operating Deck Gantry cranes, color-light green.

**VOID**

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgf

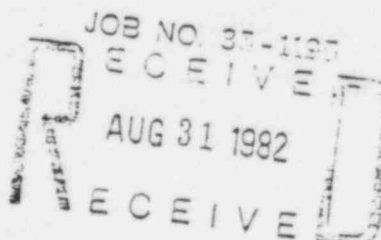
8-30-82

A. ORIGINATOR: Mark WellsDATE 8/30/82B. DESIGN REPRESENTATIVE: CE HoustonDATE 8/30/82

6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
 Quality Engineering (1)  
 TS for Orig. Design (3)  
 Westinghouse-Site (1)



DCA FORM 11-80  
 Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WILL) ~~XXXXXX~~ BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 14,3861. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_3. DESCRIPTION:A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1B. DETAILS Clarification is requested on coating requirements for steelsupports which will be completely encased by insulation. Solution: Steelsupports which will be completely encased by insulation shall receive inorganiczinc primer with no required topcoat. Coating shall be applied in accordancewith 2323-AS-30, however, 2323-AS-31 specified coatings shall be utilized. Noinspection per Appendix C of the above applicable specification shall be  
required.4. SUPPORTING DOCUMENTATION:5. APPROVAL SIGNATURES: MW/sgf

9-8-82

A. ORIGINATOR: Mark WellsDATE 9/8/82B. DESIGN REPRESENTATIVE: C. HortonDATE 9/9/826. VENDOR TRANSMITTAL REQUIRED: YES      NO XX7. STANDARD DISTRIBUTION:ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)  
Vendor Dwg. Update Group (1)

JOB NO. 35-1195

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX

(WILL) ~~(WILL)~~ BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 14,414

1. SAFETY RELATED DOCUMENT: XX YES NO
2. ORIGINATOR: CPPE XX (ORIGINAL DESIGNER \_\_\_\_\_)
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS In Containment Building Unit 1 and 2 there are to be

instrumentation spacers which are 1/2"Ø x 1 1/2" long schedule 40 pipe. These  
spacers are shown on drawing FSI-00070. Due to the size of these items, the  
spacers cannot receive a unique coating number for proper documentation.

Request clarification for coating requirements. Solution: The above subject  
spacers shall be coated under 2323-AS-30 coating requirements and guidelines,  
however, surface preparation shall equal SSPC-SP10 and 2323-AS-31 specified  
coatings shall be utilized.

**VOID**

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgf

9-10-82

A. ORIGINATOR: Mark Wells

DATE 9/10/82

B. DESIGN REPRESENTATIVE: CR Horton

DATE 9/13/82

6. VENDOR TRANSMITTAL REQUIRED: YES NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (3)  
Westinghouse-Site (1)  
Mark Wells (1)

JOB NO. 35-1195  
RECEIVED  
SEP 13 1982  
RECEIVED

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XY(WILL) ~~(XXXX/XXXX)~~ BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 14,737

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE ~~SPEC/DWG/DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS When brush repairing pinholes with NUTEC 1201 topcoat, often the brushed area does not have the gloss which the surrounding coating has. Request clarification of the acceptability of touch up areas which exhibit little or no gloss. Solution: NUTEC 1201 topcoat is a low sheen topcoat, when brush applied, 1201 will often dry to a flat finish.

For decontamination purpose, 1201 replace "a coating" is not required to have gloss surface but should be smooth and continuous, therefore, for small repair areas such as for pinholes, gloss and gloss uniformity is not required provided the coating is smooth and continuous.

4. SUPPORTING DOCUMENTATION:

JOB NO. 35-1195

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5. APPROVAL SIGNATURES: MW/sgf

10-13-82

A. ORIGINATOR: *Mark Wells*DATE 10-13-82B. DESIGN REPRESENTATIVE: *CR Hooten*DATE 10-13-82

6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)  
Civil Engineering (1)

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III X(WILL) (~~WILL~~) (~~NOT~~) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 14,9761. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_3. DESCRIPTION:A. APPLICABLE SPEC/~~DWG~~/~~DOCUMENT~~ 2323-AS-30 2323-AS-31 REV. 0  
1B. DETAILS In the above listed specifications, no color requirementis given for supports for fire hose stations. Solution: In Appendix Bof the above specifications in the section for miscellaneous and commonequipment, add supports for fire equipment under item number 10.4. SUPPORTING DOCUMENTATION:5. APPROVAL SIGNATURES: MW/sgf

11-4-82

A. ORIGINATOR: Mark WellsDATE 11-4-82B. DESIGN REPRESENTATIVE: CL HootenDATE 11-5-826. VENDOR TRANSMITTAL REQUIRED: YES NO XX

JCS NO. 35-1195

7. STANDARD DISTRIBUTION:ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)  
Civil Engineering (1)RECEIVE  
NOV 09 1982  
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Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 15,578 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES \_\_\_\_\_ NO \_\_\_\_\_
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT \_\_\_\_\_ 2323-AS-31 \_\_\_\_\_ REV. 1

B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-15,578 Rev. 0.

Coating is required for block out through the 832'-6" slab in Room 156,  
however, due to installation of the BMI tubes the coating is not accessible for  
repair per AS-31 coating criteria without damage to existing equipment. Request  
clarification of coating criteria for this blackout.

SOLUTION: In the event of loss of adhesion of the existing coatings @ the  
above location, the failed coating would not migrate to the  
Containment spray sumps, therefore, repair of existing coatings  
at the above location shall be performed under AS-30 guidelines  
rather than AS-31 to prevent damage to existing equipment. Coating  
utilized in repair shall be AS-31 specified coatings.

- 4.
- SUPPORTING DOCUMENTATION:

35-1195  
RECEIVED

MAY 04 1983

- 5.
- APPROVAL SIGNATURES:
- MW/GY/sqf

DOCUMENT CONTROL

A. ORIGINATOR: MWDATE 5-4-83B. DESIGN REPRESENTATIVE: CR KostonDATE 5-4-83

- 6.
- VENDOR TRANSMITTAL REQUIRED:
- YES \_\_\_\_\_ NO \_\_\_\_\_ XX \_\_\_\_\_

- 7.
- STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-OA Spec. Spvr.  
(1) Civil Engineering  
(1)  
(1)

(1) DCA FORM 11-80  
(1) Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX~~(WILL)~~ (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 15,656

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC ~~XXX~~ DOCUMENT 2323-AS-31 REV. 1

B. DETAILS In the Reactor Building Unit I in room 161A, some  
coating repair is required on the exposed portion of the Pressurizer  
Tank base for approximately 12" high from the bottom of the base  
@ elevation 853'-6". Request clarification for tie in of the two  
coatings.

SOLUTION: Surface preparation equal to SS-PC-SP10 shall be per-  
formed to a height of approximately 12" from the base. Feather  
back existing vendor supplied tank coating for approximately  
3" and apply coatings in accordance with AS-31 utilizing the feath-  
ed area for coating interface area.

JOB NO. 35-1195

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JAN 08 1983  
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- 4.
- SUPPORTING DOCUMENTATION:

N/A

- 5.
- APPROVAL SIGNATURES:
- MW/y1b

January 8, 1983

A. ORIGINATOR: Mark WellsDATE 1-8-83B. DESIGN REPRESENTATIVE: CR HortonDATE 1-8-83

- 6.
- VENDOR TRANSMITTAL REQUIRED:
- YES
- 
- NO
- XX

- 7.
- STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)  
Civil Engineering (1)

DCA FORM 11-80  
Admin. Rev 7-82

VOID

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 15,705

1. SAFETY RELATED DOCUMENT: XX YES NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31

B. DETAILS In Containment Building Unit 1 @ elevation 860 in the

RPI Room, request authorization to coat the exposed portion of the grout  
under the four base plates for the Thermocouple Reference Junction Boxes  
No. TBX-QAE-LTJ-01 & 02 after 72 hr cure.

SOLUTION: Grout under the subject base plates is approximately 3/4" thick,  
therefore, the exposed area of grout will be minimal. In addition,  
three day break of the subject grout exhibited strengths greater  
than 4,000 PSI therefore, authorization to apply protective coatings  
to the exposed grout under the above equipment base plates is  
granted.

4. SUPPORTING DOCUMENTATION:

JOB NO. 35-1195

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JAN 12 1983  
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5. APPROVAL SIGNATURES: MW/sgf

1-12-83

A. ORIGINATOR: Mark White

DATE 1-12-83

B. DESIGN REPRESENTATIVE: CR Boston

DATE 1-12-83

6. VENDOR TRANSMITTAL REQUIRED: YES NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)  
Civil Engineering (1)

DCA FORM 11-80  
Admin. Rev 7-82

VOID

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WILL) (~~WILL~~~~NOT~~) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 15,721 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES \_\_\_\_\_ NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-15,721 Rev. 0.

Section 6.9 Paragraph C. Revise as follows: Holidays, skips and pinholes shall be detected by visual inspection and the use of a holiday detector for the Containment liner. Holidays, skips, and pinholes for other coated areas and/or item shall be visual inspection only. Holiday detectors utilized shall be operated at a voltage that will not destroy the integrity of the coating such that it will not perform to the requirements of ANSI 101.2. The coating inspection agency shall furnish holiday detectors, scratch gauges, and other special inspection equipment if needed.

35-1195  
RECEIVED

JUN 10 1983

4. SUPPORTING DOCUMENTATION:

VOID

5. APPROVAL SIGNATURES: MW/sgf

6-10-83

A. ORIGINATOR: Mark WellsDATE 6/10/83B. DESIGN REPRESENTATIVE: CR HootonDATE 6/10/83

6. VENDOR TRANSMITTAL REQUIRED: YES \_\_\_\_\_ NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site(1) Peter Bush-QA Spec. Spvr. (1) DCA FORM 11-80  
(1) Civil Engineering (1) Admin. Rev 7-82  
(1) Rich Barber (1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 15,9591. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_

3. DESCRIPTION:

A. APPLICABLE SPEC/~~WORK~~/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS In Safeguard Building Unit 1 Room #56 request authorization to place protective coatings over concrete repair performed in the sump located @ B-S and 2' south of 7.7S prior to 28 day cure. SOLUTION: Concrete repair in the sump was performed utilizing Embeco 636 which is a high early strength grout. Also, repair to the sump involved only a small amount of area and depth, therefore, authorization to apply protective coatings to the above sump prior to 28 day cure on concrete repair is granted providing 7 day cure is satisfied.

4. SUPPORTING DOCUMENTATION:

35-1195  
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JAN 28 1983

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/sgf

1-28-83

A. ORIGINATOR: Mark WellsDATE 1-28-83B. DESIGN REPRESENTATIVE: CR HootonDATE 1-28-836. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)  
Civil Engineering (1)

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WILL) ~~XXXXXX~~ BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 16,1061. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER                     3. DESCRIPTION:A. APPLICABLE SPEC/ ~~TYPE/DOCUMENT~~ 2323-AS-31 REV. 1B. DETAILS In Containment structures various tube steel supportswhich do not have end caps, have coating on interior which has been applied with-out QC inspection and possibly over rusted steel. Request clarification onthis item. Solution: If coating failed from these areas it would do so ina sporadic manner and involve only minute amounts of coatings. Gross coatingfailure causing clogging of the Containment spray nozzles from these areas isnot likely. Coatings extending into open tube steel members resulting fromspray operations performed on the ends & exterior of the member is acceptable.35-1195  
RECEIVED4. SUPPORTING DOCUMENTATION:FEB 18 1983  
**VOID**  
DOCUMENT CONTROL5. APPROVAL SIGNATURES: MW/sgf

2-7-83

A. ORIGINATOR: Mark WellsDATE 2-7-83B. DESIGN REPRESENTATIVE: CR WestonDATE 2-8-836. VENDOR TRANSMITTAL REQUIRED: YES      NO XX7. STANDARD DISTRIBUTION:ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX:OEI

: II

:III XX

(XIII) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 16,151

1. SAFETY RELATED DOCUMENT: XX YES NO

2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER

3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS In Reactor Building Unit 1 &amp; 2 numerous universal joints

used in conjunction with valve reach rods would be damaged if surface preparation in accordance with the above applicable specification was performed. Request clarification for coating requirements. Solution: Universal joints for valve reach rods in the containment structures shall be coated under 2323-AS-30 guidelines; however, AS-31 specified coatings shall be utilized.

35-1195  
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FEB 09 1983

4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/sgf

2-8-83

A. ORIGINATOR:

*Mark Wells*

DATE 2-8-83

B. DESIGN REPRESENTATIVE:

*CR Houston*

DATE 2-8-83

6. VENDOR TRANSMITTAL REQUIRED: YES NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX:OEI \_\_\_\_\_  
: II \_\_\_\_\_  
:III XX(XIII) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 16,212

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/~~DOC~~/DOCUMENT 2323-AS-31 REV. 1B. DETAILS In Reactor Building Unit 1 the RC Drain Tank Heat

Exchanger @ AZ 85° elevation 808'-0" floor elevation, (#TBX-WPAHRD-01) has  
been installed without previous coating applied to the nuts & bolts on the  
equipment.

Request clarification of the surface preparation & coating of these  
items. Solution, surface preparation of the above bolts shall be a minimum  
SSPC SP6 or equal. All remaining criteria of AS-31 shall remain as is for  
the subject items.

35-1195  
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FEB 11 1983

4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL  
**VOID**  
2-11-83

5. APPROVAL SIGNATURES: MW/sgf

A. ORIGINATOR: Mark Wells DATE 2-11-83B. DESIGN REPRESENTATIVE: CR Houston DATE 2-11-83

6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)	(1) Ron Michels-OA Spec. Spvr. (1)	DCA FORM 11-80
Quality Engineering	(1)	Admin. Rev 7-82
TS for Orig. Design	(1)	
Westinghouse-Site	(1)	

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 16,230 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES \_\_\_\_\_ NO \_\_\_\_\_
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/ENG DOCUMENT 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-16,230 Rev. 0.

Request clarification concerning acceptability of contaminants in topcoats for steel and concrete and the removal thereof. Also request clarification of gloss requirements for repair areas on topcoats.

SOLUTION: In general, foreign contaminants are not acceptable in coatings and must be removed. If the contamination can be removed without affecting the continuity of the system, this may be accomplished by abrasion, as required, of the surface. Recoating of the area after contaminant removal need not be required if the coating system thickness is within procedural limits. Top coated areas which have been abraded for various reasons, i.e. runs, sags, high millage, etc., and are within acceptable procedural thickness following the repair, do not require recoating for gloss enhancing.

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgr

7-5-83

A. ORIGINATOR: Mark Waller DATE 7/5/83B. DESIGN REPRESENTATIVE: CR Horton DATE 7/5/83

6. VENDOR TRANSMITTAL REQUIRED: YES \_\_\_\_\_ NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-QA Spec. Spvr. (1) DCA FORM 11-80  
(1) Civil Engineering (1) Admin. Rev 7-82  
(1)  
(1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX

(WIXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 16537

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31

B. DETAILS In the fuel transfer canal in the Fuel Building at

elevation 824'-6", request the use of NUTEC #10 as a concrete sealer for grouting performed for the installation of lead shielding around the Fuel transfer tube. The application of Nutec #10 will allow coating operations to proceed prior to 28 day cure of the grout.

SOLUTION: The use of Nutec 10 as a concrete or grout sealer to allow coating prior to 28 day cure is acceptable in the above area; however, the following parameters shall be followed.

(1) If curing compound other than Nutec #10 is present, it shall be removed by blast operations prior to coating with Nutec #10.

(2) Nutec #10 shall be thinned from 20%-40% for application.

(Continued on Page 2)

4. SUPPORTING DOCUMENTATION:

DCA-8451

5. APPROVAL SIGNATURES: MW/cw

A. ORIGINATOR:

*Mark Wells*DATE 3-4-83

B. DESIGN REPRESENTATIVE:

*CR Hooten*DATE 3-7-83

6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site(1) Ron Michels Spec Sprv.  
(1)  
(1)  
(1)(1) DCA FORM 11-80  
Admin. Rev 7-82**VOID**35-1195  
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DOCUMENT CONTROL  
March 4, 1983

- (4) Refer to the manufacturers product data sheet for Nutec #10 general application and safety data.
- (5) Application of Nutec #10 shall be by applicators qualified for concrete protective coating application in Level I and II areas.
- (6) Topcoating of Nutec #10 with the approved concrete protective coating system shall not procede until a minimum of 24 hrs. of cure above 50°F surface temperature has elapsed for the applied Nutec #10. NOTE: This applies only to grout cured in excess of 7 days.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX: CEI

: II XX: III     

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT

DC NO. 17,142 Rev. 21. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER     

3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-17,142 Rev. 1.

Request clarification of topcoating required for the Manipulator crane  
(TBX-FHSCMC-01) @ EL. 860'-0" in Reactor Bldg. #1 which was received with epoxy  
coating from the vendor.

SOLUTION: Patch adhesion tests were performed on the subject equipment per Paragraph  
9.2.2 of AS-31 in the above applicable specification with applicable results. (See  
attached inspection reports.)

Therefore, Phenoline 305 topcoat by Carboline Corp. shall be applied utilizing  
applicable site procedures and the following.

(1) After the existing vendor applied coating is abraded to acceptable "non glossy"  
finish, the surface shall be wiped prior to application of 305 topcoat with Xylol  
(Continued on Page 2)

4. SUPPORTING DOCUMENTATION:

RECEIVED

5. APPROVAL SIGNATURES: GY/sgf

DOCUMENT CONTROL  
5-20-83A. ORIGINATOR: *[Signature]*DATE 5-20-83B. DESIGN REPRESENTATIVE: *[Signature]*DATE 5-23-836. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
 Quality Engineering  
 TS for Orig. Design  
 Westinghouse-Site

(1) Peter Bush-QA Spec. Spvr.  
 (1) Civil Engineering  
 (1)  
 (1)

(1) DCA FORM 11-80  
 (1) Admin. Rev 7-82

to remove loose particles.

- (2) Apply Phenoline 305 topcoat to achieve a dry film thickness of 3 to 7 mils. Utilize WFT gauges during application to determine proper thickness and document results per applicable site procedures to avoid later destructive testing to determine thickness of applied topcoat.

QC# 17143 92 347

Case No. 44974

12 AK 175

John H. 3/17/85  
125-514820-1 CID

24 July 2015

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100-111001-2500

100-111001-2500

RELATED NCR NO. C-81-01369 R.1	IN. CLOSED <input type="checkbox"/>	DATE	SIGNATURE GC INSPECTOR
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PR 49 977

1

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☐ INSPECTION COMPLETED, ALL ADJUDICABLE ITEMS SATISFACTORY  
☒ INSPECTION COMPLETED, UNSATISFACTORY ITEMS LISTED BELOW

BELOW (CHL, SHCS, ETC) MANIPULATOR CRANE @ ELEV 860', AZ 75°-105°  
ITEMS INSPECTED INCLUDE BEAMS FOR THE CRANE (X AXIS)

RELATED NCR NO. 081-01349 R.1	I.R. CLOSED <input type="checkbox"/>	DATE	SIGNATURE QC INSPECTOR
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI  
: II  
: III XX(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 17,4751. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER     3. DESCRIPTION:A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS In Reactor Buildings Unit 1 and 2, installed bolts, nuts and washers which require coating under AS-31 specification requirements shall receive a minimum surface preparation equal to SSPC SP6 unless otherwise noted. The previous requirement of SSPC SP10 surface preparation on these installed items is not possible due to probable damage to surrounding equipment and coatings. In addition to the above, continuity testing required for the listed items shall be visual only.

35-1195  
RECEIVED4. SUPPORTING DOCUMENTATION:

MAY 26 1983

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/sgr

5-25-83

A. ORIGINATOR: Mark WellsDATE 5/25/83B. DESIGN REPRESENTATIVE: CR KeatonDATE 5/26/836. VENDOR TRANSMITTAL REQUIRED: YES      NO XX7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-QA Spec. Spvr.  
(1) Civil Engineering  
(1) Rick Barber  
(1)

(1) DCA FORM 11-80  
(1) Admin. Rev 7-82  
(1)

7

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 17,758

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/ENG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS Clarification is requested on coating requirements for  
gear boxes, U-joints and associated equipment located on the Polar Crane  
and rotating platform in Reactor Building #1 and #2. Because of the  
configuration of this equipment it is not possible to coat these items  
as required per AS-31 specifications. SOLUTION: Do to the configuration  
of the items listed above, coating shall be applied in accordance with  
2323-AS-30; however, 2323-AS-31 specifies coatings shall be utilized. QC  
inspection is not required.

35-1195  
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JUL 17 1983

4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: GY/sgr

6-17-83

A. ORIGINATOR: MWDATE 6-17-83B. DESIGN REPRESENTATIVE: W. HootonDATE 6-17-83

6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site(1) Peter Bush-OA Spec. Spvr. (1)  
(1) Civil Engineering (1)  
(1) H. Williams-Civil QC Sovr. (1)  
(1) Rich BarberDCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX~~WEEKS~~ (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 17,3911. SAFETY RELATED DOCUMENT: XX YES \_\_\_\_\_ NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_3. DESCRIPTION:A. APPLICABLE SPEC/~~ENG~~/DOCUMENT \_\_\_\_\_ 2323-AS-31 REV. 1

B. DETAILS Clarification is required on coating requirements for the 175 ton and 20 ton block and associated equipment located on the Polar Crane in Reactor 1 & 2. Because of the configuration of this equipment it is not possible to coat these items as required per AS-31 Specification.

SOLUTION: Do to the configuration of the items listed above, coating shall be applied in accordance with 2323-AS-30; however, 2323-AS-31 specified coatings shall be utilized. OC inspection is not required.

4. SUPPORTING DOCUMENTATION:35-119  
RECEIVED

JUN 28 1983

5. APPROVAL SIGNATURES: GY/sgrDOCUMENT CONTROL  
6-27-83A. ORIGINATOR: MWDATE 6-27-83B. DESIGN REPRESENTATIVE: CE HortonDATE 6-28-836. VENDOR TRANSMITTAL REQUIRED: YES \_\_\_\_\_ NO \_\_\_\_\_ XX \_\_\_\_\_7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-QA Spec/ Contr.  
(1) Civil Engineering  
(1)  
(1)

(1) DCA FORM 11-80  
(1) Admin. Rev 7-82

COMMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX: OET \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX

~~(XXXX)~~ (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 18,143

1. SAFETY RELATED DOCUMENT: XX YES      NO

2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER                     

3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS Problems have arisen in placing coating code numbers on

shims and washer plates utilized in Reactor Building Unit 1 and 2.

SOLUTION: Shims and washer plates which have outside dimensions of 2 1/2"

x 2 1/2" or less, regardless of thickness, shall not require a

unique coating code number. Full traceability of these items

cannot be maintained without the coating code numbers, therefore,

application of coating shall be under 2323-AS-30 guidelines.

Coatings utilized shall be as specified in 2323-AS-31 Specification.

4. SUPPORTING DOCUMENTATION:

35-1195  
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JUL 19 1983

VOID  
DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/sgr

7-18-83

A. ORIGINATOR: Mark Wells

DATE 7-18-83

B. DESIGN REPRESENTATIVE: Chooton

DATE 7-18-83

6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-QA Spec. Spvr. (1) DCA FORM 11-80  
(1) Civil Engineering (1) Admin. Rev 7-82  
(1)  
(1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OET  
: II  
: III XX

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 18,177

1. SAFETY RELATED DOCUMENT: XX YES NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/ENG DOCUMENT 2323-AS-31

B. DETAILS Clarification is requested for painting requirements of

the Pneumatic cylinders for apposed blade HVAC dampers in Reactor Building #1 and 2.

SOLUTION: The above cylinders shall be coated under AS-31 requirements except for areas 1/2" from exposed gasket or seal materials and 1/2" around the perimeter of penetrating components including the penetrating component itself.

35-1195  
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JUL 21 1983

4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/sg

7-20-83

A. ORIGINATOR: Mark Wells

DATE 7-20-83

B. DESIGN REPRESENTATIVE: CR Horton

DATE 7-20-83

6. VENDOR TRANSMITTAL REQUIRED: YES NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-QA Spec. Svcr. (1) DCA FORM 11-80  
(1) Civil Engineering (1) Admin. Rev 7-82  
(1)  
(1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: CEN  
: II  
: III XX(WILL) ~~NOT~~ BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 18,330

1. SAFETY RELATED DOCUMENT: XX YES NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/ ~~DESIGN DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS In Appendix B of the above applicable specification, under CPSES Paint Schedule Area I, add the following statement after the heading "Color": Color "White" may be utilized as alternate color for any of the colors specified below. This includes initial application, recoating, or for finish coat repairs.

35-1195  
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AUG 01 1983

DOCUMENT CONTROL

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: MW/sgr

A. ORIGINATOR: Mark Wells DATE 8/4/83B. DESIGN REPRESENTATIVE: CR Horton DATE 8-4-83

6. VENDOR TRANSMITTAL REQUIRED: YES NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)	(1) Peter Bush-QA Spec. Spvr.	(1) DCA FORM 11-80
Quality Engineering	(1) Civil Engineering	(1) Admin. Rev 7-82
TS for Orig. Design	(1) TUGCO	(1)
Westinghouse-Site	(1)	

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OET  
: II  
: III XX

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 18,416

1. SAFETY RELATED DOCUMENT: XX YES NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/TWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS Difficulties have arisen in obtaining a surface preparation on welds equal to SSPC-SP-10 by means of power tools. Request that surface preparation with cleanliness equal to SSPC-SP-6 on weld areas be permissible in Reactor Building Unit 1 & 2. Solution: When performing preparation for coating with power tools on installed items, surface preparation performed in the weld areas shall yield a minimum surface cleanliness equal to that required of SSPC-SP-6. This area may extend up to 1" from the weld in any direction. Power tooling may be performed with, but not limited to, tools utilizing 3M clean-n-strip pads, flapper wheels.

4. SUPPORTING DOCUMENTATION:

35-1195  
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AUG 15 1983

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/sgr

8-15-83

A. ORIGINATOR:

DATE 8-15-83

B. DESIGN REPRESENTATIVE:

DATE 8-15-83

6. VENDOR TRANSMITTAL REQUIRED: YES NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-OA Spec. Spvr. (1) DCA FORM 11-80  
(1) Civil Engineering (1) Admin. Rev 7-82  
(1)  
(1)

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PAGE 1 OF 2

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 18,510 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER     

3. DESCRIPTION:

A. APPLICABLE SPEC/~~EXISTING DOCUMENT~~ 2323-AS-31 REV. 1B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA 18,510 Rev. 0.

In Reactor Building Unit 1 & 2, installed bolts, nuts, washers, anchor bolts, & threaded portions of hanger rods, turn buckles, etc., which are to receive protective coating, shall receive said coatings under Specification 2323-AS-30 rather than AS-31. This is due to possible damage to existing surrounding coatings and equipment if preparation is performed per AS-31 and due to the limited amount of coating applied to each item.

(Continued on Page 2).

4. SUPPORTING DOCUMENTATION:

35-1195  
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JAN 20 1984

5. APPROVAL SIGNATURES: MW/bwb

DOCUMENT CONTROL

A. ORIGINATOR: Mark Welch DATE 1/17/84B. DESIGN REPRESENTATIVE: RM Kiser DATE 1-17-84C. DESIGN REVIEW PRIOR TO ISSUE: Brant DATE 1-19-846. VENDOR RELATED CHANGE XX NO      YES: P.O. NUMBER     

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1)	Mark Welch-QA Spec. Spvr.	(1)
QUALITY ENGINEERING	(1)	Civil Engineering	(1)
DCTG FOR ORIG. DESIGN	(1)	B.K. Bhujang-Civil/Structural	(1)
Westinghouse	(1)	Design Review Group	(1)

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B. DETAILS (cont.)

Material applied to the above items shall be as specified in 2323-AS-31.  
1 1/2", 2 or 2 1/2" anchor bolts which are not utilized for supports shall  
receive Nutec 1201 topcoat rather than Phenoline 305.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX: OEI

: II

: III XX

(WILL) (WILL/NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 18,576

1. SAFETY RELATED DOCUMENT: XX YES NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DOC/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS To expand the scope of repairability of painted steel coating systems in the Reactor Buildings, the following shall be added to the above applicable specification:

(1) Add the following new item to Appendix "A" Table A-1.

COATING ITEM #	TYPE OF COATING	%SOLIDS BY VOLUME	MANUFACTURER	PRODUCT NAME & NO.	%ZINC DRY FILM
PC-P-6	EPOXY- POLYAMID.	RESIN 72% CATALYST 65%	CARBOLINE	CARBOLINE 191 PRIMER	-

(2) Add the following to Appendix "A" Table A-2 under the heading for steel:

MANUFACTURER	PRIMER	TOPCOAT
CARBOLINE	CARBOLINE 191 PRIMER	PHENOLINE 305 FINISH

35-1195  
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SEP 01 1983

4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/sgf

8-31-83

A. ORIGINATOR:

DATE 8-31-83

B. DESIGN REPRESENTATIVE:

DATE 9-1-83

6. VENDOR TRANSMITTAL REQUIRED: YES NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site

(1) Peter Bush-QA Spec. Spvr. (1) DCA FORM 11-80  
(1) Civil Engineering (1) Admin. Rev 7-82  
(1)  
(1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WILL) (WILLXNOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 18,632

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/~~DOC~~/DOCUMENT 2323-AS-31  REV. 1B. DETAILS Difficulties have arisen in defining what is a contaminant.

SOLUTION: Incorporate the following definition of a contaminant to be included  
as No. 12 Appendix D "Definition of Defects" of subject specification.

Contaminant: A foreign substance, inadvertently added to a coating or found on a  
substrate, that adversely affects the application, adhesion, curing  
and/or subsequent performance of the applied coating. Atmospheric  
moisture and condensation can be considered to be substrate contami-  
nants, as is a solution of mixed fission products or radioactive  
nuclides.

Note: Definition taken from ASTM "Manual of Coating Work for Light-Water  
Nuclear Power Plant Primary Containment and other Safety Related Facilities"

- 4.
- SUPPORTING DOCUMENTATION:

35-1195  
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SEP 10 1983

- 5.
- APPROVAL SIGNATURES:
- TK/sgr

A. ORIGINATOR: M. W. [Signature] DOCUMENT CONTROL DATE 9/8/83B. DESIGN REPRESENTATIVE: CR [Signature] DATE 9/8/83

- 6.
- VENDOR TRANSMITTAL REQUIRED:
- YES
- 
- NO
- XX

- 7.
- STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design  
Westinghouse-Site(1) Peter Bush-QA Spec. Spvr. (1)  
(1) Civil Engineering (1)  
(1)  
(1)DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX(WILL) (~~WILL NOT~~) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 18,657

1. SAFETY RELATED DOCUMENT: XX YES NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/~~XXX~~/DOCUMENT 2323-AS-31 REV. 1B. DETAILS No provisions are made for recording unqualified and/or undocumented coatings in containment.SOLUTION: Incorporate the following as paragraph 1.1 subparagraph E in the specification.

An exempt log for protective coatings shall be maintained. This log will be a part of permanent plant records. The log shall describe the item or area coated, the coating system, if known, and the square footage of surface involved. All painted surfaces with an unqualified and/or undocumented coating system shall be included on the log.

4. SUPPORTING DOCUMENTATION:

35-1195  
RECEIVED

SEP 12 1983

5. APPROVAL SIGNATURES: TK/sgr

A. ORIGINATOR: Mark Wells DATE 9/12/83B. DESIGN REPRESENTATIVE: CR Hooton DATE 9/12/83

6. VENDOR TRANSMITTAL REQUIRED: YES \_\_\_\_\_ NO XX

7. STANDARD DISTRIBUTION:

ARMS (Original)  
Quality Engineering  
TS for Orig. Design

(1) Peter Bush-QA Spec. Spvr.	(1) DCA FORM 11-80
(1) Civil Engineering	(1) Admin. Rev 7-82
(1)	

DOCUMENT CONTROL

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 18,869

1. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER     3. DESCRIPTION:A. APPLICABLE SPEC/~~DESIGN DOCUMENT~~ 2323-AS-31 REV. 1B. DETAILS Protective Coating on some pipe hangers was burnt or  
discolored during Hot Functional Testing.The areas of coating burnt or discolored during Hot Functional  
Testing need not be repaired and is acceptable.35-1195  
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OCT 04 1983

4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: TK/sgr

10-3-83

A. ORIGINATOR: [Signature] DATE 10/3/83B. DESIGN REPRESENTATIVE: CR Hooton DATE 10/4/83C. DESIGN REVIEW PRIOR TO ISSUE: ~ N/A ~ DATE     6. VENDOR RELATED CHANGE XX NO      YES: P.O. NUMBER     7. STANDARD DISTRIBUTION:ARMS (ORIGINAL) (1) Mark Welch-QA Spec. Svpr. (1)  
QUALITY ENGINEERING (1) Civil Engineering (1)  
DCTG FOR ORIG. DESIGN (1)

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PAGE 1 OF 2

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(XXXX) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 18,989 Rev. 1

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/ ~~2323-AS-31~~ 2323-AS-31 REV. 1

B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-18,989 Rev. 0.

PROBLEM: There is no provision in the specification for either coating or

not coating exposed epoxy grout at the edge of base plates. Also

clarification is needed as to "what is an interface" for coating

purposes where base plates meet walls, ceilings, or floors.

SOLUTION: The coating of exposed epoxy grout is not required. If, for

appearance, it is coated it may be coated with either Carboline

Phenolite 305 or Southern Imperial Nutec 1205. Thickness of

4. SUPPORTING DOCUMENTATION:

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5. APPROVAL SIGNATURES: TK/sgr

DOCUMENT CONTROL

A. ORIGINATOR: James C. Hill DATE 11/5/83

B. DESIGN REPRESENTATIVE: EM Fessenden DATE 11-8-83

C. DESIGN REVIEW PRIOR TO ISSUE: Patel DATE 11-8-83

6. VENDOR RELATED CHANGE XX NO      YES: P.O. NUMBER

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1)	Mark Welch-QA Spec. Sovr.	(1)
QUALITY ENGINEERING	(1)	Civil Engineering	(1)
DCTG FOR ORIG. DESIGN	(1)		

DCA FORM 9-83

**VOID**

SOLUTION: coatings to be in accordance with established  
(Continued) applicable site procedures. Coatings applied to  
the above may be applied without QC inspection.

Where gap between base plate and wall, ceiling,  
or floor is less than the gap which requires epoxy  
grout it shall be considered an interface for  
coating purposes. It is not expected that coating  
will bridge gap at all times.

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OCT 26 1983

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PAGE 1 OF 1

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION~~OWNED~~ (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 19,050

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:
- A. APPLICABLE SPEC/~~WORK/EXCISEMENT~~ 2323-AS-31
- B. DETAILS

PROBLEM: There is extreme difficulty in coating the interior of pipe  
whip restraint bumpers.

SOLUTION: The interior of bumpers shall not require coating. Any coating  
done will be to best effort and will not require inspection.

35-1195  
RECEIVED4. SUPPORTING DOCUMENTATION:

OCT 31 1983

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: TK/sgr

10-25-83

A. ORIGINATOR: *[Signature]*DATE 10/26/83B. DESIGN REPRESENTATIVE: *[Signature]*DATE 10/26/83C. DESIGN REVIEW PRIOR TO ISSUE: *[Signature]*DATE 10-29-836. VENDOR RELATED CHANGE XX NO      YES: P.O. NUMBER     7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1) Mark Welch-QA Spec. Spvr. (1)
QUALITY ENGINEERING	(1) Civil Engineering (1)
DCTG FOR ORIG. DESIGN	(1)

DCA FORM 9-83

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JAN 18 1984

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PAGE 1 OF 1

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (~~XXXXXX~~) BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 19,126 R.1

1. SAFETY RELATED DOCUMENT: XX YES      NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER     3. DESCRIPTION:A. APPLICABLE SPEC/~~CHG/DOCUMENT~~ 2323-AS-31REV. 1B. DETAILS THIS REVISION VOIDS & SUPERSEDES DCA 19,126 Rev. 0.

Revise section 7.0 paragraph b, subsection 2 as follows:

Item 1 - Change second statement to state: "Remove rust and provide a cleaned roughened surface by use of abrasive blasting or power tooling as required by the coating manufacturer."

Item 2 - Change third statement to state: "Roughen and taper (feather edge) adjacent undamaged coatings by hand or power sanding a sufficient amount to ensure a smooth continuous final coating system."

4. SUPPORTING DOCUMENTATION:35-1195  
RECEIVED5. APPROVAL SIGNATURES: MW/bwbJAN 20 1984  
1-17-84A. ORIGINATOR: Mark WelchDOCUMENT CONTROL 24B. DESIGN REPRESENTATIVE: P.M. B. B.DATE 1-13-84C. DESIGN REVIEW PRIOR TO ISSUE: P. J. B.DATE 1-20-846. VENDOR RELATED CHANGE XX NO      YES: P.O. NUMBER     7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1)	Mark Welch-QA Spec. Spvr.	(1)
QUALITY ENGINEERING	(1)	Civil Engineering	(1)
DCG FOR ORIG. DESIGN	(1)	B.K. Bhujang-Civil/Structural	
Westinghouse	(1)	Design Review Group	(1)

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Tyco (2) SPEC

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PAGE 1 OF 1

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WILL) ~~XXXXXX~~ BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 19,409

1. SAFETY RELATED DOCUMENT: XX YES      NO

2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER     

3. DESCRIPTION:

A. APPLICABLE SPEC/~~DWG/DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS PROBLEM: The current wording of the specification states:

Par. 1.1.b "Exposed steel surfaces rendered inaccessible after shop assembly shall not require field protective coating in most cases". There is no provision for similar problems on concrete surfaces.

SOLUTION: Change sentence to read "Exposed surfaces rendered inaccessible after shop assembly, or during construction, shall not require field protective coating application in most cases".

4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: TK/bwb

12-12-83

A. ORIGINATOR: [Signature]

DATE 12-12-83

B. DESIGN REPRESENTATIVE: [Signature]

DATE 12-13-83

C. DESIGN REVIEW PRIOR TO ISSUE: [Signature]

DATE 12-14-83

6. VENDOR RELATED CHANGE XX NO      YES: P.O. NUMBER     

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)  
QUALITY ENGINEERING  
DCTG FOR ORIG. DESIGN  
Washington

(1) Mark Welch-OA Spec. Spvr. (1)  
(1) Civil Engineering (1)  
(1) B.K. Bhujang-Civil/Structural  
(1) Design Review Group (1)

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PAGE 1 OF 2

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~WILL~~ ~~NOT~~ BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 19,622

1. SAFETY RELATED DOCUMENT: yy YES      NO2. ORIGINATOR: CPPE yy ORIGINAL DESIGNER     3. DESCRIPTION:A. APPLICABLE SPEC/ ~~WILL~~ ~~NOT~~ 2323-AS-31 REV. 1B. DETAILS Appendix D of the above applicable specification, item 8-Dry  
Spray, revise the note, following appearance, as follows: Appearance - sand-  
like or dust-like surface texture on the surface, minor amount of adherent  
dry-spray acceptable on final finish coat.See Page 2 of 2.25 JAN 1984  
RECEIVED4. SUPPORTING DOCUMENTATION:

JAN 25 1984

## DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/bwb

1-17-84

A. ORIGINATOR: Mark Wells DATE 1-17-84B. DESIGN REPRESENTATIVE: R.M. Kissinger DATE 1-17-84C. DESIGN REVIEW PRIOR TO ISSUE: Bruce L. Ambach DATE 1-23-846. VENDOR RELATED CHANGE yy NO      YES: P.O. NUMBER     7. STANDARD DISTRIBUTION:ARMS (ORIGINAL)  
QUALITY ENGINEERING  
DCRG FOR ORIG. DESIGN  
Westinghouse

(1)

(1)

(1)

Mark Welch-QA Spec. Spvr. (1)  
Civil Engineering (1)  
B.K. Bhujang-Civil/Structural  
Design Review Group (1)

DCA FORM 9-83

**carboline.**

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TELEX 44-7332

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December 2, 1983

Mr. Tom Kelly  
Ebasco  
10175 Richmond Avenue  
Houston, Texas 77042

Subject: Decontaminable Finish Coats Over Carbo Zinc 11

Reference: This letter supercedes November 30, 1983 letter.

Dear Tom:

Please be advised that Carbo Zinc 11, by itself, is decontaminable. Any topcoat which provides a smoother surface will render the substrate even more decontaminable. Some materials perform this function better than others. As you are aware, both Carboline 191HB and Phenoline 305 have both been tested for decontaminability and were found to be suitable for that purpose. Irregularities such as orange peel or dryspray result in a duller finish and, from an aesthetic viewpoint, may be less desirable. The ability to seal the zinc primer is what is important to make decontamination easier. As long as the coating is applied so that it has sealed the primer, the surface is decontaminable. Hope this information helps.

Best regards,

*Steven J. Harrison*

Steven J. Harrison  
Power Industry Specialist

mkm/1/616

Kelly/113083

cc: Mr. Charles Rushing/Mr. Seymour Fiebach/  
Mr. Dan McBride/Mr. Paul Litzsinger

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(WILL NOT)~~ BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 10 104

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/~~DESIGN DOCUMENT~~ 2323-AS-31 R.V. 1B. DETAILS PROBLEM: There is no guidance in the specification for coating or not coating machined surfaces or lubricated surfaces.SOLUTION: Add to paragraph 1.2b12. Machined surfaces13. Lubricated surfaces25-1195  
RECEIVED

FEB 02 1984

DOCUMENT CONTROL

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES:

TK/bwb

1-27-84

A. ORIGINATOR: [Signature] DATE 1/27/84B. DESIGN REPRESENTATIVE: [Signature] DATE 1-27-84C. DESIGN REVIEW PRIOR TO ISSUE: P. J. [Signature] DATE 2-01-84

6. VENDOR RELATED CHANGE:
- XX
- NO
- 
- YES: P. O. NUMBER:
- 

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL) (1)  
QUALITY ENGINEERING (1)  
DCTG FOR ORIG. DESIGN (1)  
WESTINGHOUSE (1)Mark Welch-QA Spec. Svcr. (1)  
Civil Engineering (1)  
B.K. Bhujang-Civil/Structural (1)  
Design Review Group (1)

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MAR 01 1984

GIBBS & HILL, INC.

SPEC TUGCO(2)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

Page 1 of 1

(WHICH MAY BE INCORPORATED IN DESIGN DOCUMENT)

DCA NO. 19,707

1. SAFETY RELATED DOCUMENT: ☒ YES ☐ NO

2. ORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 REV. 1

B. DETAILS Due to construction activities, the protective coatings on the top of the polar crane support girders has been damaged or worn in areas exposing primer and substrate. Grease and oil have impregnated the exposed inorganic zinc primer and onto substrate in areas. Steam cleaning and blasting the surface to reapply the protective coating system is not practical due to possible damage to equipment and components from the cleaning operations. Request clarification on coating requirements.

SOLUTION: The top of the polar crane support girders shall not require additional topcoat application, but as a minimum, all exposed substrate shall receive primer application with inorganic zinc primer in accordance with the above applicable specification. Thickness of primer shall be as stipulated in Construction Procedure CCP 30.

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES:

MM/bb

DOCUMENT CONTROL

12-84

A. ORIGINATOR: Mark Nelson-DA DATE 12-84

B. DESIGN REPRESENTATIVE: Mark Nelson-DA DATE 12-84

C. DESIGN REVIEW PRIOR TO ISSUE: Mark Nelson-DA DATE 12-84

6. VENDOR RELATED CHANGE: ☒ NO ☐ YES: P. O. NUMBER:                     

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1)	Mark Nelson-DA	(1)
QUALITY ENGINEERING	(1)	Civil Engineering	(1)
OCTG FOR ORIG. DESIGN	(1)	Design Review	(1)
WESTINGHOUSE	(1)		

END PAGE 1-1

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~(WILL)~~ BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 19.8121. SAFETY RELATED DOCUMENT: XX YES        NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER       

3. DESCRIPTION:

A. APPLICABLE SPEC/ ~~DESIGN DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS PROBLEM: There is a lack of clarity in paragraph 9.2.2 as written.

SOLUTION: Rewrite paragraph 9.2.2 as follows:

9.2.2 Adhesion Test

9.2.2.1 Adhesion testing shall be required for the following:

(a) All painted concrete surfaces -- One test every 1,000 square foot for the first 10,000 square feet of concrete coating.

Additional testing on concrete shall be performed only as directed by engineer or owner.

(b) All vendor-applied shop-primed equipment shall be tested prior to receiving topcoat.

(Continued on Page 2)

4. SUPPORTING DOCUMENTATION:

5. APPROVAL SIGNATURES: TK/bb

A. ORIGINATOR:

B. DESIGN REPRESENTATIVE:

C. DESIGN REVIEW PRIOR TO ISSUE:

6. VENDOR RELATED CHANGE: XX NO        YES: P. O. NUMBER:       

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1)	Mark Welch-OA	(1)
QUALITY ENGINEERING	(1)	Civil Engineering	(1)
DCTG FOR ORIG. DESIGN	(1)	Design Review	(1)
WESTINGHOUSE	(1)		

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MAR 02 1984

GIBBS &amp; HILL, Inc.

VOID

35-1195

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MAR 02 1984

DOCUMENT CONTROL

3-2-84

DATE

DATE

DATE

Equipment primed with materials as noted in Table A-2 shall be exempt from this test only when documentation certifying proper material and application per ANSI N101.4 is provided by the vendor.

(c) As directed by owner or engineer.

9.2.2.2 The number of tests to be performed on vendor primed equipment shall be:

(a) For large areas of single component equipment - one test per 500 square feet

(b) For equipment with several components

(1) From 1-10 items - Test 20 percent

(2) Over 10 items - Test 10 percent

9.2.2.3 The following test methods shall be used:

(a) For equipment and surfaces inside the containment (or to be installed inside the containment) and which receive coating materials as noted in Table A-2 the Elcometer 106 Adhesion Tester shall be used in accordance with the recommendations of the manufacturer of the instrument. Five dollies (surface area permitting) tested to 250 pounds, four of which meet 250 pounds, constitute as acceptable test.

(b) For equipment outside containment ASTM D3359-78 test method (results 5A and 4A) are acceptable or other test methods listed in ASTM D01.43 Table A5A-8 as directed by owner may be used.

9.2.2.4 As adhesion tests are destructive, repair to damage coating shall be done in accordance with coating manufacturers recommendations.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~BE~~ INCORPORATED IN DESIGN DOCUMENT

DCA NO. 19,943

1. SAFETY RELATED DOCUMENT: XX YES        NO2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER       

3. DESCRIPTION:

A. APPLICABLE SPEC/~~ONLY DOCUMENT~~ 2323-AS-31 REV. 1B. DETAILS One time deviation to allow coating of crane rails embedswith Carbozinc II top coated with Imperial 1201 finish coat. The embeds are  
located at EL. 860' and 905' of Unit I.**VOID**35-1195  
RECEIVED

MAR 07 1984

4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL

Imperial Test Report 553-81

5. APPROVAL SIGNATURES: TK/bb

2-24-84

A. ORIGINATOR: [Signature]DATE 2-24-84B. DESIGN REPRESENTATIVE: [Signature]DATE 2-24-84C. DESIGN REVIEW PRIOR TO ISSUE: [Signature]DATE 3-6-846. VENDOR RELATED CHANGE: XX NO        YES: P. O. NUMBER:       

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1)	Mark Welch-QA	(1)
QUALITY ENGINEERING	(1)	Civil Engineering	(1)
OCTG FOR ORIG. DESIGN	(1)	Design Review	(1)
WESTINGHOUSE	(1)		

MAR 06 1984

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CIBBS & HILL, Inc.

(WILL) (XXXXXX) BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 19,985

1. SAFETY RELATED DOCUMENT: XX YES      NO

2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER     

3. DESCRIPTION:

A. APPLICABLE SPEC/~~XXXXXX~~ 2323-AS-31 REV. 1

B. DETAILS In Section 7.0 paragraph b item 2 add the following "Major"/"Minor"  
defect criteria for repair of applied steel coatings: Minor Defects -  
Minor defects are defined as an area, either circular or linear which may extend  
to substrate, in which a 1/2" diameter circle cannot be completely inscribed at  
any point along the entire length. At a minimum, minor defects shall be repaired  
by blasting or abraiding, by hand or power any exposed steel substrate to ensure  
cleanliness equal to that required in the area which the defect exists. Existing  
surrounding coatings shall be abraided to remove any loose coatings or contaminants.  
At a minimum, topcoat shall then be applied at a thickness sufficient to ensure  
a smooth transition to existing surrounding coatings.

35-1195  
RECEIVED

4. SUPPORTING DOCUMENTATION:

VOID

MAR 06 1984

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: MW/bb

3-4-84

A. ORIGINATOR: Mark Welch DATE 3-4-84

B. DESIGN REPRESENTATIVE: RMK DATE 3-6-84

C. DESIGN REVIEW PRIOR TO ISSUE: NA DATE 3-6-84

6. VENDOR RELATED CHANGE: XX NO      YES: P. O. NUMBER:     

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1)	Mark Welch-QA	(1)
QUALITY ENGINEERING	(1)	Civil Engineering	(1)
DCTG FOR ORIG. DESIGN	(1)	Design Review	(1)
WESTINGHOUSE	(1)		

B. Details (cont.)

Major Defects - Major defects are defined as an area, either circular or linear which may extend to substrate, in which a  $1/2$ " diameter circle can be completely inscribed at some point along the entire length. Major defects shall be repaired by blasting or power tooling any exposed steel substrate to ensure cleanliness equal to that required in the area which the defect exists. Existing surrounding coatings shall be abraded to remove any loose coatings or contaminants. Replace coatings in the effected area as required, i.e., primer and/or finish, as required.

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MAR 06 1984

SPEC TUGCO(2)

Page 1 of 1

GIBBS & HILL Inc

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WILL) ~~(XXXXXX)~~ BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 10,006

1. SAFETY RELATED DOCUMENT: XX YES        NO

2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER       

3. DESCRIPTION:

A. APPLICABLE SPEC/~~DWG/DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS Item 1) Section 6.3 paragraph a states that all "Surfaces shall be clean, dry and free from cement splatter...". Concrete surfacer may be applied over "damp" concrete by the coating manufactures recommendations.  
Solution: Add the following 'Note' after Section 6.3 paragraph a: Concrete surfacer may be applied over "damp" concrete if allowed by the coating manufacturer, but at no time shall the surfacer be applied over free standing water.  
Item 2) In Section 9.2.3 paragraph b item 3, delete the requirement to correct "fish eyes" and "orange peel" in concrete surfacer. Justification - fish eyes or orange peel will not appear in concrete surfacer due to viscosity of the material and "trowling" during application.

35-1195  
RECEIVED

4. SUPPORTING DOCUMENTATION:

MAR 13 1984

DOCUMENT CONTROL

**VOID**

5. APPROVAL SIGNATURES: MW/bb

3-4-84

A. ORIGINATOR: Mark Welch DATE 3-4-84

B. DESIGN REPRESENTATIVE: RM Kissinger DATE 3-6-84

C. DESIGN REVIEW PRIOR TO ISSUE: NA DM Tuite DATE 3-13-84

6. VENDOR RELATED CHANGE: XX NO        YES: P. O. NUMBER:       

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1)	Mark Welch-QA	(1)
QUALITY ENGINEERING	(1)	Civil Engineering	(1)
OCTG FOR ORIG. DESIGN	(1)	Design Review	(1)
WESTINGHOUSE	(1)		

DCA FORM 9-23

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

(WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT

DCA NO. 20023

1. SAFETY RELATED DOCUMENT: XX YES        NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-As-31 REV. 1

B. DETAILS Due to problems concerning acceptable Elcometer 106 adhesion tester calibrations, provide one time deviation to section 9.2.2 allowing isolation of coatings which have failed due to adhesion loss, on the polar crane in Unit I Reactor Building, by other means as deemed necessary by the responsible Quality Control Engineer.

Alternate methods of isolation may be such as scraping suspect coatings back to tightly adherent coatings or other methods as deemed necessary by the Quality Engineer.

At a minimum isolated area shall exhibit sound tightly adherent coatings around the perimeter of the damaged area.

35-1195  
RECEIVED

MAR 07 1984

4. SUPPORTING DOCUMENTATION:

DOCUMENT CONTROL

**VOID**

5. APPROVAL SIGNATURES: MW/11r

3-7-84

A. ORIGINATOR: Mark Welch DATE 3-7-84B. DESIGN REPRESENTATIVE: R.M. King DATE 3-7-84C. DESIGN REVIEW PRIOR TO ISSUE: NA Snodgrass DATE 3-7-84

6. VENDOR RELATED CHANGE:
- XX
- NO
- 
- YES: P. O. NUMBER:
- 

7. STANDARD DISTRIBUTION:

ARMS (ORIGINAL)	(1)	Civil Engineering	(1)
QUALITY ENGINEERING	(1)	Mark Welch - QA Spec. Serv.	(1)
DCTG FOR ORIG. DESIGN	(1)	B.K. Bhujang - C/S Design Review Group	(1)
WESTINGHOUSE	(1)		

DESIGN/ENGINEERING  
CHANGE/DEVIATION REQUEST  
NUCLEAR SAFETY-RELATED ITEMS

Change/Deviation \_\_\_\_\_ G & H Job. No. 11-2323-001  
Requested By: O. B. Jones Originator Ref. No. PC-1  
G & H ☐ Client ☐ Field ☒ Change/Deviation Request No. 5-291  
Correspondence Requesting Change/Deviation \_\_\_\_\_

DESCRIPTION OF CHANGE/DEVIATION REQUESTED:

(see attached)

**VOID**

ENGINEERING JUSTIFICATION FOR ABOVE:

Resolve conflict between painting procedures in the subject specification and those in specification AS-31, Protective Coatings

CHANGE/DEVIATION REQUEST PREPARED BY: Keith Falk  
Title Chem. Engr. Date 7/1/77

DISCIPLINE JOB ENGINEER'S COMMENTS:

None

Is change-reportable under 10 CFR 50 Para. 55e. YES ☐ NO ☒

G & H Documents Affected: 2323-SS-14 Rev 3

Other Documents Affected: \_\_\_\_\_

CHANGE/DEVIATION REQUEST: Approved ☒ Not Approved ☐

INTERDISCIPLINE REVIEWS		
	Initials	Date
Structural		
Mech		
Elau		
QA		
Arch.	<u>NLG</u>	<u>7/6/77</u>

J.E. [Signature] Date 7/6/77

QA - Design Verification

Approved ☒ Not Approved ☐  
Design Review Eng. [Signature] Date 7/7/77

Project Manager: Approved ☒ Not Approved ☐ Signature [Signature] Date 7/7/77

How is Change/Deviation Implemented \_\_\_\_\_

Complete ☐ J.E. \_\_\_\_\_

Date \_\_\_\_\_

TUSI (DALLAS) - Approval TR A 7/7/77  
Responsible Engineer TR A 7/7/77  
Project Engineer CGG 7/7/77  
Project Manager LG 7/7/77

VENDOR ACCEPTANCE

Date \_\_\_\_\_

By \_\_\_\_\_ Title \_\_\_\_\_

Duly Authorized Representative of the Company

Revised June 27, 1977

Section 1.5: Add to list of specifications

2323-AS-31 Protective Coatings ✓

Section 4.6: Delete items b and c ✓

Section 9.2: Substitute the following:

✓ Primer materials, application and inspection shall be as stated in Specification 2323-AS-31.

Section 9.4: Substitute the following:

✓ Finish coat materials, application, and inspection shall be as stated in Specification 2323-AS-31.

Section 9.5: Delete this section

Section 9.6: Delete this section

Section 11.0: Change the last paragraph to read:

Quality assurance for protective coatings shall be in accordance with the requirements of Specification 2323-AS-31.

TEXAS UTILITIES SERVICES INC.

B & R DCC DIST.

TGH-5133

JOB NO. 35-1195

July 7, 1977

Mr. R. E. Hersperger  
Gibbs & Hill, Inc.  
393 Seventh Avenue  
New York, New York 10001

**R E C E I V E D**  
JUL 14 1977  
**R E C E I V E D**

COMANCHE PEAK STEAM ELECTRIC STATION  
DOCUMENT STATUS

REF: DE/CD-292 & 293  
FILE NO. 9410, 5214, 5217

DOOD	/
CHILDRENS	/
RUSSIAN	/
TILER	/
TUGBOY	140
LEH	/
TGH	14A
STAR	7/14
DE/CD	7/14

Dear Mr. Hersperger:

We have reviewed the following documents and have assigned them the following status:

Source	Drwg/Dwg#	Rev.	Title	Status
Telecopy G&H	DE/CD-292	-	Containment Liner Protective Coating Revisions	1
	DE/CD-293	-	Misc. Steel Protective Coating Revisions	1

Status No. Definition:

1. Approved
2. Approved Except As Noted on Attached
3. Not Approved - Correct and Resubmit per Attached Comments
4. For Information Only

Note: DE/CD-293 has a typographical error in revision for Section 9.2.b. "Texts" should read "Tests".

If you have any questions or comments, please contact this office.

Very truly yours,

*H. C. Schmidt*  
H. C. Schmidt  
Project Manager-Nuclear Plants

HCS/JRA:skt  
cc: H. C. Dodd 2c,2A  
J. T. Merritt 2c,2A

DESIGN/ENGINEERING  
CHANGE/DEVIATION REQUEST  
NUCLEAR SAFETY-RELATED ITEMS

Change/Deviation \_\_\_\_\_ G & H Job. No. 11-2323-001  
Requested By: O. B. Jones Originator Ref. No. PC-2  
G & H ☐ Client ☐ Field ☒ Change/Deviation Request No. 5-292  
Correspondence Requesting Change/Deviation \_\_\_\_\_

DESCRIPTION OF CHANGE/DEVIATION REQUESTED:

(see attached)

ENGINEERING JUSTIFICATION FOR ABOVE:

Resolve conflict between painting procedures in the subject specification and those in Specification 2323-AS-31, Protective Coatings

CHANGE/DEVIATION REQUEST PREPARED BY: Keith Falk  
Title Chem. Engr. Date 7/1/77

DISCIPLINE JOB ENGINEER'S COMMENTS:

None

Is change-reportable under 10 CFR 50 Para. 55e. YES ☐ NO ☒

G & H Documents Affected: 2323-SS-17 Rev1

Other Documents Affected: \_\_\_\_\_

CHANGE/DEVIATION REQUEST: Approved ☒ Not Approved ☐

INTERDISCIPLINE REVIEWS		
	Initials	Date
Structural		
Mech		
Elctr		
QA		
Arch.	NLG	7/6/77

J.E. [Signature] Date 7/6/77

QA - Design Verification

Approved ☒ Not Approved ☐  
Design Review Eng. A.F. Caputo Date 7/7/77

Project Manager: Approved ☒ Not Approved ☐ Signature [Signature] Date 7/7/77

How is Change/Deviation Implemented \_\_\_\_\_

Complete ☐ J.E. \_\_\_\_\_ Date \_\_\_\_\_

TUSI (DALLAS) - Approval TCH - 7/7/77

Responsible Engineer TCH 7/7/77

Date

Project Engineer TCH 7/7/77

Date

Project Manager TCH 7/7/77

Date

VENDOR ACCEPTANCE

Date \_\_\_\_\_

By \_\_\_\_\_

Title

Duly Authorized Representative of the Company

Revised June 23, 1977

Section 3.3: Delete the following:

- ✓ ANSI N 101.4 Quality Assurance for Protective Coatings Applied to Nuclear Facilities

Section 8.1.2.C: Revise to say the following:

- ✓ Application of the shop coat (primer) shall be in strict accordance with the coating manufacturer's instruction and shall conform to the requirements of Specification 2323-AS-31

✓ Section 8.1.2d: Delete this section

✓ Section 8.1.2e: Delete this section

✓ Section 8.2.1: Replace with the following:

Miscellaneous steel surface in the Reactor Building internal structural shall be cleaned, and have surface preparation in accordance with Specification 2323-AS-31.

Section 8.2.2: Replace with the following:

- ✓ The shop coat (primer) on miscellaneous steel in the Reactor Building internal structures shall be in accordance with Specification 2323-AS-31.

✓ Section 8.2.3: Replace with the following:

The finish coat on miscellaneous steel in the Reactor Building internal structures shall be in accordance with Specification 2323-AS-31.

Section 8.3.1: Replace with the following:

- ✓ Miscellaneous steel surfaces for all structure other than the Reactor building shall be cleaned and have surface preparation in accordance with Specification 2323-AS-31.

Section 8.3.2: Replace with the following:

- ✓ The shop coat (primer) for all structures other than the Reactor Building shall be in accordance with Specification 2323-AS-31.

Section 9.2b: Replace with the following:

- ✓ Tests and inspections for protective coatings shall be in accordance with Specification 2323-AS-31.

Section 10.1: See DCDD No. 255.

NUCLEAR SAFETY-RELATED ITEMS

Change/Deviation \_\_\_\_\_ G & H Job. No. \_\_\_\_\_ DATE 11-2323-001  
 Requested By: \_\_\_\_\_ Originator Ref. No. PC-3  
 G & H ☐ Client ☒ Field ☐ Change/Deviation Request No. S-319  
 Correspondence Requesting Change/Deviation TGH-5134

DESCRIPTION OF CHANGE/DEVIATION REQUESTED:

Resolution and incorporation of the comments transmitted  
 by TGH-5134; see the attached.

JOB NO. 35-1195

ENGINEERING JUSTIFICATION FOR ABOVE:

Clarify certain items to allow for smoother interface  
 between Client/Engineer/Contractor.

CHANGE/DEVIATION REQUEST PREPARED BY: K. Falk  
 Title Chem. Engr. Date 8/2/77

DISCIPLINE JOB ENGINEER'S COMMENTS:

NONE

Is change-reportable under 10 CFR 50 Para. 55e. YES ☐ NO ☒

G & H Documents Affected: Specification 2323-AS-31

Other Documents Affected: \_\_\_\_\_

CHANGE/DEVIATION REQUEST: Approved ☒ Not Approved ☐

INTERDISCIPLINE REVIEWS		
	Initials	Date
Structural	<u>SMH</u>	<u>8-3-77</u>
Mech	_____	_____
Elau	_____	_____
QA	_____	_____
Arch.	<u>NLG</u>	<u>8/3/77</u>

J.E. John Chapak Date 8/3/77

QA - Design Verification

Approved ☒ Not Approved ☐  
 Design Review Eng. David Stanley Date 8/8/77

Project Manager: Approved ☒ Not Approved ☐ Signature P.L. Juveney Date 8/15/77

How is Change/Deviation Implemented \_\_\_\_\_

Complete ☐ J.E. \_\_\_\_\_

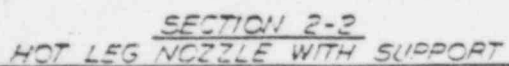
Date \_\_\_\_\_

USI (DALLAS) - Approval

VENDOR ACCEPTANCE

Responsible Engineer \_\_\_\_\_ Date \_\_\_\_\_  
 Project Engineer \_\_\_\_\_ Date \_\_\_\_\_  
 Project Manager \_\_\_\_\_ Date \_\_\_\_\_

Date \_\_\_\_\_  
 By \_\_\_\_\_ Title \_\_\_\_\_  
 Duly Authorized Representative of the Company  
 Revised June 23, 1977



SECTION 2-2  
HOT LEG NOZZLE WITH SUPPORT

SPEC, FILE, ARMS, LEH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 5002SAFETY RELATED DOCUMENT X YES NO1. DESCRIPTION:A. APPLICABLE SPEC ~~XXXXXX~~ 2323-AS-31 REV. 1

B. DETAILS In the Reactor Buildings 1 and 2, areas exist on electrical penetrations which cannot be coated per AS-31 standards. These areas, as shown on the attached sketch, are located on the outer pipe flange. Due to the flanges being machine surfaced, sandblasting is not permitted in removing the existing primer applied by the vendor. Please advise on corrective action to be taken concerning the coating criteria on the recessed flange areas.

SOLUTION: Prior to bolting the electrical penetration flanges together, the recessed areas shall be lightly hand sanded and topcoated with Carboline 305. Being that the primer/topcoat system is not a full "Q" system, final inspection will not be required. The exposed exterior electrical penetrations shall be governed by the AS-31 requirement.

FSE-001823. SIGNATURES: GDM/ss 6-21-79A. APPROVED BY: [Signature]

G&amp;H Representative

6-21-79  
DateB. APPROVED BY: [Signature]

Responsible Engineer

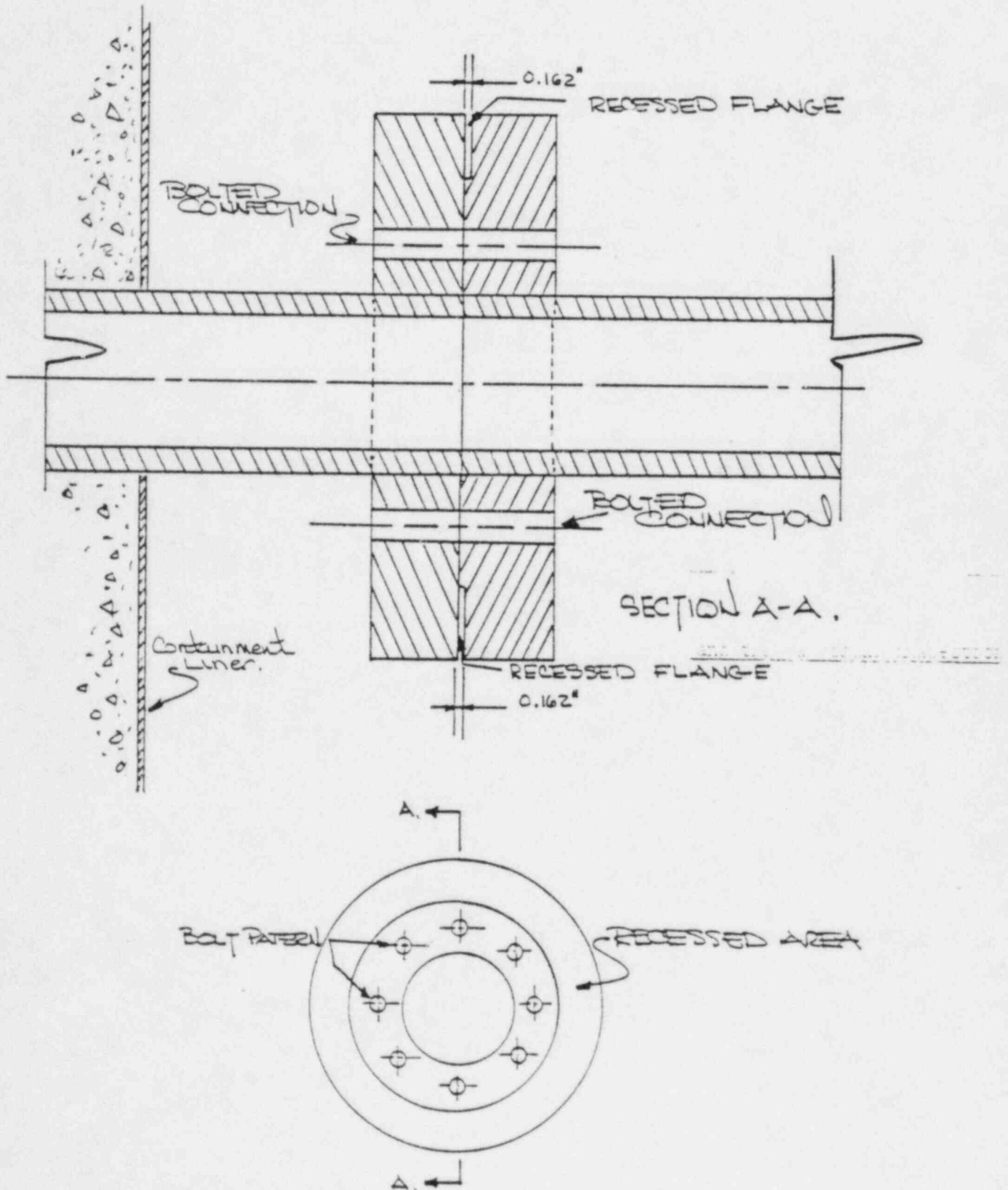
6-21-79  
Date**VOID**4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
G&H New York (1)  
G&H Dallas (1)  
TUGCO Site QA (1)  
B&R Site QA (1)  
FSDG Site (1)

JOB NO. 35-1195

RECEIVE  
JUN 25 1979  
RECEIVE

ELECTRICAL PENETRATION FLANGES.  
RB# 1.2.



spec, file, arms, leh, tugco

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONXXXXX (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 5092

SAFETY RELATED DOCUMENT ☒ YES ☐ NO1. DESCRIPTION:A. APPLICABLE SPEC/~~XXXX/DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS The equipment hatches located in Reactor Building #1 and #2, centerline elevation 838'-6", have floor grating brackets welded to the interior equipment hatch carbon steel surfaces. The brackets are welded in such a manner that areas exist between the two brackets and in bolt connection holes that cannot be coated per AS-31 standards. Request that these areas be considered inaccessible and void from final QA inspection.

SOLUTION: The solution as stated above is acceptable in deleting the final inspection on coating requirements for the areas indicated.

2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM/ss 7-3-79

A. APPROVED BY:

GGH Representative

Date

B. APPROVED BY:

Responsible Engineer

Date

4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
GGH New York (1)  
GGH Dallas (1)  
TUGCO Site QA (1)  
B&R Site QA (1)  
FSDG Site (1)

JOB NO. 35-1195

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JUL 06 1979  
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SPEC, FILE, ARMS, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION~~XXXX~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 5482SAFETY RELATED DOCUMENT X YES      NO1. DESCRIPTION:A. APPLICABLE SPEC ~~XXXXXXX~~ 2323-AS-31 REV. 1

B. DETAILS Areas exist on the steel liner behind the Permanent Containment  
Purge System ductwork from 950'-7" to 1069'-0", Azimuth 67° Reactor Building  
#1 and #2 which cannot be coated per AS-31 equipments due to removal of the  
dome stiffener plates by C.B.&I. Request clarification.

SOLUTION: Per Section 1.1b of AS-31, these areas shall be  
 considered inaccessible; however, in order to prevent corrosion, an attempt  
 will be made to repair and apply the prime and finish coats per AS-31 re-  
 quirements. No QC inspection will be required after application.

2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM/ss 8-27-79A. APPROVED BY: *R.B. Williams*

G&amp;H Representative

8-27-79  
DateB. APPROVED BY: *Gordon MacRae*

Originating engineer

8/27/79  
Date4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
 G&H New York (1)  
 G&H Dallas (1)  
 TUGCO Site QA (1)  
 FSDG Site (1)

JOB NO. 35-1103  
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 AUG 29 1979  
 RECEIVE

SPEC, FILE, ARMS, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 5504

SAFETY RELATED DOCUMENT ☒ YES ☐ NO

## 1. DESCRIPTION:

A. APPLICABLE SPEC/ ~~XXXXXX~~ 2523-AS-31 REV. 1

B. DETAILS Areas exist behind the name plates on the component cooling water drain tanks in Reactor Building #1 and #2, 808'-0" elevation which cannot be coated per AS-31 standards. Request that these areas behind the plates be void to final QA inspection.

SOLUTION: Due to the small area involved (roughly 2" - 4") these areas shall be void to inspection, however, in order to prevent future corrosion, an attempt will be made to apply a prime and finish coat to the above areas.

## 2. SUPPORTING DOCUMENTATION

**VOID**

## 3. SIGNATURES: GDM/ss 8-28-79

A. APPROVED BY: *P. E. Hines* 8-28-79  
G&H Representative Date

B. APPROVED BY: *Shadon W. R. [Signature]* 8/28/79  
Originating Engineer JOB NO. 35-1195 Date

## 4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
G&H New York (1)  
G&H Dallas (1)  
TUGCO Site QA (1)  
FSUG Site (1)

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AUG 29 1979  
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## FIGURE 1.

Page 1 of 1

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (~~WILL NOT~~) BE INCORPORATED IN DESIGN DOCUMENTS

DCA NO. 5510 Rev. 1

1. SAFETY RELATED DOCUMENT: ☒ YES ☐ NO2. ORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 3. DESCRIPTION:

A. APPLICABLE SPEC/~~2323-AS-31~~ 2323-AS-31 REV. Rev. 1

B. DETAILS This revision voids and supersedes DCA 5510 Rev. 0.

To allow for increased visibility during construction and operation, request  
the following areas be coated with 1201 white rather than 1201 grey:

Auxiliary Building El. 830' - 6", room 215, 211 and 217, Demineralizer

Pits; Auxiliary Building El. 852' - 6", room 235 openings to Demineralizer

Pits, room 234 openings to Filter Pits.

Solution: To allow for increased visibility in the listed areas, the  
above color deviation is acceptable.

## 4. SUPPORTING DOCUMENTATION:

**VOID**

## 5. APPROVAL SIGNATURES: MW:smb

August 17, 1981

A. ORIGINATOR: Mark Wells DATE 8/17/81B. DESIGN REPRESENTATIVE: RM Kissinger DATE 8-17-816. VENDOR TRANSMITTAL REQUIRED: YES ☐ NO ☒

## 7. STANDARD DISTRIBUTION:

DCA FORM 11-80

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design. (1)

JOB NO. 35-1195  
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AUG 18 1981  
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SPEC, FILE, ARMS, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 5975SAFETY RELATED DOCUMENT X YES NO1. DESCRIPTION:A. APPLICABLE SPEC/~~FIG/DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS Weld areas exist on the backside of the conduit hangers  
against the containment liner which cannot be coated under AS-31 requirements.  
These areas are between Azimuth 280°-284°, elevation 905'-0" to 1006'-0",  
Reactor Building #1. Request authorization to coat areas under AS-30  
condition.

SOLUTION: Due to the small areas involved, these areas  
will be repaired per AS-30. However, in order to prevent corrosion, an  
attempt will be made to apply a prime and finish coat to the weld areas.

2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM/ss 10-25-79A. APPROVED BY: RB Williams

G&amp;H Representative

10-25-79  
DateB. APPROVED BY: Weldon MacFarlane

Originating Engineer

10/25/79  
Date4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
 G&H New York (1)  
 G&H Dallas (1)  
 TUGCO Site QA (1)  
 FSUG Site (1)

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 OCT 21 1979  
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SPEC, FILE, ARMS, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONEXPLICITLY (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 6114

SAFETY RELATED DOCUMENT X YES    NO1. DESCRIPTION:A. APPLICABLE SPEC/~~DOC/DOC~~ 2323-AS-31 REV. 1

B. DETAILS During sandblasting of the eight (8) inspection  
chambers in Reactor Building No. 1, elevation 824'-0" to 832'-0",  
delaminations in the steel plate surfaces were exposed. Under AS-31  
requirements no delaminations are allowed and if found must be  
removed by hand or power tool grinding. Upon removal of delami-  
nations with power tools, the surface was completely sandblasted  
again in order to produce a surface profile on the power tooled  
areas. Each time sandblasting was completed additional delami-  
nations appeared on the steel plate surfaces.—Request that—  
clarification be given on this matter.

2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM/ss 11-15-79

A. APPROVED BY: *R.B. Williams* 11-15-79  
 G&H Representative Date

B. APPROVED BY: *Gordon MacFarlane* 11-15-79  
 Originating Engineer Date

4. STANDARD DISTRIBUTION:

B&R Field (Original) (1)  
 G&H New York (1)  
 G&H Dallas (1)  
 TUGCO Site QA (1)  
 FSDG Site (1)

JOB NO. 00-1107  
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Upon examination in the field of the inspection chambers, the following items were noticed:

- 1) In areas where the delaminations were removed by power tool grinding, exposed substrate were contaminated with oil or grease from the grinding equipment thus requiring a reblast regardless of delaminations.
- 2) Areas exist on the steel plate that when bolted to the existing steel cannot be decontaminated due to inaccessibility after placement.

Although the surface delaminations are numerous, the size limitations are very small as compared with the overall area of the inspection chambers. It is therefore recommended that "Q" inspection be deleted and that a visual inspection be given by the QC Department on the blast criteria with exception to delaminations. All other AS-31 guidelines shall be maintained including the minimum 200 psi requirement.

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION

CHANGE INDEX:OEI  
: II  
:III XX

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 6174 REV. 2

1. SAFETY RELATED DOCUMENT: XX YES NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER
3. DESCRIPTION:

**VOID**

- A. APPLICABLE SPEC/~~DESIGN~~ 2323-AS-31 REV. 1
- B. DETAILS "THIS REVISION VOIDS AND SUPERSEDES DCA 6174 REV. 1".

In Reactor Building 1 and 2, areas exist between the end of floor slabs and the containment liner plate that cannot be protectively coated per guidelines established in AS-31. There are also areas which exist between permanent equipment, duct work and the liner plate which the work area has limited amount of accessibility. Request clarification for coating requirements in these areas.

SOLUTION: Due to limited access, these areas in question, up to 12" max, shall be coated under AS-30 guidelines utilizing AS-31 specified coating. Coating in these areas shall be on a best effort basis. QC inspection shall not be required.

35-1155  
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4. SUPPORTING DOCUMENTATION:

MAY 10 1983

DOCUMENT CONTROL

5. APPROVAL SIGNATURES: GY/cw May 9, 1983
  - A. ORIGINATOR: *W. J. [Signature]* DATE 5-9-83
  - B. DESIGN REPRESENTATIVE: *CRHooton* DATE 5-10-83
6. VENDOR TRANSMITTAL REQUIRED: YES NO XX
7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION**VOID**(XXX) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 6230

SAFETY RELATED DOCUMENT X YES    NO1. DESCRIPTION:A. APPLICABLE SPEC/~~DOXXDOXXDOXX~~ 2323-AS-31 REV. 1

B. DETAILS An area exists in Containment Building #1 elevation 880'-885'-6", Azimuth 150° thru 210° in which the liner plate has received damage to the .inc primer in five (5) localized locations. Due to construction of the 885' slab, repair of the damaged primer is not possible due to long cure times involved prior to topcoat-ing which would hold up slab construction. Request that this area be seal coated with topcoat without repair to the damaged primer.

SOLUTION: Upon completion of the 885' slab between Azimuth 150° thru 210° the slab will be within 6" of the liner plate

(CONTINUED ON PAGE 2 of 2)

2. SUPPORTING DOCUMENTATION3. SIGNATURES: GDM/ss 12-6-79

A. APPROVED BY: R.B. Williams 12-6-79  
Gen Representative Date

B. APPROVED BY: Gordon MacHarg 12/6/79  
Originating Engineer Date

4. STANDARD DISTRIBUTION:

BSR Field (Original) (1)  
GCH New York (1)  
GCH Dallas (1)  
TUGCO Site (1)  
FSDG Site (1)

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causing the steel area behind the slab to be inaccessible to coating and QC inspection per AS-31 requirements. For this reason, it is of greater importance to neglect the minor inorganic zinc repair in order to topcoat the area that will be rendered inaccessible at a later date but maintain decontaminability, due to topcoat application at this time.

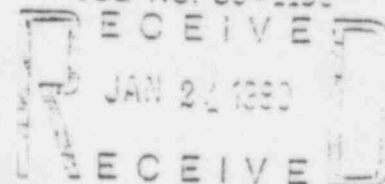
spec, file, arms, hah, tugco

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(XXXXX (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 6236SAFETY RELATED DOCUMENT X YES      NO     1. DESCRIPTION:A. APPLICABLE SPEC/~~ENR/DOCKENX~~ 2323-AS-31 REV. 1B. DETAILS In the Reactor Building, the Reactor Vessel head  
bolt racks CP1-FHSESR-01 thru 18 have imperfections in the steel  
substraight that cannot be blasted out thus violating AS-31  
SSPC-SP10 criteria.SOLUTION: After visual inspection of the eighteen  
bolt racks for Reactor Building #1, authorization is given de-  
leting these racks from Q inspection but that coating requirements  
per AS-31 remain.2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM/ss 12-6-79A. APPROVED BY: RB Williams 12-6-79  
G&H Representative DateB. APPROVED BY: Dodon MacHaire 12/6/79  
Originating Engineer Date4. STANDARD DISTRIBUTION:BCR Field (Original) (1)  
G&H New York (1)  
G&H Dallas (1)  
TUGCO Site QA (1)  
FOUS Site (1)

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION~~CHANGED~~ (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 6583SAFETY RELATED DOCUMENT X YES    NO1. DESCRIPTION:A. APPLICABLE SPEC/~~DOC/DOCUMENT~~ 2323-AS-31 REV. 1B. DETAILS Request authorization to topcoat zinc primed  
embeds in the pipe chase walls. Safeguards #2, elevation 810'-0".  
Room 82 with Grev #1201 topcoat.SOLUTION: Southern Imperials #1201 topcoat is  
recommended over steel with inorganic zinc primer. The proposed  
change is therefore acceptable as long as adhesion is obtained  
per AS-31 standards.2. SUPPORTING DOCUMENTATION**VOID**3. SIGNATURES: GDM/ss 1-3-80A. APPROVED BY: R. B. Williams 1-3-80  
G&H Representative DateB. APPROVED BY: London Mac Hail 1/3/80  
Originating Engineer Date4. STANDARD DISTRIBUTION:B&R Field (Original) (1)  
G&H New York (1)  
G&H Dallas (1)  
TUGCO Site QA (1)  
FSUG Site (1)JOB NO. 05-1105  
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JAN 03 1980  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (XXXXXX) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 6546SAFETY RELATED DOCUMENT X YES NO1. DESCRIPTION:A. APPLICABLE SPEC/ENG DOCUMENT 2323-AS-31 REV. 1B. DETAILS Request clarification on protective coating criteria for  
Rooms 263A Fuel Building elevation 832'-0" and Room 255 Auxiliary Building  
elevation 810'-6".SOLUTION: Due to the intended design of Room 263A, Spent  
Fuel Cask area, the room shall be protectively coated full height including  
the ceiling area. Drawing 2323-A1-0537 will be revised accordingly to in-  
corporate "Note 5".In Room 255 Auxiliary Building 810'-6" elevation, protective  
coatings shall be applied full height and carried up the shaft to meet the  
existing coating requirements called out in Room 255 Auxiliary Building elevation  
852'-6", designated in the Room Finish Schedule.2. SUPPORTING DOCUMENTATION3. SIGNATURES: GDM/ss 1-23-80A. APPROVED BY: RB Williams **VOID** 1-23-80  
GGH Representative Date  
B. APPROVED BY: Dan Matheson 1/23/80  
Originating Engineer Date4. STANDARD DISTRIBUTION:B&R Field (Original) (1)  
GGH New York (1)  
GGH Dallas (1)  
TUGCO Site QA (1)  
FSUG Site (1)

JOB NO. 05-1150



file, arms, hah, tugco, spec

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 6639

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 1. DESCRIPTION:

A. APPLICABLE SPEC/STANDARD ~~2323-AS-31~~ 2323-AS-31 REV. 1

B. DETAILS In Room 271 of the Fuel Building, areas exist on bolted connections which cannot be coated per AS-31 after erection of the 35 stainless steel storage racks. Request guidance on coating requirements for these bolted areas.

SOLUTION: The six support channels for the storage racks are bolted to the north and south walls with 1-3/8" and 1" diameter bolts with associated nuts and washers. Prior to placement of the 1-3/8" diameter bolts, nuts and washers the assemblies will be sandblasted at the shop and primed per AS-31 requirements. The smaller 1" diameter bolts, nuts and washers will be power tooled per AS-30 and primed with CZ11 prior to final erection. Once in place both sizes of bolts, nuts and washers will be topcoated with AS-31 coatings and void to final inspection.

## 2. SUPPORTING DOCUMENTATION

**VOID**

## 3. SIGNATURES: GDM/ss 2-7-80

A. APPROVED BY: *R. B. Williams* 2-7-80  
Design Representative DateB. APPROVED BY: *Donald V. Rice* 2-7-80  
Originator Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)

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HAR, TUGCO, SPEC, SPEC

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WXXX) (WILL NOT BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 7318

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER

## 1. DESCRIPTION:

A. APPLICABLE SPEC/~~XXX~~ ~~DOCUMENT~~ 2323-AS-30  
2323-AS-31 REV. 0B. DETAILS In room #51 of Safeguard Building Unit #1, a steel embed exists  
in the west wall directly behind a piece of electrical equipment that has  
been set. At the present time the embed has not been coated per AS-31  
guidelines as required by the room schedule. Due to limited access, request  
that this embed be deleted from O coating requirements.SOLUTION: The steel embed shall be deleted from O inspection per AS-31.  
The steel surface shall be prepared per AS-30 and primed with an inorganic  
zinc, topcoat application shall be that required to protect the primer from  
contamination as needed.

## 2. SUPPORTING DOCUMENTATION

3. SIGNATURES: GDM/dt 4/22/80

A. APPROVED BY: Jerry A. Allen **VOID** 4/23/80  
Design Representative DateB. APPROVED BY: Harold M. Allen 4/22/80  
Originator Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)

JOB NO. 35-1195

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APR 23 1980  
RECEIVED

SPEC, HAH, TUGCO

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(X) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTSAUTHORIZATION NO. 7506SAFETY RELATED DOCUMENT X YES NOORIGINATOR: CPPE X ORIGINAL DESIGNER       1. DESCRIPTION:A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-30 REV. 0  
2323-AS-31 1B. DETAILS Due to coating requirements in the rooms in which the waste decay tanks are mounted, Aux. Bldg. 852'-6" elevation, the exterior steel surface of the tanks tag # TBX-GHATGD-01 thru 010 shall be coated per AS-31 requirements up 6'-0" from the floor. The tanks above 6'-0" shall be coated under AS-30 guidelines; however, AS-31 coatings and color requirements and primer shall be maintained.**VOID**2. SUPPORTING DOCUMENTATION:3. SIGNATURES: GDM/dt 5/9/80A. APPROVED BY: [Signature] 5-12-80  
Design Representative DateB. APPROVED BY: CR Houston 5-12-80  
Originator Date4. STANDARD DISTRIBUTION:ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)JOB NO. 03-1107  
RECEIVED  
MAY 10 1980  
RECEIVED

spec, hah, tugco

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 7769

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 1. DESCRIPTION:

A. APPLICABLE SPEC/~~EXISTING~~ 2323-AS-31 REV. 1

B. DETAILS There are areas in Rooms 268 and 272 of the Fuel Bldg. which require coatings per AS-31. However, due to addition of electrical conduit and HVAC ductwork, these areas are neither coatable nor inspectable.

SOLUTION: Rooms 268 and 272 are Note 1 rooms. As such, AS-31 coatings are required only 6' up on the walls. In cases where HVAC ductwork is in close proximity to the walls, only coat behind the HVAC ductwork approx. 6" with AS-31 coatings. The remainder of the wall behind this ductwork should be considered inaccessible and therefore, not subject to coating. In cases where electrical conduit and equipment adjacent to the walls, coat with AS-31 materials on a "best effort" basis.

## 2. SUPPORTING DOCUMENTATION

**VOID**

3. SIGNATURES: JS/dt 6/9/80

A. APPROVED BY:

*Jerry A. Allen*  
Design Representative

6/9/80  
Date

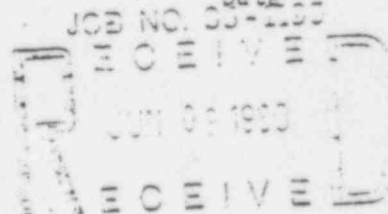
B. APPROVED BY:

*John D. Smith*  
Originator

9 June 80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)



COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WYXX) (WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 7789

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER

## 1. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT 2323-AS-31 R.V. 1

B. DETAILS Due to partial inaccessibility of concrete pad under 10 gas decay tanks in Auxiliary Bldg. El. 852'6" this area cannot be prepared and coated or inspected per AS-31 requirements.

SOLUTION: These pad areas, the interior faces of the tank skirts, and the tank bottoms are to be coated with AS-31 materials in accordance with manufacturers written instructions. However, QC final inspection is waived.

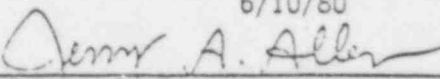
## 2. SUPPORTING DOCUMENTATION

**VOID**

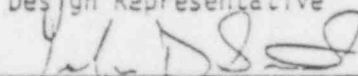
## 3. SIGNATURES: JS/dt

6/10/80

A. APPROVED BY:

  
Design Representative10 June 80  
Date

B. APPROVED BY:

  
Originator12 June 80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)JOB NO. 35-1195  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL NOT) BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 7825

SAFETY RELATED DOCUMENT ☒ YES ☐ NOORIGINATOR: CPPE ☒ ORIGINAL DESIGNER ☐

## 1. DESCRIPTION:

A. APPLICABLE SPEC/~~DESIGN DOCUMENT~~ AS-31 REV. 1

B. DETAILS The nuts and bolts at the flange connections on, the Spent Fuel Pool Cooling Heat Exchangers, equipment #'s CPX-SFAHSP-01 and 0-2 have not been primed. Due to inaccessibility of some surfaces, surface preparation and coating of these nuts and bolts, per AS-31 is not possible at this time.

SOLUTION: The total surface area in question is relatively small. These nuts and bolts shall be removed from the scope of work of AS-31 and included in AS-30. All surface preparation and coating to be done to AS-30 requirements. Top coat, however, will be that material specified in AS-31 for this area.

## 2. SUPPORTING DOCUMENTATION

**VOID**

3. SIGNATURES: JDS/dt 6/16/80

A. APPROVED BY: James A. Allen  
Design Representative16 June 80  
DateB. APPROVED BY: John D. Smith  
Originator16 June 80  
Date

## 4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)

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RECEIVE  
JUN 17 1980  
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COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATIONCHANGE INDEX: OEI \_\_\_\_\_  
: II \_\_\_\_\_  
: III XX

(WILL) (WILL NOT) BE INCORPORATED IN DESIGN DOCUMENT DCA NO. 7859 Rev. 3

1. SAFETY RELATED DOCUMENT: XX YES      NO
2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER \_\_\_\_\_
3. DESCRIPTION:

A. APPLICABLE SPEC/DWG/DOCUMENT \_\_\_\_\_ 2323-AS-31 \_\_\_\_\_ REV. 1

B. DETAILS THIS REVISION VOIDS AND SUPERSEDES DCA-7859 Rev. 2.

There are numerous steel items in Room 153 of Reactor Building Unit 1 that, due to considerable congestion in the room, should be declared inaccessible per paragraph 1.1b of AS-31 for coating repair. These items include handrail, platforms, supports, ladder and embeds. Sandblasting and coating is not possible under AS-31 requirements due to possible damage to surrounding equipment.

SOLUTION: In room 153 coating operations on installed steel items shall be performed under AS-30 guidelines utilizing AS-31 specified coatings. QC inspections for coating operations on installed steel items in Room 153 shall be waived.

4. SUPPORTING DOCUMENTATION:

**VOID**

JOB NO. 87-1195

RECEIVED

DEC 16 1982

RECEIVED

5. APPROVAL SIGNATURES: MW/sgf 12-16-82  
A. ORIGINATOR: Mark Wells DATE 12-16-82  
B. DESIGN REPRESENTATIVE: CR Horton DATE 12-16-82
6. VENDOR TRANSMITTAL REQUIRED: YES      NO XX
7. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
TS for Orig. Design (1)  
Westinghouse-Site (1)  
Civil Engineering (1)

DCA FORM 11-80  
Admin. Rev 7-82

COMANCHE PEAK STEAM ELECTRIC STATION  
DESIGN CHANGE AUTHORIZATION(WILL) ~~XXXXXXXXXX~~ BE INCORPORATED  
IN DESIGN DOCUMENTS

AUTHORIZATION NO. 7864

SAFETY RELATED DOCUMENT X YES      NOORIGINATOR: CPPE X ORIGINAL DESIGNER     1. DESCRIPTION:A. APPLICABLE SPEC ~~XXXX/DOCUMENT~~ 2323-AS-31 REV. 1

B. DETAILS There exists, areas of steel substrate on the containment side of the Personnel Air-Lock at El. 832' that are inaccessible for proper surface preparation and coating as required by Spec. AS-31. These areas include the door hinges and areas behind hydraulic and electrical equipment as well as some other small areas which cannot be adequately protected from damage. Request that these areas be deleted from the AS-31 scope of work. SOLUTION: Due to the inaccessibility of these areas for proper surface preparation and coating and due to the high cost of disassembly of the hydraulic and electrical equipment as well as the possible warranty problems arising because of sand or other abrasive materials contaminating and for damaging bearings.

(cont'd on page 2 of 2)

2. SUPPORTING DOCUMENTATION3. SIGNATURES: JDS/dt

6/18/80

A. APPROVED BY: *James A. Allen*

Design Representative

Date

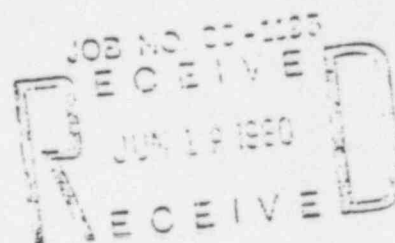
B. APPROVED BY: *John Del...*

Originator

Date

4. STANDARD DISTRIBUTION:

ARMS (Original) (1)  
Quality Engineering (1)  
Original Designer (if CPPE originated) (1)



and electrical or hydraulic components, approval is hereby granted to remove the inaccessible areas of the Personnel Air-Lock from the requirements of AS-31 per para. 1.1B of AD-31. However, the surfaces in question will be cleaned and coated on a "best effort" basis with AS-31 specified materials. QC to monitor ambient conditions, application procedures, and curing requirements. QC inspection of surface preparation and final acceptance is not required.

**BBS & Hill, Inc.**  
ENGINEERS DESIGNERS CONSTRUCTORS

JOB NO. 35-1195

**R E C E I V E**  
**R E C E I V E**

APR 24 1978

April 18, 1978

DIRECT DIAL EXTENSION  
(212) 760-4450

GTN-26194

Texas Utilities Generating Company  
2001 Bryan Tower  
Dallas, Texas 75201

Attention: Mr. E. G. Gibson,  
Project Engineer

Gentlemen:

TEXAS UTILITIES GENERATING COMPANY  
COMANCHE PEAK STEAM ELECTRIC STATION  
1981-83 - 2300 MW INSTALLATION  
G&H PROJECT NO. 2323  
05277 PROTECTIVE COATINGS  
SPECIFICATION NO. 2323-AS-31  
REF: DAIM 322

B & R DCC DIST.

PROJECT MGR.	1
PROJECT ENGR.	2
QA MGR.	1
PROJECT CONT. ENGR.	1
TUCCO QA	1
PROJECT GEN. MGR.	1
ARMS	1
SAP/SPEC	1
GTN	1

By copy of this letter to Brown & Root, Plantsite, we are forwarding ten (10) copies of Specification 2323-AS-31 "Protective Coatings" Revision 1, dated March 15, 1978, for construction.

The following DC/DDA's have been incorporated into the above revision of the specification which has been design reviewed:

DC/DDA - 588, 667, 694, 732, 733, 877, 882, 887, 893, 907, 964, 1011, 1012, 1028, 1313, 941, 1318, 1460

In addition, the following documents have been considered and incorporated as applicable:

TUF - 3865, 4102, 4300, 4192, 4188, 4180, 4160  
GHF - 2097, 2230  
TWX - 1094, 1241, 1060

GTN-26194

-2-

April 18, 1978

Texas Utilities Generating Company

GTT - 1735, 1925

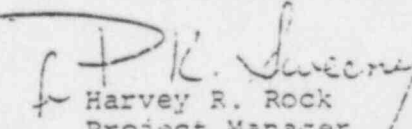
Telecon - 1/9/78 (JXC/So. Imperial)  
1/9/78 (KF/O. B. Jones)  
1/19/78 (JXC/So. Imperial)

Carboline Telex dated 10/3/77

GTN-22679

Very truly yours,

GIBBS & HILL, Inc.

  
Harvey R. Rock  
Project Manager

*nlc*  
HRR-NLG-KF:smm  
1 Copy + 6A

cc: ARMS (B&R Site) - Orig. L + 10A  
J. C. Kuykendall (TUGCO Site) - 1L, 1A  
J. T. Merritt (TUSI Site) - 2L, 1A  
L. A. Ashley (B&R Houston) - 1L, 1A  
J. R. Ainsworth (TUSI NY) - 1L  
R. E. Holloway (G&H Dallas) - 2L, 2A

TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK STEAM ELECTRIC STATION  
SAFETY RELATED EQUIPMENT  
SPECIFICATION - PSAR CONFORMANCE RECORD

SPECIFICATION NO. 2323-AS-31 Revision 1  
EQUIPMENT PROTECTIVE COATINGS

TUSI REFERENCE NO. 05277  
DATE: March 15, 1978

SPECIFICATION CONFORMANCE:

YES

X

NO

SPECIFICATION NONCONFORMANCE:

PSAR SECTION APPLICABLE: 6.2

PAGE AFFECTED:

TABLE AFFECTED:

FIGURE AFFECTED:

JUSTIFICATION:

REFERENCES: See previous PSAR conformance records

PSAR CHANGE PROVIDED IN AMENDMENT NO:

DATE:

G&H	APPROVED BY					
	ORIGINATOR	DATE	SUPERVISOR	DATE	PROJECT MANAGER	DATE
	<i>J. Felt</i>	<i>4/12/78</i>	<i>Julius K. H. H.</i>	<i>4/12/78</i>	<i>P. J. H.</i>	<i>4/12/78</i>
TUSI	APPROVED BY					
		DATE		DATE		DATE

CPSES NRC TRT

SSER - COATINGS 4

WORK PACKAGE

VOL XIII OF XIII

2323-AS-31

FOIA-85-59

A/66