

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:)	
)	
TEXAS UTILITIES ELECTRIC)	Dockets Nos. 50-445 and
COMPANY, <u>et al.</u>)	50-446
)	
(Comanche Peak Steam Electric)	(Application for
Station, Units 1 and 2))	Operating License)

AFFIDAVIT OF C. THOMAS BRANDT
REGARDING NEAR WHITE BLAST

My name is C. Thomas Brandt. I reside in Ft. Worth, Texas. I am employed by Ebasco Services, Inc. at Comanche Peak Steam Electric Station. A statement of my educational and professional qualifications has been received in evidence as an attachment to Applicants' Exhibit 141.

This affidavit addresses Applicants' construction and quality procedures regarding the near-white blast criterion for steel surface preparation. In testimony before the Board, Robert Hamilton alleged that in September or October, 1981, Applicants changed the Comanche Peak procedures that require near-white blast steel surface preparation (CASE Ex. 653 at 15). In response, Applicants submitted copies of the Comanche Peak Construction Procedure, CCP-30, "Coating Steel Substrates Inside Reactor Building and Radiation Areas," Section 4.1.1, and the relevant QA/QC procedure, QI-QP-

11.4-1, "Inspection of Steel Substrate Surface Preparation,"
Section 3.3.2.c.

The Board concluded that Applicants' reference to CCP-30 did not completely address the question, because the procedure was Revision 10, dated January 26, 1982. The Board found that Applicants had not addressed Mr. Hamilton's allegation for the period between September or October, 1981, (when, Mr. Hamilton believed, that the procedures were changed), and January 26, 1982, when Revision 10 to the construction procedures went into effect.

Attached to this affidavit (Attachment A) are copies of the following revisions to CCP-30, "Coating Steel Substrates Inside Reactor Building and Radiation Areas," Section 4.1.1:

Revision 7	Effective 5/7/81
Revision 8	Effective 10/22/81
Revision 9	Effective 11/4/81
Revision 10	Effective 1/26/82

In each revision, Section 4.1.1 of the construction procedures, which governs the preparation of steel substrate surface, is identical. Specifically, each revision provides:

The surface shall then be cleaned by blast, hand or power tool operations to achieve an equivalent of SSPC-SP10-63, "near white" blast cleaning.

At no time during 1981 or 1982 was the near-white blast standard removed from the Comanche Peak construction procedures. Indeed, the near-white blast standard for steel

surface preparation was incorporated in the procedures in 1977 and is in the most current procedures (as of May, 1984). Prior to 1977, the construction procedures required that steel substrate be prepared to a "white metal blast cleaning" condition, as defined by SSPC-SP-5.

Also attached to this affidavit (Attachment B) are copies of those provisions of QI-QP-11.4-1, "Inspection of Steel Substrate Surface Preparation and Primer Application," that governed the inspection of steel substrate surfaces after preparation by blasting or power tooling (in Revisions 3 and 4, the relevant section is 3.3.2; in all subsequent revisions the section is 3.2.2):

Revision 3	Issued 5/29/81
Revision 4	Issued 10/23/81
Revision 5	Issued 10/27/81
Revision 6	Issued 11/10/81
Revision 7	Issued 12/2/81
Revision 8	Issued 6/11/82

As the attachments show, Applicants did not change these quality instructions as to the "near white blast" standard in late 1981, as Mr. Hamilton alleged. The "near white blast" inspection standard for steel substrate surface preparation has been included in Applicants' quality instructions since 1977.

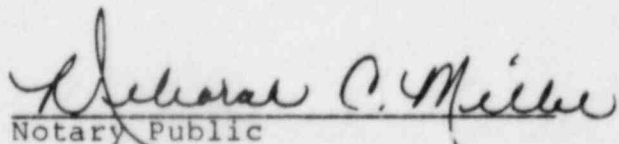
The Board's October 25, 1983 Memorandum and Order in this proceeding (at 8) concluded that Applicants could not

rely on Section 4.1.1 of then-current CCP-30, because the copy of the procedure before the Board was Revision 10, dated January 26, 1982. The Board apparently concluded that Section 4.1.1 itself had been amended on January 26, 1982. The only reason that Applicants submitted Revision 10 of CCP-30 to the Board was that it was the procedure in effect at the time that Mr. Hamilton left his employment at Comanche Peak.

Applicants revise the Comanche Peak construction and inspection procedures from time to time. When a set of procedures is revised, each page of the procedure in question is given a new revision number and a new effective or issue date, to ensure uniformity. When a given page of procedures is given a new revision number and effective or issue date, that does not necessarily mean that the procedure on that page has been changed. In this case, for example, as a comparison to Revisions 7, 8 and 9 shows, Section 4.1.1 of CCP-30 remained identical during the relevant period with respect to the near-white blast criterion.


C. Thomas Brandt

Subscribed and sworn to before me this 7th day of May, 1984.


Notary Public

My Commission Expires February 14, 1988

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a "first-in", "first-out" basis. After materials have been partially used from an individual container, the said container cannot be resealed and returned to "Q" storage area for later use. Containers opened and partially distributed from the "Q" paint storage area may be resealed and the remaining contents used for "Q" painting. The contents from partially used containers shall not be reused after a period of 7 days has elapsed from date of initial opening.

3.6 SPECIAL COATING PROCEDURE

3.6.1 When items require special coating not covered under the content of this document, the appropriate Project Engineer (Mechanical, Civil, Electrical) shall complete Attachment 2 and transmit it to the Paint Superintendent. A log of all procedures from Attachment 2 shall be maintained by the Site Coating Engineer. The following information shall be completed on each procedure.

3.6.2 Each procedure shall be given an unique number. The scope will describe the working limits of the procedure with detailed work requirements being listed under the requirements section. The approvals section shall have signatures of the following: Project Discipline Engineer (Mechanical, Civil, etc.), QA Manager if coating of item is safety related, TUSI representative when required, Engineer who prepared document, and a revision number and date. Upon completion of the document, distribution shall be made to all holders of this procedure.

3.7 TOUCH-UP AND FINISH COATING OF VENDOR APPLIED COATINGS

3.7.1 Prior to touch-up of primer or application of topcoat, an adhesion test shall be performed by the Brown & Root QC Department. If results are acceptable, work may proceed in accordance with sections 4.4.2.2 through 4.4.2.9.

3.7.2 The QC Inspector or his representative shall notify the responsible area engineer and/or the Paint Superintendent as soon as possible after receipt of a non-conforming item in need of paint repair to allow time for Attachment 2 preparation and a planned schedule for repair.

4.0 PROCEDURE FOR COATING

4.1 PREPARATION OF SUBSTRATES AND COATING MATERIALS

4.1.1 Surface Preparation for Primer - Under normal conditions, surface preparation shall not begin unless the temperature of the surface to be blasted is 5° F above the dew point. If needed, the surface to be primed shall then be cleaned of any heavy oil or grease deposits in accordance with SSPC-SP-1-63 "Solvent Cleaning".



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Small amounts of grease or oil deposits may be removed by blast operations. The surface shall then be cleaned by blast, hand or power tool operations to achieve an equivalent of SSPC-SP10-63, "near white" blast cleaning. Although 1-3 mil. surface profile is preferred, a minimum of 1 mil. profile is required. After the above surface preparation, the surface to be primed shall be air blasted and/or solvent wiped to remove dust, sand or foreign contaminants from the surface. Air blasting shall not be performed where air-borne contaminants could adhere to tacky paint. Sufficient time shall be provided to allow suspended particles to settle before beginning primer application. If rust forms after surface preparation, the rusted area shall be re-cleaned before primer application. Under no case shall a blast, hand, or power tool cleaned surface be exposed for more than 24 hours prior to priming without additional cleaning of the surface. When applying coatings that will be joined together by a later coating operation, the interface shall be constructed as follows:

- a. Blasting using no border tape - Overblast the steel to near white metal approximately 12" - 18" beyond the point which will receive primer. Hold back approximately 12" - 18" from edge of blasted area when applying primer.
- b. Blast, hand or power tool cleaning using border tape - Clean the steel to near white metal approximately 3" - 6" beyond the point which will receive primer. Place border tape approximately 1" in from edge of cleaned area and prime. When applying seal or finish coat on either of above methods hold back approximately 12" - 18" from edge of primer.

4.1.2 Removal of weld spatter and other minor surface imperfections (not to exceed .031" for containment liners) - If needed, weld spatter omitted by others will be removed by Painting Personnel in accordance with SSPC-SP-2 and SSPC-SP-3. If it is determined that surface defects are severe enough to require later repair, the area to be repaired will be blocked out and spot painted at a later date. All edges, protrusions, and peaks shall be ground smooth to a rounded contour; 1/8-inch radius of the contour may be used for a guide.

4.2 SURFACE PREPARATION FOR FINISH COAT

4.2.1 Surface preparation for the finish coat shall consist of the removal, if needed, of any oil or grease. This shall be accomplished by use of a manufacturer recommended cleanser or cleansing method on areas that have been seal-coated. On areas where the Carbo Zinc 11 primer is exposed, oil and grease will



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3.7 TOUCH-UP AND FINISH COATING OF VENDOR APPLIED COATINGS

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3.7.2 The QC Inspector or his representative shall notify the responsible area engineer and/or the Paint Superintendent as soon as possible after receipt of a nonconforming item in need of paint repair to allow time for Attachment 2 preparation and a planned schedule for repair.

4.0 PROCEDURE FOR COATING

4.1 PREPARATION OF SUBSTRATES AND COATING MATERIALS

4.1.1 Surface Preparation for Primer - Final surface preparation shall not begin unless the temperature of the surface to be blasted is 5°F above the dew point. If needed, the surface to be primed shall then be cleaned of any heavy oil or grease deposits in accordance with SSPC-SP-1-63 "Solvent Cleaning".

Small amounts of grease or oil deposits may be removed by blast operations. The surface shall then be cleaned by blast, hand or power tool operations to achieve an equivalent of SSPC-SP10-63, "near white" blast cleaning. Although 1-3 mil. surface profile is preferred, a minimum of 1 mil. profile is required. After the above surface preparation, the surface to be primed shall be air blasted and/or solvent wiped to remove dust, sand or foreign contaminants from the surface. Air blasting shall not be performed where air-borne contaminants could adhere to tacky paint. Sufficient time shall be provided to allow suspended particles to settle before beginning primer application. If rust forms after surface preparation, the rusted area shall be re-cleaned before primer application. Under no case shall a blast, hand, or power tool cleaned surface be exposed for more than 24 hours prior to priming without additional cleaning of the surface. When applying coatings that will be joined together by a later coating operation, the interface shall be constructed as follows:

- a. Blasting using no border tape - Overblast the steel to near white metal approximately 12" - 18" beyond the point which will receive primer. Hold back approximately 12" - 18" from edge of blasted area when applying primer.



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3.7 TOUCH-UP AND FINISH COATING OF VENDOR-APPLIED COATINGS

3.7.1 Prior to touch-up of primer or application of topcoat on vendor coated items other than pipe hanger support components, an adhesion test shall be performed by the Brown & Root QC Department. If results are acceptable, work may proceed in accordance with sections 4.4.2.2 through 4.4.2.9.

3.7.2 The QC Inspector or his representative shall notify the responsible area engineer and/or the Paint Superintendent as soon as possible after receipt of a nonconforming item in need of paint repair to allow time for Attachment 2 preparation and a planned schedule for repair.

4.0 PROCEDURE FOR COATING

4.1 PREPARATION OF SUBSTRATES AND COATING MATERIALS

4.1.1 Surface Preparation for Primer - Final surface preparation shall not begin unless the temperature of the surface to be blasted is 5°F above the dew point. If needed, the surface to be primed shall then be cleaned of any heavy oil or grease deposits in accordance with SSPC-SP-1-63 "Solvent Cleaning".

Small amounts of grease or oil deposits may be removed by blast operations. The surface shall then be cleaned by blast, hand or power tool operations to achieve an equivalent of SSPC-SP10-63, "near white" blast cleaning. Although 1-3 mil. surface profile is preferred, a minimum of 1 mil. profile is required. After the above surface preparation, the surface to be primed shall be air blasted and/or solvent wiped to remove dust, sand or foreign contaminants from the surface. Air blasting shall not be performed where air-borne contaminants could adhere to tacky paint. Sufficient time shall be provided to allow suspended particles to settle before beginning primer application. If rust forms after surface preparation, the rusted area shall be re-cleaned before primer application. Under no case shall a blast, hand, or power tool cleaned surface be exposed for more than 24 hours prior to priming without additional cleaning of the surface. When applying coatings that will be joined together by a later coating operation, the interface shall be constructed as follows:

- a. Blasting using no border tape - Overblast the steel to near white metal approximately 12" - 18" beyond the point which will receive primer. Hold back approximately 12" - 18" from edge of blasted area when applying primer.



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3.7 TOUCH-UP AND FINISH COATING OF VENDOR APPLIED COATINGS

3.7.1 Prior to touch-up of primer or application of topcoat on vendor coated items other than pipe hanger support components, an adhesion test shall be performed by the Brown & Root QC Department. If results are acceptable, work may proceed in accordance with sections 4.4.2.2 through 4.4.2.9.

3.7.2 The QC Inspector or his representative shall notify the responsible area engineer and/or the Paint Superintendent as soon as possible after receipt of a nonconforming item in need of paint repair to allow time for Attachment 2 preparation and a planned schedule for repair.

4.0 PROCEDURE FOR COATING

4.1 PREPARATION OF SUBSTRATES AND COATING MATERIALS

4.1.1 Surface Preparation for Primer - Final surface preparation shall not begin unless the temperature of the surface to be blasted and/or power tooled is 5°F above the dew point. If needed, the surface to be primed shall then be cleaned of any heavy oil or grease deposits in accordance with SSPC-SP-1-63 "Solvent Cleaning".

Small amounts of grease or oil deposits may be removed by blast operations. The surface shall then be cleaned by blast, hand or power tool operations to achieve an equivalent of SSPC-SP10-63, "near white" blast cleaning. Although 1-3 mil. surface profile is preferred, a minimum of 1 mil. profile is required. After the above surface preparation, the surface to be primed shall be air blasted and/or solvent wiped to remove dust, sand or foreign contaminants from the surface. Air blasting shall not be performed where air-borne contaminants could adhere to tacky paint. Sufficient time shall be provided to allow suspended particles to settle before beginning primer application. If rust forms after surface preparation, the rusted area shall be re-cleaned before primer application. Under no case shall a blast, hand, or power tool cleaned surface be exposed for more than 24 hours prior to priming without additional cleaning of the surface. When applying coatings that will be joined together by a later coating operation, the interface shall be constructed as follows:

- a. Blasting using no border tape - ~~Overblast the steel~~ to near white metal approximately 12" - 18" beyond the point which will receive primer. Hold back approximately 12" - 18" from edge of blasted area when applying primer.



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3.3 POST BLAST CLEANING OPERATIONS

3.3.1 Blast Cleanup

The inspector shall visually check the blasted substrate surface and adjacent areas for removal or control of abrasive and dust prior to start of final inspection.

Criteria:

The surface shall be brushed or vacuumed to the extent required for final surface inspection. The adjacent areas shall be cleaned to the extent necessary to avoid contamination during subsequent coating applications.

3.3.2 Blasted or Power Tooled Surface Acceptability

The inspector shall perform the following inspections to determine acceptability of the blast cleaned or power tooled surface:

- a. Absence of Foreign Matter -- A visual inspection shall be performed to determine removal of foreign matter from the surface.

Criteria:

SSPC-SP10-63

The surface, when viewed without magnification, shall be free of all oil, grease, visible mill scale, rust, corrosion products, oxides, paint, or any foreign matter, except for light shadows, slight streaks, or slight discolorations caused by rust stain, mill scale oxides, or slight, tight residues of paint.

- b. Removal of Sharp Projections -- A reinspection for sharp projections that were not blended (rounded) during blast cleaning or power tooling shall be performed.

Criteria:

Sharp projections (including weld splatters) are not acceptable. See note on item 3.1.5 above regarding grinding operations to remove projections.

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- c. Anchor Pattern Depth -- The anchor pattern depth of the blasted or power tooled surface shall be inspected at random locations using a Keane-Tator Surface Profile Comparator (model 373) or equivalent. A power tooled surface shall be inspected with use of either a roughness gage and/or comparator plate which has been approved by the coating manufacturer.

Criteria: Blast Cleaning

SSPC-SP10-63T

The anchor pattern depth for a blasted surface shall not be less than 1S70 (minimum depth 1.0 mils).

Power tooling - Power Tooling (SSPC-SP3-63) may also be used with no Area Restrictions, providing this type preparation produces an Acceptable Surface Comparable to SSPC-SP10-63T.

The Anchor Pattern Depth for a power tooled surface shall not be less than 1 mil. No maximum profile will be specified, providing that correct millage requirements can be obtained after primer application.

3.4 FINAL ACCEPTANCE

The inspector shall determine that all FDRs and NCRs are complete prior to signing and dating Final Acceptance on checklist.

3.3 POST BLAST CLEANING OPERATIONS

3.3.1 Blast Cleanup

The inspector shall visually check the blasted substrate surface and adjacent areas for removal or control of abrasive and dust prior to start of final inspection.

The surface shall be brushed or vacuumed to the extent required for final surface inspection. The adjacent areas shall be cleaned to the extent necessary to avoid contamination during subsequent coating applications.

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- b. Removal of Sharp Projections -- A reinspection for sharp projections that were not blended (rounded) during blast cleaning or power tooling shall be performed.

Sharp projections (including weld spatter) are not acceptable. See note on item 3.1.5 above regarding grinding operations to remove projections.

- c. Anchor Pattern Depth -- The anchor pattern depth of the blasted or power tooled surface shall be inspected at random locations using a Keane-Tator Surface Profile Comparator (model 373) or equivalent. A power tooled surface shall be inspected with use of either a roughness gage and/or comparator plate which has been approved by the coating manufacturer.

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3.3 POST BLAST CLEANING OPERATIONS

3.3.1 Blast Cleanup

The inspector shall visually check the blasted substrate surface and adjacent areas for removal or control of abrasive and dust prior to start of final inspection.

The surface shall be brushed or vacuumed to the extent required for final surface inspection. The adjacent areas shall be cleaned to the extent necessary to avoid contamination during subsequent coating applications.

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The inspector shall perform the following inspections to determine acceptability of the blast cleaned or power tooled surface:

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The surface, when viewed without magnification, shall be free of all oil, grease, visible mill scale, rust, corrosion products, oxides, paint, or any foreign matter, except for light shadows, slight streaks, or slight discolorations caused by rust stain, mill scale oxides, or slight, tight residues of paint.

- b. Removal of Sharp Projections -- A reinspection for sharp projections that were not blended (rounded) during blast cleaning or power tooling shall be performed.

Sharp projections (including weld spatter) are not acceptable. See note on item 3.1.5 above regarding grinding operations to remove projections.

- c. Anchor Pattern Depth -- The anchor pattern depth of the blasted or power tooled surface shall be inspected at random locations using a Keane-Tator Surface Profile Comparator (model 373) or equivalent. A power tooled surface shall be inspected with use of either a roughness gage and/or comparator plate which has been approved by the coating manufacturer.

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The anchor pattern depth for a blasted or power tooled surface shall be a minimum of 1.0 mils.

No maximum profile will be specified, providing that correct millage requirements can be obtained after primer application.

3.3.3 Unique Number Identification

After blasting and prior to prime coat application, QC shall verify that construction has identified each piece with a unique number in accordance with References 1-A and 1-B. The QC Inspector shall maintain a Protective Coatings Unique Identification Number Log, Attachment 1 for all protective coatings application on all steel designated for use in the Reactor Building. Subsequent subdivision of coated steel in the field or shop shall be verified by QC in accordance with Reference 1-C.

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

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

3.4 PRIMER PRE-APPLICATION INSPECTIONS

3.4.1 Ambient Conditions

Immediately prior to primer application, the QC Inspector shall determine air temperature, surface temperature, relative humidity and dew point using methods described in Section 3.1.1.

Normal conditions of ambient and surface temperatures shall be 40-95°F and 40-110°F, respectively. In no case shall Carbolite limits (0-130°F ambient temperature, 0-200°F surface temperature) be exceeded. Carbo-Zinc-11 may be thinned up to 2 quarts per gallon per application. When using higher ~~thermal~~ levels at or below normal temperature,

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The surface shall be brushed or vacuumed to the extent required for final surface inspection. The adjacent areas shall be cleaned to the extent necessary to avoid contamination during subsequent coating applications.

3.2.2 Blasted or Power Tooled Surface Acceptability

The inspector shall perform the following inspections to determine acceptability of the blast cleaned or power tooled surface:

- a. Absence of Foreign Matter -- A visual inspection shall be performed to determine removal of foreign matter from the surface.

The surface, when viewed without magnification, shall be free of all oil, grease, visible mill scale, rust, corrosion products, oxides, paint, or any foreign matter, except for light shadows, slight streaks, or slight discolorations caused by rust stain, mill scale oxides, or slight, tight residues of paint.

- b. Removal of Sharp Projections -- A reinspection for sharp projections that were not blended (rounded) during blast cleaning or power tooling shall be performed.

Sharp projections (including weld spatter) are not acceptable.

Protrusions and peaks shall be ground to a rounded contour.

NOTE: Any mechanical surface preparation other than sandblasting or hand or power tooling of sharp edges or weld spatter will require a B&R NDE visual inspector's acceptance of the work performed.

- c. Anchor Pattern Depth -- The anchor pattern depth of the blasted or power tooled surface shall be inspected at random locations using a Keane-Tator Surface Profile Comparator (model 373) or equivalent. A power tooled surface shall be inspected with use of either a roughness gage and/or comparator plate which has been approved by the coating manufacturer.

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The anchor pattern depth for a blasted or power tooled surface shall be a minimum of 1.0 mils.

No maximum profile will be specified, providing that correct millage and surface uniformity requirements can be obtained after primer application.

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

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

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

3.3 PRIMER PRE-APPLICATION INSPECTIONS

3.3.1 Ambient Conditions

Immediately prior to primer application, the QC Inspector shall determine air temperature, surface temperature, relative humidity and dew point using methods described in Section 3.1.1.

Normal conditions of ambient and surface temperatures shall be as follows:

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3.2 POST BLAST CLEANING OPERATIONS

3.2.1 Blast Cleanup

The inspector shall visually check the blasted substrate surface.

The surface shall be brushed or vacuumed to the extent required for final surface inspection. The adjacent areas shall be cleaned to the extent necessary to avoid contamination during subsequent coating applications.

3.2.2 Blasted or Power Tooled Surface Acceptability

The inspector shall perform the following inspections to determine acceptability of the blast cleaned or power tooled surface:

- a. Absence of Foreign Matter -- A visual inspection shall be performed to determine removal of foreign matter from the surface.

The surface, when viewed without magnification, shall be free of all oil, grease, visible mill scale, rust, corrosion products, oxides, paint, or any foreign matter, except for light shadows, slight streaks, or slight discolorations caused by rust stain, mill scale oxides, or slight, tight residues of paint.

- b. Removal of Sharp Projections -- A reinspection for sharp projections that were not blended (rounded) during blast cleaning or power tooling shall be performed.

Sharp projections (including weld spatter) are not acceptable.

Protrusions and peaks shall be ground to a rounded contour.

NOTE: Any mechanical surface preparation other than sandblasting or hand or power tooling of sharp edges or weld spatter will require a B&R NDE visual inspector's acceptance of the work performed.

- c. Anchor Pattern Depth -- The anchor pattern depth of the blasted or power tooled surface shall be inspected at random locations using a Keane-Tator Surface Profile Comparator (model 373) or equivalent. A power tooled surface shall be inspected with use of either a roughness gage and/or comparator plate which has been approved by the coating manufacturer.

The anchor pattern depth for a blasted or power tooled surface shall be a minimum of 1.0 mils.

No maximum profile will be specified, providing that correct millage and surface uniformity requirements can be obtained after primer application.

3.2.3 Unique Number Identification

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

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

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

3.3 PRIMER PRE-APPLICATION INSPECTIONS

3.3.1 Ambient Conditions

Immediately prior to primer application, the QC Inspector shall determine air temperature, surface temperature,

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3.2 POST BLAST CLEANING OPERATIONS

3.2.1 Blast Cleanup

The inspector shall visually check the blasted substrate surface.

The surface shall be brushed or vacuumed to the extent required for final surface inspection. The adjacent areas shall be cleaned to the extent necessary to avoid contamination during subsequent coating applications.

3.2.2 Blasted or Power Tooled Surface Acceptability

The inspector shall perform the following inspections to determine acceptability of the blast cleaned or power tooled surface:

- a. Absence of Foreign Matter -- A visual inspection shall be performed to determine that all oil and grease, dirt, millscale, rust, corrosion products, oxides, paint or other foreign matter have been completely removed from the surface except for light shadows, very slight streaks or slight discolorations caused by rust stains, mill scale, oxides, or slight, tight residues of paint or coating that may remain. At least 95 percent of each square inch of surface area shall be free of all residues, and the remainder shall be limited to light discolorations as mentioned above.

NOTE: If coating removal is required from an area or item which has been coated in accordance with this instruction, shadows or tight residues of primer which may remain in the profile of the previously prepared substrate is acceptable.

- b. Removal of Sharp Projections -- A reinspection for sharp projections that were not blended (rounded) during blast cleaning or power tooling shall be performed.

Weld splatter on structural steel shall be removed by either grinding or sand blasting. However, if the weld splatter should remain after the above operation, the weld splatter will be acceptable.

THIS DOCUMENT IS UNCLASSIFIED DATE 06-01-2001 BY 60322 UCBAW/STP

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Sharp projections are not acceptable.

Protrusions and peaks shall be ground to a rounded contour.

NOTE: Any mechanical surface preparation other than sandblasting or hand or power tooling of sharp edges or weld spatter will require a visual welding inspector's acceptance of the work performed.

- c. Anchor Pattern Depth -- The anchor pattern depth of the blasted or power tooled surface shall be inspected at random locations using a Keene-Tator Surface Profile Comparator (model 373) or equivalent. A power tooled surface shall be inspected with use of either a roughness gage and/or equivalent.

The anchor pattern depth for a blasted or power tooled surface shall be a minimum of 1.0 mils.

No maximum profile will be specified, providing that correct millage and surface uniformity requirements can be obtained after primer application.

3.2.3 Unique Number Identification

After blasting power tool and prior to prime coat application, QC shall verify that construction has identified each piece with a unique number in accordance with References 1-A and 1-B. The QC Inspector shall maintain a Protective Coatings Unique Identification Number Log, Attachment 1 for all protective coatings application on all steel designated for use in the Reactor Building. Subsequent subdivision of coated steel in the field or shop shall be witnessed by QC in accordance with Reference 1-C.

NOTE:

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

- B. Liner plate is excluded from QP numbers.

Equipment which is identified for suitable fitment identification need not be identified with a permanent plant identification number.

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
TEXAS UTILITIES ELECTRIC)	Docket Nos. 50-445 and
COMPANY, <u>et al.</u>)	50-446
)	
(Comanche Peak Steam Electric)	(Application for Operating
Station, Units 1 and 2))	Licenses)

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing "Applicants' Motion For Summary Disposition Of Near-White Blast Surface Preparation Issue," in the above-captioned matter were served upon the following persons by overnight delivery (*), or deposit in the United States mail, first class, postage prepaid, this 11th day of May 1984, or by hand delivery (**) on the 13th day of May 1984:

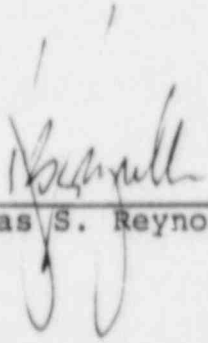
** Peter B. Bloch, Esq. Chairman, Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555	Chairman, Atomic Safety and Licensing Appeal Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555
* Dr. Walter H. Jordan 881 West Outer Drive Oak Ridge, Tennessee 37830	Mr. William L. Clements Docketing & Service Branch U.S. Nuclear Regulatory Commission Washington, D.C. 20555
* Dr. Kenneth A. McCollom Dean, Division of Engineering Architecture and Technology Oklahoma State University Stillwater, Oklahoma 74074	** Stuart A. Treby, Esq. Office of the Executive Legal Director U.S. Nuclear Regulatory Commission Washington, D.C. 20555
Mr. John Collins Regional Administrator, Region IV U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive Suite 1000 Arlington, Texas 76011	Chairman, Atomic Safety and Licensing Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555

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