UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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

TESTIMONY OF RAYMOND J. VURPILLAT
REGARDING BROWN & ROOT RESPONSE TO
ASME SURVEY AND RESURVEY

Q1. Please state your name, residence and educational and professional qualifications.

A1. My name is Raymond J. Vurpillat. I reside in Houston, Texas. A statement of my educational and professional qualifications is attached hereto as Attachment 1.

Q2. What is your current position?

A2. I am employed by Brown & Root, Inc. in the position of Power Group Quality Assurance Manager. As such I was responsible for implementation of corrective action in the Brown & Root Quality Assurance Program for Comanche Peak in response to the findings of the ASME survey team made at the October 12-14, 1981 Survey and the January 18-20, 1982 Resurvey.

Q3. What is the purpose of your testimony?

A3. The purpose of my testimony is to demonstrate that Brown & Root has taken appropriate corrective actions which assure that work performed under the authority of the

ASME Certificates of Authorization issued to Brown & Root for Comanche Peak meets all applicable ASME Code standards.

Q4. What actions has Brown & Root taken in response to the findings of the ASME Survey Team following the October 1981 survey?

A4. Brown & Root has taken appropriate actions in response to each of the items identified in the November 23, 1981 letter from the ASME setting forth the findings of the ASME Survey Team of their October 12-14, 1981 survey of the Brown & Root ASME QA Program for Comanche Peak. That letter is attached hereto as Attachment 2. In addition, Brown & Root has taken measures to assure that the matters identified by the ASME Survey Team will not recur and that all ASME Code work performed by Brown & Root at Comanche Peak in areas affected by those findings satisfy applicable ASME Code requirements.

Q5. In what areas did the ASME Survey Team make findings?

A5. The ASME Survey Team made findings both with respect to Brown & Root ASME Code work at Comanche Peak and with respect to the implementation of the Brown & Root ASME QA Manual. The first six comments of the ASME Survey Team concerned the Manual. The remaining comments concerned implementation of the Manual.

Q6. The ASME Survey Team made a finding regarding the Brown & Root ASME QA Manual, as follows:

> The manual was vague, failed to establish required controls, responsibilities, or provide for objective evidence that required activities were satisfatorily performed.

What actions has Brown and Root taken in response to this finding?

A6. The QA Manual which was reviewed by the ASME Survey Team had been revised by Brown & Root several months before the ASME Survey. These revisions were approved by the Authorized Nuclear Inspector for Comanche Peak at the time they were made. When making these changes, some of the essential features that had been described both in the original QA Manual and the implementing procedures were taken out of the QA Manual, and left in the procedures. In response to the Survey Team's comment that these revisions left the QA Manual too vague, the QA Manual was subsequently revised to reinclude the specific features which had remained in the procedures.

Q7. The ASME Survey Team made a finding regarding the Brown & Root ASME QA Manual, as follows:

> The manual established the Summer 1974 Addenda for piping and the Winter 1974 Addenda for component supports as the Code effectivity. The manual addressed activities only permitted by later Code addenda; such as NX-2610, NA-3867.4(f) and supply of material - NCA-3820(e), without any identification of the applicability of these provisions.

What actions did Brown & Root take in response to this finding?

A7. This finding concerns the use by Brown & Root of specific ASME Code provisions from later Code Addenda than the Addenda specified in the Manual for the work being performed. Brown & Root has verified, however, that the required details concerning the use of these later Addenda paragraphs are documented in the appropriate design documents, and ASME has been so advised.

Q8. The ASME Survey Team made a finding regarding the Brown & Root ASME QA Manual, as follows:

> The manual control system did not contain the exhibits displayed in the manual or any manual approval method.

What actions did Brown & Root take in response to this finding?

A8. The documents used to control and transmit the QA Manual were, in fact, not included in the QA Manual exhibits. Nevertheless, these control documents were part of the Quality Assurance program in that they were contained in implementing procedures. The QA Manual approval and transmittal was, in fact, performed in accordance with the program as detailed in those procedures. Subsequent to the ASME Survey, the subject transmittal forms were added to the Manual as exhibits.

Q9. The ASME Survey Team made a finding regarding the Brown & Root ASME QA Manual, as follows:

> The program elements of process control, nonconformity control and document control required significant changes.

What actions did Brown & Root take in responding to this finding?

A9. The elements of control referenced by the ASME Survey Team were, in fact, part of the Brown & Root Quality Assurance system but were detailed in the QA implementating procedures rather than in the QA Manual. In response to this finding, Brown & Root has added more clarifying detail to the QA Manual.

Q10. The ASME Survey Team made a finding regarding the Brown & Root ASME QA Manual, as follows:

> The design control element (control of field change design information and feed back of construction information to the Owner) was missing from the Manual.

What actions did Brown & Root take in responding to this finding?

A10. As described in the previous comments, Brown & Root has always had implementing procedures regarding control of field change information from the design stage forward. In response to the ASME Survey Team's comment, Brown & Root incorporated these controls into the QA Manual. The ASME did not require any change in the features of control.

Q11. The AMSE Survey Team made a finding regarding the Brown & Root ASME QA Manual, as follows:

> All elements required changes to provide definitive information since few auditable controls were included.

What actions did Brown & Root take in responding to this finding?

A11. The Survey Team requested that the specific details of controlling work, which were in the Brown & Root implementing procedures, also be described in the QA Manual. The QA Manual was revised to accomplish this.

Q12. The ASME Survey Team made several findings regarding the implementation of the Brown & Root ASME QA Manual for Comanche Peak. Specifically, with respect to the area of document control, the ASME found, as follows:

> The manual requires that the File Custodians in each department maintain a log of design changes received from the Owner. The File Custodian is to mark the involved document to indicate that a design change had been received and then the document user checks the log to find the applicable design change(s).
>
> The log being maintained by the QA Department File Custodian contained numerous mistakes and was missing information. Three of three design packages, checked by the team, contained design changes not properly identified in the log.

What actions did Brown & Root take in response to this finding?

A12. The ASME Survey Team was describing a situation involving the QA Department File Custodian. This File Custodian was reviewing each completed document package to assure that all the editorial work, required signatures, and other specifics were properly documented prior to placing these document packages in storage files. These documents were not working documents (i.e., not used for field work) but merely documents that were to be reviewed after construction and prior to final storage.

For the three design packages that were reviewed by the Survey Team, the document review had not yet been accomplished although the records were in the File Custodian's hands. The matter raised by the Survey Team concerns the timeliness in performing the review, not that the records were being reviewed improperly.

In response to this finding Brown & Root directed that all design change logs related to ASME Code work be reviewed by File Custodians to verify and update, if necessary, the current revision status of those documents. This review was performed to assure that the latest revisions and design changes are reflected in the design change logs. The review has been completed and all logs properly updated. To assure that this situation will not recur, the Document Control Center Supervisor has re-indoctrinated File Custodians on the requirements of file maintenance, including the timeliness of reviews.

Q13. With respect to instructions, procedures and drawings, the ASME found, as follows:

> Brown & Root Construction Procedure 6.9G, reviewed by the Site QA Manager, was in direct conflict with the QA Manual and the Code (NA-5241) in that it stated that the ANI would sign a blank process sheet and then B&R would add the ANI hold points. The AIA representatives stated that this procedure was not honored by them and that they had requested the procedure to be revised. The procedure has not been revised.

> The purpose of the Site QA Manager's review is to assure that the procedure complies with the Code and the QA Manual.

What actions did Brown & Root take in responding to this finding?

A13. The Authorized Nuclear Inspector on site used the procedure described above in order to establish "generic" hold points as he felt were necessary. The Survey Team felt that the ANI should not sign blank process sheets to establish hold points. Accordingly, this procedure has been revised and a new revision has deleted the paragraph which describes the establishment of ANI holdpoints. The ANI continues to use his own method of establishing hold points. In addition, to prevent recurrence of this situation, the Quality Assurance Department has been reorganized and additional Quality Engineers and a Codes & Standards Staff Assistant have been assigned direct responsibility for reviewing the procedures to assure compliance with the Code and the QA Manual.

Q14. With respect to control of purchased materials, items and services, the vendor control of the ASME Survey Team found, as follows:

> B&R procured plate material from a vendor that they had surveyed and qualified as a Material Supplier of bolting and plate materials. The material had been formed into a saddle configuration by this vendor. The B&R survey and qualification of the vendor did not address review of any

operation relative to forming and the B&R purchase order did not define a forming process or procedure.

What actions did Brown & Root take in responding to this finding?

A14. This finding concerned material supplied by AFCO Steel. In response to it, Brown & Root conducted a review of the AFCO Steel procedures for forming, bending and rolling. In addition, Brown & Root conducted an audit on December 2-3, 1981 to verify that AFCO Steel was in compliance with the reviewed procedure. Based on the completion of an acceptable review of the procedure and the audit results, Brown & Root has identified on the Approved Suppliers List ("ASL") for AFCO Steel that the scope of permitted materials/service includes formed plates. To assure that this situation does not recur, the Site QA Manager has directed Quality Engineering to insure, in accordance with current Brown & Root QA Manual and implementing procedures, that requisitioned items or services are within the scope of the applicable supplier prior to purchase order approval.

Q15. With respect to control of purchased materials, items, and services by the production shop, the ASME Survey Team found, as follows:

> The same material addressed in C1 was observed in the production shop with work in process. This material had not been receipt inspected in noncompliance with the QA Manual and the material was not identified as required by the B&R purchase order. B&R had divided the material and transferred

the material identification incorrectly. B&R does not verify the transfer of material identification and during the review of the manual stated that this verification was unnecessary.

What actions did Brown & Root take in response to this finding?

A15. This material had been properly receipt inspected by QC receiving in accordance with the approved procedure at that time. A misunderstanding arose because the heat code (110) was marked on each piece of cut material immediately next to the shop order number (479) to produce what appeared to be a new number (110479) on one line, rather than two lines as on the original material. In any event, an Nonconformance Report ("NCR") was written to cover all such items and this material has been marked with the entire heat number (803N80110) rather than the abbreviated heat code, and verified for correctness.

To prevent recurrence of this matter, the QA Manual and QA Procedures and Construction Procedures have been revised and training on the revised procedures has been conducted and completed. A QC Inspector is now required to verify, prior to cutting a piece or dividing material from a bundle, that the transfer of markings to each piece is in accordance with the revised procedures. This verification is documented in accordance with the revised procedures.

Q16. With respect to the control of construction processes using process sheets, the ASME Survey Team found, as follows:

> Process Sheets were observed in production that had not been reviewed with the ANI for establishment of hold points in noncompliance with the B&R QA Manual and NA-5241 of the Code. The process sheets CC-068-002-S33R and AF-035-S33A are included in this finding although numerous such process sheets are in production. (See B above).

What actions did Brown & Root take in response to this finding?

A16. This matter arose because of differences of opinion between two ANIs regarding the review of process sheets to establish hold points. The first ANI on site did not wish to review all process sheets for pipe hangers. He felt that his inspection of the installation of the pipe hangers would satisfy his requirements for inspections. A subsequent ANI felt that it was necessary to establish hold points on the process sheets.

This condition had been documented prior to the ASME survey in a NCR. With the concurrence of the ANI, the following actions were taken: (1) all process sheets, including Code-related Operation Travelers, are being routed through the ANI for preliminary review and establishment of hold points prior to issuance, (2) welding documentation packages and Operation Travelers issued but not yet complete are being submitted to the ANI for review and establishment of hold

points and/or signature, and (3) travelers and welding documentation packages which have been completed are being referenced with the NCR number. These NCRs are and will continue to be reviewed by the ANI, prior to the items being certified. The NCR will.remain open until corrective action is complete. To prevent recurrence of this matter a procedure has been prepared and issued to include the requirement of ANI preliminary review to preclude issuance of the subject documents without such review.

Q17. With respect to the control of construction process using welding procedure specifications, the ASME Survey Team found, as follows:

> Welding Procedure Specification 11012 for welding with impact test requirements did not specify the travel speed but instead controlled the heat input by Volt/amp range and maximum bend width for a given electrode diameter. The Procedure Qualification Record 010AB1276 for this WPS recorded a bead width greater than that allowed by the WPS.

What actions did Brown & Root take in responding to this finding?

A17. This concern of the Survey Team was resolved by subsequent additional qualifications of the procedure by testing of all worst case heat input conditions which might exist during welding. The test results meet the requirements

of the Code, and all other similar welding procedure qualification records have been reviewed for adequacy.

Finally, an NCR on this matter has been issued and the welding procedure specification was revised to restrict the bead width to 5/16". Supplementary tests were performed on a test coupon which was welded using a 3/8" bead width, which qualified that welding procedure specification for the greater 3/8" bead width.

Q18. With respect to nonconformity control,the ASME Survey Team found, as follows:

> Nonconformity Control Report (NCR) M-2952 reported that a spool piece had been welded into the system backwards. B&R QA determined the disposition to be rework and not repair and thereby the disposition to cut the spool piece out and reweld it in the correct configuration was not reviewed by welding engineering, as would have been required by a repair designation. There appeared to be no consideration of the heat input effects on the material, etc. as would be expected with this type of nonconformance.

What actions did Brown & Root take in response to this finding?

A18. Although the welding control procedures were not described in detail in the QA Manual, appropriate procedures were and remain in place to assure that for those materials for which heat input is a consideration, replacement welds for

items to be repaired or reworked are evaluated by Brown & Root Welding Engineering in accordance with the design criteria to assure that the properties of the material are not affected. Specifically, all Component Modification Cards ("CMCs") which are written to remove and/or replace welds are routed to Brown & Root Welding Engineering for review and the issuance of documentation for the replacement welds. Welding Engineering prepares new weld data cards for the replacement welds and performs evaluations of heat input effects at that time. CMCs are reviewed against design specifications and procedural requirements and those which are not in compliance are returned to the originator and documentation for replacement welds is not issued. This documentation system for all ASME welding is described in the Brown & Root QA Manual and assures Welding Engineering involvement in all welding activities.

In any event, welds for the spool referenced in this finding were not stainless steel nor did they require Charpy impact testing. The material was Carbon Steel, 2" Schedule 40, Class 3. Therefore, further evaluation concerning heat input for this material was not necessary.

Q19. With respect to the identification and control of material and items, the ASME Survey Team found, as follows:

> Component Supports are procured as stamped items by the Owner. The Code Data Report does not list Code Case N-225. The Component Support is supplied to B&R with only the Code Data Report by the

Owner. B&R then cuts the component support, removing the welds, and uses the material to fabricate other component supports. B&R does not have the Certificate of Compliance (C of C) for the material.

What actions did Brown & Root take in response to this finding?

A19. In response to this finding, Brown & Root has issued an NCR to address the deficiency identified. The component supports are supplied for Comanche Peak by ITT-Grinnell, and NPS Industries. ITT-Grinnell has provided required Code Data Reports in addition to Certified Material Test Reports, Certificates of Compliance as applicable or a single certification as appropriate. NPS Industries had provided only the required Code Data Report. NPS Industries has been requested to provide Certificates of Compliance or Material Test Reports, stating the type and grade of material supplied. The need for such documentation arises when revised designs are issued which require the cutting of the component supports, removal of the welds, and use of the material to fabricate or modify other component supports. Prior to receipt of the required material certifications from NPS Industries, the use of salvaged material and the fabrication or modification of Code supports was placed on administrative hold. Quality Engineering is reviewing the material certifications to assure acceptability of the documentation and the material supplied.

For new fabrication or modification, salvaged material will be inspected and released in accordance with applicable procedures and documented in appropriate inspection reports. Material which cannot be properly verified will not be used in Code applications. For salvaged material previously installed, the material used will be checked against and be traceable to proper documentation from the vendor. Material which cannot be traced to proper documentation will be identified in a NCR and removed.

Q20. With respect to authorized nuclear inspector involvement, the ASME Survey Team found, as follows:

> The ANI hold points on process sheets have been bypassed on numerous occasions. The ANI logbook documents these conditions and the volume would indicate a significant breakdown of the program and interface between B&R and the Authorized Inspection Agency personnel (See B and D-1 above).

What actions did Brown & Root take in responding to this finding?

A20. All missed hold points during the period reviewed by the ASME Survey Team have been documented in NCR's and resolved, including ANI concurrence. In addition, Brown & Root has reviewed all NCRs initiated because of bypassing the hold points established by the ANI and/or Brown & Root QC. As a result of their review, a Corrective Action Request ("CAR") has been issued to construction by the Site QA Manager. A review of the NCRs referenced on the Corrective Action Request indicates that there has been a significant

reduction in the frequency of missed ANI hold points since May of 1980. CARs written in October, 1978, and April, 1979, apparently have resulted in this improved performance.

To prevent recurrence of this situation, Quality Engineering and the Codes & Standards Staff Assistant have been assigned direct responsibility for coordinating ANI activities and assuring that any concerns identified by the ANI are timely resolved or brought to the attention of management for resolution.

Q21. Has the ASME Survey Team conducted a resurvey of the Brown & Root QA program for activities performed under the Brown & Root ASME Certificates of Authorization for Comanche Peak?

A21. Yes, on January 18-20, 1982.

Q22. What were the findings of the Survey Team at that Resurvey and what actions did Brown & Root take in response to the findings?

A22. The Survey Team recommended renewal of the certificates upon completion of responses to three items and certification and approval of those items by the Authorized Nuclear Inspector Supervisor. Brown & Root has taken appropriate corrective actions in response to those findings and the ANI Supervisor has approved and verified these actions in a letter from Hartford Steam Boiler Inspection and Insurance Company to ASME, February 8, 1982. That letter is attached hereto as Attachment 3.

Q23. What was the first finding the ASME Survey Team made at the resurvey?

A23. The ASME Survey Team found that a material supplier (AFCO), which had been surveyed and qualified by Brown & Root, had supplied materials which had been procured from other material suppliers which were not properly qualified.

Q24. What actions did Brown & Root take in response to this finding?

A24. Brown & Root has restricted the sources from which AFCO may procure ASME materials for use by Brown & Root at Comanche Peak. Until such time as AFCO may obtain an ASME Quality Sytems certificate as a Material Supplier, AFCO is limited to procuring materials from:

1. Materials manufacturers qualified by AFCO and holding current ASME Quality System Certificates,
2. Material suppliers who have a current ASME Quality System Certificate, or
3. Suppliers who are on the current Brown & Root approved suppliers list for Comanche Peak.

In addition, all documentation associated with AFCO has been reviewed by QA Engineering. One material supplier, not falling in the above categories, was identified as having provided AFCO with material. All material supplied by this company has been

identified as nonconforming and tagged in accordance with the Brown & Root QA Program. The material was evaluated by Brown & Root Design Engineering and the disposition submitted to the ANI for concurrence. See Attachment 3 at 1-2. Concurrence from the ANI has been received. See Attachment 3 at 1-2. Subsequently, on February 5, 1982, AFCO also received their Quality Systems Certificate as a Material Supplier from ASME.

Q25. What was the second finding made by the ASME Survey Team at the resurvey?

A25. The ASME Survey Team found that a supplier of ASME Code items was not listed on the Brown & Root Approved Suppliers List.

Q26. What actions did Brown & Root take in response to this finding?

A26. In response, Brown & Root has revyewed ¶he cwrrent suppliers of ASME Code items to determine whether or not they appear on the Brown & Ro Approved Suppliers List. Brown & Root has verified that all suppliers of Code stamped items, including the supplier identified by ASME, hold valid certificates of authorization. Brown & Root has placed those suppliers on the Approved Suppliers List. See Attachment 3 at 2.

Q27. What was the third finding made by the ASME Survey Team at the resurvey?

A27. The ASME Survey Team determined that some welding material which had been receipt inspected and accepted by Brown & Root had not been properly marked as so received.

Q28. What action has Brown & Root taken in response to this finding?

A28. Brown & Root has reviewed all welding material on site to assure proper identification. This review has been documented by Root & Brown QA. With respect to the particular material identified by ASME, Brown & Root has segregated and tagged such material in accordance with their QA Program and the material has been scrapped. In addition, all receiving inspectors have been retrained in the proper use of receiving procedures and material identification requirements. See Attachment 3 at 2.

Q29. In sum, what has been Brown & Root's response to the findings of the ASME survey and resurvey of the Brown & Root ASME QA Program for Comanche Peak?

A29. All findings and comments made by the ASME Survey Team as a result of the October 12-14, 1981 Survey and the January 18-20, 1982 Resurvey of the Brown & Root ASME QA Program for Comanche Peak have been responded to by Brown and Root. These responses have demonstrated to the

satisfaction of the ASME Subcommittee on Nuclear Accreditation that Brown & Root's ASME QA Program for Comanche Peak warrants issuance of the NA and NPT Certificates of Authorization to Brown & Root for Comanche Peak. These Certificates were reissued to Brown & Root on March 15, 1982. Issuance of these Certificates indicates that ASME is satisfied that the Brown & Root ASME QA program has fulfilled the requirements of the Code.

ATTACHMENT 1

RAY J. VURPILLAT

STATEMENT OF EDUCATIONAL
AND PROFESSIONAL QUALIFICATIONS

POSITION:	Power Group QA Manager
FORMAL EDUCATION:	B.S. Chemical Engineering, Purdue University
EXPERIENCE:	
1980 - Present	Power Group QA Manager, Brown & Root, Inc. Manages programs and personnel of Power Group QA Department concerned with various maintenance projects throughout OK, MS, LA, TX, NB, FL and VA.
1968 - 1980	Assistant QA Manager, United Engineers and Constructors. Was involved in the planning, management, and supervision of QA Programs related to design and/or construction of 16 commercial nuclear power plants and more than 10 fossil-fueled power plants.
1967 - 1968	Associate, Gunite Services, Inc. Partner in a construction business involved primarily in concrete construction related to medium-sized private and commercial projects.
1964 - 1967	Warner Co., Director of Quality Control. Responsible for attaining the quality of concrete materials and ready mixed concrete production.
1956 - 1964	Pittsburgh Testing Laboratory, started as a trainee and later became Philadelphia District Manager. Responsible for planning and supervision of all phases of inspection and testing functions related to medium-large construction projects.
PROFESSIONAL:	Professional Engineer in Indiana and California Member of American Society for Quality Control Member of various American Concrete Institute and ASME Committees.

The American Society of Mechanical Engineers

United Engineering Center • 345 E. 47th St., New York, N.Y. 10017 • 212-644-7812 • TWX 710-581-5267

November 23, 1981

CERTIFIED MAIL #P35 7143418

RETURN RECEIPT REQUESTED

BROWN & ROOT, INC.
R.J. Vurpillat; QA Mgr.
4100 Clinton Drive
Houston, TX 77020

Subject: Report of ASME Nuclear Survey Conducted on October 12-14, 1981 for New NA & NPT (Replacing current site extension N-2222-2 & N-2223-2) at Comanche Peak Electric Station, Units #1 & #2; Glen Rose, TX.

An ASME Nuclear Survey was conducted at your facilities on the date and location shown above for the subject reqested Authorization.

As a result of the Survey, the Team has recommended that a Resurvey is required. The ASME decision on the Teams recommendation will be forwarded to you shortly.

The deficiencies noted in your program include, but are not limited to, the following items which require corrective action:

I. Quality Assurance Manual

(A) The manual was vague, failed to establish required controls, responsibilities, or provide for objective evidence that required activities were satisfactorily performed.

(B) The manual established the Summer addenda 1974 for piping and Winter addenda 1974 for component supports as the Code effectivity. The manual addressed activities only permitted by later Code addenda; such as NX-2610, NA-3867.4(f) and supply of material - NCA-3820(e), without any identification of the applicability of these provisions.

(C) The manual control system did not include the exhibits displayed in the manual or any manual approval method.

(D) The program elements of process control, nonconformity control and document control required significant changes.

(E) The design control element (control) of field change design information and feed back of construction information to the Owner) was missing from the manual.

(F) All elements required changes to provide definitive information since few auditable controls were included.

II. Implementation

(A) Document Control - The manual requires that the File Custodians in each department maintain a log of design changes received from the Owner. The File Custodian is to mark the involved document to indicate that a design change had been received and then the document user checks the log to find the applicable design change(s).

The log being maintained by the QA Department File Custodian contained numerous mistakes and was missing information. Three of three design packages, checked by the team, contained design changes not properly identified in the log.

(B) Instruction Procedures & Drawings - B & R Construction Procedure 6.9G, reviewed by the Site QA Manager, was in direct conflict with the QA Manual and the Code (NA-5241) in that it stated that the ANI would sign a blank process sheet and then B & R would add the ANI hold points. The AIA representatives stated that this procedure was not honored by them and that they had requested the procedure to be revised. The procedure has not been revised.

The purpose of the Site QA Manager's review is to assure that the procedure complies with the Code and the QA Manual.

(C) Control of Purchased Materials, Items and Services -

(1) Vendor Control - B & R procured plate material from a vendor that they had surveyed and qualified as a Material Supplier of bolting and plate materials. The material had been formed into a saddle configuration by this vendor. The B & R survey and qualification of this vendor did not address review of any operation relative to forming and the B & R purchase order did not define a forming process or procedure.

(2) The same material addressed in C1 was observed in the production shop with work in process. This material had not been receipt inspected in noncompliance with the QA Manual and the material was not identified as required by the B & R purchase order. B & R had divided the material and transferred the material identification incorrectly. B & R does not verify the transfer of material identification and during the review of the manual stated that this verification was unnecessary.

(D) Control of Construction Processes -

(1) Process Sheets were observed in production that had not been reviewed with the ANI for establishment of hold points in noncompliance with the B & R QA Manual and NA-5241 of the Code. The process sheets CC-068-002-S33R and AF-035-023-S33A are included in this finding although numerous such process sheets are in production. (See B above)

(2) Welding Procedure Specification 1[illegible]12 for welding with impact test requirements did not specify the travel speed but instead controlled the heat input by Volt/amp range and maximum bead width for a given electrode diameter. The Procedure Qualification Record 010AB127 for this WPS recorded a beam width greather than that allowed by the WPS.

(E) Nonconformity Control - Nonconformity Control Report (NCR) M-2952 reported that a spool piece had been welded into the system backwards. B & R QA determined the disposition to be rework and not repair and thereby the disposition to cut the spool piece out and reweld it in the correct configuration was not reviewed by welding engineering, as would have been required by a repair designation. There appeared to be no consideration of the heat input effects on the material, etc. as would be expected with this type of nonconformance.

(F) Identification and Control of Material and Items - Component Supports are procured as stamped items by the Owner. The Code Data Report does not list Code Case N-225. The Component Support is supplied to B & R with only the Code Data Report by the Owner. B & R then cuts the component support, removing the welds, and uses the material to fabricate other component supports. B & R does not have the Certificate of Compliance (C of C) for the material.

(G) Authorized Nuclear Inspector Involvement - The ANI hold points on process sheets have been bypassed on numerous occasions. The ANI logbook documents these conditions and the volume would indicate a significant breakdown of the program and interface between B & R and the Authorized Inspection Agency personnel (See B and D-1 above).

It is called to your attention that the resurvey will include a review of the entire program & its implementation, and all areas discussed by the Survey Team with your personnel should be given particular consideration.

Please note that arrangements to schedule dates for the resurvey have been made and the exact dates have been or will be sent to you shortly. Note that the resurvey will not be held until we have received payment of our invoice for the subject survey.

If you disagree with the decision above and wish to submit additional information for reconsideration, you must make your intentions known, in writing, to this office, to be received within five (5) working days after receipt of this letter. Your request for reconsideration must include the reasons upon which the reconsideration is to be based.

If you have any questions concerning this survey or the resurvey, please contact this office.

Joseph A. Russo
Manager, Accreditation - N & SPPE
(212) 644-8051

/CE

cc: AIA - Hartford Steam Boiler
Chmn., SC-NA

R.P.I. 1 FEB 10 '82

ATTACHMENT 3.

THE HARTFORD STEAM BOILER
INSPECTION and INSURANCE COMPANY
HARTFORD • CONNECTICUT 06102

HOUSTON OFFICE — 4151 SOUTHWEST FREEWAY, SUITE 200, HOUSTON, TEXAS 77027 — (713) 623-2220

February 8, 1982

Ms. Arlene Spadafino
Director of Accreditation
The American Society of Mechanical Engineers
United Engineering Center
345 East 47th Street
New York, N.Y. 10017

RE: BROWN & ROOT, INC., COMANCHE PEAK UNITS 1 & 2
GLEN ROSE, TEXAS 76043
ASME NUCLEAR SURVEY CONDUCTED JANUARY 18, 19 & 20, 1982
FOR NA & NPT CERTIFICATES OF AUTHORIZATION.

Dear Ms. Spadafino:

The implementation of the corrective action required by the three findings (reports attached) was verified as being completed on February 4, 1982.

The specific corrective action taken is as follows:

FINDING #1

A. Letter has been written to AFCO which restricts the sources in which they, AFCO, may procure ASME materials for use by Brown & Root, Inc. at CPSES. AFCO is limited to procuring materials from:

1. Materials manufacturers qualified by AFCO or holding current ASME Quality System Certificates (materials).
2. Material suppliers who have a current ASME Quality System Certificate (materials).
3. Suppliers who are on the current Brown & Root approved suppliers list for CPSES.

B. All documentation associated with AFCO has been reviewed by QA Engineering and one material supplier, not falling in the above categories, was identified as having provided AFCO with material.

All the material from this supplier has been identified as non-conforming and tagged in accordance with the B & R QA Program. The nonconformance reports issued against this supplier's material are being evaluated by Design Engineering and Quality Engineering and the proposed disposition will be submitted for ANI concurrence prior to implementation.

FINDING #2

Brown & Root, Inc. Quality Assurance has reviewed current suppliers of ASME Code items to determine whether or not they appear on the B & R approved suppliers list.

B & R has verified the validity of the applicable Certificate(s) of Authorization of all suppliers of code stamped items which includes Southwest Fabrication, Inc. and has placed them on the B & R approved suppliers list.

FINDING #3

Brown & Root, Inc. issued a nonconformance report, segregated and tagged the above welding material in accordance with their QA Program, and this material has been scrapped.

All welding material on site has been reviewed to assure proper identification. This review has been documented by Quality Assurance. All receiving Inspectors have been retrained in the proper use of receiving procedures and material identification requirements and this training has been documented by Quality Assurance.

If more information is required or clarification is required, please do not hesitate to contact me.

Yours truly,

R.C. Howard
Sr. Regional Manager
Special Inspection Services Division

cc: R.E. Tilton - ASME Team Leader

cc: S.M. Matthews - State of Texas

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Date: January 20, 1982 Page 1 of 1

This form is to be used for the Inspection Specialist's verification of corrective actions taken by the Company to findings identified during a survey. After Sections I and II are completed by the Team Leader and accepted by a Company's representative, the original form is left with the Inspection Specialist and a copy returned to ASME with the team report. The Inspection Specialist is to complete Section III and transmit all finding reports from this survey to ASME with details included in one (1) transmittal.

Company & Survey Location
Brown & Root, Inc.
Comanche Peak Steam Electric Station
Glen Rose, TX

Inspection Specialist: Ronald Howard

Report Deadline Date: February 20, 1982

Section I
Finding # 1 (Describe deficiency including Code para.(s) and QA manual ref.(s)

AFCO (Material Supplier) surveyed & qualified by Brown & Root (B&R) the B&R survey did not address vendor qualification. The records of material supplied by AFCO show that they procured it from other material suppliers which was not under Code Case N-242-1.

Para. 8.3(b) & ~~[illegible]~~ NA-3700

Team Leader: R. E. Tilton Survey Dates: January 19-20, 1982

Section II - Proposed Corrective Action by the Company

A. Future procurement from AFCO will be restricted to materials manufacturer certificate holders, until such time as AFCO may obtain a Materials Supplier certificate; and

B. All material supplied by AFCO will be identified, and those items procured by AFCO from Material Suppliers shall be identified as nonconforming and dispositioned in accordance with Section 16.0 of the B&R QA manual.

Completion Date: 1/22/82 Company Rep: [signature]

Title: Site QA Manager

Section III - Summary of Verification by Inspection Specialist Including Actual Corrective Actions Taken

A. A letter has been written to AFCO which restricts the sources in which they may procure ASME materials for use by Brown & Root.
B. All documentation associated with AFCO has been review by QA Engineer. All materials procured by AFCO from improperly qualified suppliers have been identified by B&R ~~[illegible]~~ as nonconforming, tagged in accordance with Brown & Root QA Program.

Verification Date: 2-4-82 Inspection Specialist: R. C. Howard

Agency: Hartford Steam Boiler I & I Co.

ASME SURVEY PLANNING AND
AND CORRECTIVE ACTIONS

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Date: January 30, 1982 Page 1 of 1

This form is to be used for the Inspection Specialist's verification of corrective actions taken by the Company to findings identified during a survey. After Sections I and II are completed by the Team Leader and accepted by a Company's representative, the original form is left with the Inspection Specialist and a copy returned to ASME with the team report. The Inspection Specialist is to complete Section III and transmit all finding reports from this survey to ASME with details included in one (1) transmittal.

Company & Survey Location
Brown & Root Inc.
Comanche Peak Steam Electric Station
Glen Rose, TX

Inspection Specialist: Ronald Holland

Report Deadline Date: Feb 20, 1982

Section I
Finding # 2 (Describe deficiency including Code para.(s) and QA manual ref.(s)

~~P.O.~~ Purchase Order to Southwest Fabricating Inc for Piping Subassemblies. RC-2-RB-30-6 & RC-2-RB-63-6. Southwest Fabricators, Inc. is not a Brown & Root, Inc Approved Supplier.
(Para 8.3(c)) ~~NCA-3~~ NA-3853

Team Leader: R. E. Tilton

Survey Dates: January 18-22, 1982

Section II - Proposed Corrective Action by the Company

B&R Quality Assurance shall identify all suppliers of Code items, and initiate action to include those not currently identified on the Approved Suppliers list, on the listing in accordance with Section 8.0 of the B&R QA Manual

Completion Date: 1/27/82 Company Rep: Carl R. Purdy

Title: Site QA Manager

Section III - Summary of Verification by Inspection Specialist Including Actual Corrective Actions Taken

Brown & Root Quality Assurance has reviewed current suppliers of ASME Code items to determine whether or not they appear on the B&R Approved Suppliers List.
B&R has verified the validity of the applicable certificates of authorization of all suppliers of Code stamped items which includes Southwest Fabricators Inc and has placed them on the B&R Approved Suppliers List.

Verification Date: 2-4-82 Inspection Specialist: R. E. Tilton

Agency: Hartford Steam Boiler I & I Co.

3/80

ASME SURVEY FINDING REPORT

AND CORRECTIVE ACTIONS

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Date: February 24, 1982

Page 1 of 1

This form is to be used for the Inspection Specialist's verification of corrective actions taken by the Company to findings identified during a survey. After Sections I and II are completed by the Team Leader and accepted by a Company's representative, the original form is left with the Inspection Specialist and a copy returned to ASME with the team report. The Inspection Specialist is to complete Section III and transmit all finding reports from this survey to ASME with details included in one (1) transmittal.

Company & Survey Location

BROWN & ROOT INC
COMANCHE PEAK STEAM ELECTRIC STATION
GLEN ROSE, TX.

Inspection Specialist: RONALD HOWARD

Report Deadline Date: FEBRUARY 26, 1982

Section I
Finding # .3 (Describe deficiency including Code para.(s) and QA manual ref.(s)

WELDING MATERIAL (HT # 065228 - E 70-S-2) TO SFA 5.18 AND BEEN RECEIPT INSPECTED AND ACCEPTED BY BROWN & ROOT INC. THE MATERIAL WAS NOT IDENTIFIED AS REC'D BY SFA 5.18 PARA 13.4. (PARA 8.4.3) NA 4133.8.

Team Leader: R. E. TILTON

Survey Dates: FEBRUARY 26, 1982

Section II - Proposed Corrective Action by the Company

All welding material, on-site, shall be reviewed to assure proper identification. This review shall be documented. Receiving Inspectors shall be re-trained in proper use of receiving inspection procedures and material identification requirements. The training shall be performed and documented as required by QA Manual.

Completion Date: 2/3/82

Company Rep: [signature]

Title: Sr QA Manager

Section III - Summary of Verification by Inspection Specialist Including Actual Corrective Actions Taken BROWN & ROOT ISSUED NCR, SEGREGATED AND TAGGED THE ABOVE WELDING MATERIAL. THIS MATERIAL WAS LOCATED & SEGREGATED. ALL WELDING MATERIAL ONSITE HAS BEEN REVIEWED TO ASSURE PROPER IDENTIFICATION. THIS REVIEW HAS BEEN DOCUMENTED BY QA. ALL RECEIVING INSPECTORS HAVE BEEN RE-TRAINED IN THE PROPER USE OF RECEIVING PROCEDURES AND MATERIAL IDENTIFICATION REQUIREMENTS. THIS TRAINING HAS BEEN DOCUMENTED BY QA.

Verification Date: 2-4-82

Inspection Specialist: [signature]

Agency: [illegible]