8/14/84

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. 50-445-1 and 50-446-1
(Comanche Peak Steam Electric Station Station, Units 1 and 2)	

CASE'S MOTIONS REGARDING ANI DOCUMENTS

CASE (Citizens Association for Sound Energy), Intervenor herein, files these Motions Regarding ANI Documents pursuant to the Board's ruling during the 7/26/84 telephone conference call (Tr. 13,855/24-13,857/10, 13,859/20-13,860). (See full discussion at Tr. 13,845/6-13,860/16.)

Although we still believe that these documents should have been provided by Applicants under existing discovery requests some time ago (see discussion at Tr. 13,850/23-13,854/22), the Board has already ruled in this regard. However, the fact remains that we did not have these documents until we obtained them in the TUEC rate hearings, we do have them now (and are finally able to get them into the hands of the Board) and we believe that the information contained in them is too important for the Board not to consider.

CASE had hoped to be able to make this filing earlier; however, when we obtained a copy of the transcript of the conference call after it was received at the mini-public document room and we had an opportunity to review the Board's comments, it became obvious that information was required in addition to the very brief and somewhat skimpy summary we had already prepared. Therefore, we have done some very rough, brief, trending in an

attempt to give the Board a more accurate picture of why CASE believes the ANI documents are so important. This information is contained in attachments organized by general subject matter. It should be remembered that the ANI documents, in and of themselves, (although important) represent only a part of the overall picture of the design and construction at Comanche Peak, and should be considered in that overall context. In addition, the attached summaries were done very hurriedly and (while we have attempted to include sufficient information to allow the Board to understand the importance of the documents) do not represent our total arguments regarding these documents.

One of the reasons these ANI documents is important is because of the position held by the Authorized Nuclear Inspectors (ANI's) at Comanche Peak. As stated by Applicants' counsel, Mr. Horin, during the 7/26/84 conference call "These SIS reports are . . . inspections by the authorized nuclear inspector . . . the authorized nuclear inspector is not a contractor or subcontractor, he's an independent inspector who is out at the site." (Tr. 13851/3-9, emphasis added.)

In addition, these documents are relevant and material to CASE's Contention 5 because in some instances the ANI has found problems with items which had already been inspected and accepted under Applicants' QA/QC program. Further, in several instances, the ANI specifically identified clear trends and patterns which Applicants' own QA/QC program had failed to promptly identify or correct. Additional points are contained in the discussions of each of the categories.

There are a couple of specific items to which CASE wishes to call the Board's attention. One has to do with the report discussed briefly during

the conference call (at Tr. 13,850/2-22); this is CASE Exhibit 1,058, ANI SIS Report 932 10-032, dated 2/17/84. It is included on pages 8 and 9 of the attached section on "ANI REPORTS -- WELDING." We believe that this particular report is relevant and material in several ways and deserves further comment.

As the ANI stated, this report (which was dated 2/17/84) has to do with hidden welds on a support, in regard to interpass temperature while welding to embed plates. The welder admitted that he did not know the thickness of the embed plate he was welding to, nor did he check the interpass temperature during welding. Further, in Applicants' answer to this report (dated 3/9/84), they stated that the welder was retrained and that the QC department was instructed to monitor preheat and interpass temperatures 2 days a week, to be implemented by 3/12/84.

This report is important in several ways. One of the most important is regarding prompt identification and corrective action regarding nonconforming conditions. Applicants had been on notice regarding this problem not only through the February 1984 prefiled testimony of Henry and Darlene Stiner /1/, but also through the affidavit of Henry and Darlene Stiner filed July 28, 1983 /2/. However, corrective action was apparently not taken until 3/9/84 when the problem was pointed out by the ANI, to be implemented by 3/12/84, and apparently consisted only of instructing the QC

/1/ see page 10, line 14, through page 12, line 10, bound in following Tr. 10,333, stricken at Tr. 9955/21-9960/24.

/2/ see Affidavit of Henry and Darlene Stiner, page 4, line 1, through page 6, line 25, attached to CASE's 7/28/83 letter to the Board under subject of Objections to Board's Findings and CASE's Answer to Applicants' 7/15/83 Summary of the Record Regarding Weave and Downhill Welding.

department to monitor preheat and interpass temperatures two days a week.

In addition, this report and Applicants' response to it is contrary to testimony in the operating license hearings by Applicants' witnesses, and this ANI report was in fact written up at almost the exact time Applicants' witnesses were testifying in the operating license hearings that they and everybody they ever knew of or even heard of always checked the heat input when welding /3/. This ANI Report obviously calls into question the testimony of Applicants' witnesses in this regard (as well as in regard to their other testimony).

(It should be noted that the NRC Staff is also looking into the matter of proper use of preheat at Comanche Peak.)

To CASE, perhaps the most important aspect of this is not that Applicants did not respond to the 7/28/83 allegations of Henry and Darlene Stiner, but the way Applicants responded to them -- by apparently ignoring the problem, then by successfully (with the assistance of the NRC Staff) attempting to keep Henry and Darlene Stiner's testimony in this regard out of the record, then by attempting to mislead the Board regarding preheat at Comanche Peak, and next, by attempting to prevent CASE from getting the ANI Reports into the hands of the Board. Further, Applicants' counsel attempted to downplay the importance of this particular ANI Report (Tr. 13,855/3-7), although Applicants' attorneys (even assuming that they were not themselves

/3/ See, for example, testimony of Applicants' Witnesses Clifton R. Brown at Tr. 11,465-11,466, 11,468, 11,486; Fred E. Coleman at Tr. 11,535-11,537, 11,567, 11,570-11,571; Isaiah Pickett at Tr. 11,615-11,620, 11,643, 11,651-11,652; Armand M. Braumuller and Salvador Fernandez at Tr. 11,663-11,664, 11,668, 11,670; and perhaps others -- we are still working on our welding findings and do not have the additional citations at this time.

aware of the contents of the report earlier, were made aware of it over a month ago, with CASE's 6/30/84 letter to Mr. Reynolds under subject of "Documents Obtained by CASE in Rate Hearings Which Are Also Relevant and Material for Operating License Hearings," and CASE's 6/30/84 Request to Applicants for Admissions, to which we attached a brief description of the portions of the documents, along with copies of the documents themselves /4/. CASE submits that Applicants themselves should have called this February 17 report and Applicants' March 9 response and March 12 implementation date to the Board's attention as soon as it occurred -- especially in view of the fact that this matter was a subject discussed during hearings which were underway at almost exactly the same time, during the weeks of February 20-24 and March 19-23.

And finally, Applicants put in place a partial remedy which, CASE submits, is too little too late -- not only because of the timing, but also because there is no indication that Applicants have attempted to ascertain whether or not this is an isolated incident or has more widespread implications, or that they have even considered retraining any other welders.

To CASE, this entire matter and Applicants' actions regarding it call into serious question the testimony of Applicants' welding witnesses and the adequacy and effectiveness of Applicants' QA/QC program, indicates a lack of candor and honesty with the Board on the part of Applicants, and strongly challenges the adequacy and intent of Applicants' management of the design and construction process at Comanche Peak.

/4/ We are attaching copies of the same documents to this pleading.

For this reason, we believe that this ANI Report should be admitted into the record of these proceedings and that CASE should be allowed to include it in our proposed findings on welding.

As mentioned previously, although CASE has tried to include sufficient information to allow the Board to understand the importance of the documents, the attached summaries do not represent our total arguments regarding these documents. They will be addressed further in the context of the overall picture, in conjunction with other documents and testimony in the proceedings.

A brief example of this will serve to illustrate our point, and can be found in the summary section "ANI REPORTS -- PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES." In our overall proposed findings, we will include the fact that, although the problem of violation of requirements that nonconforming conditions be promptly identified and corrected had been specifically identified by the ANI not once, but several times, Applicants never took action sufficient to correct the problem (see entire summary section). Further, although Applicants continued to "reinstruct" employees regarding the handling of nonconformances, Applicants' response was totally inadequate; the below-listed ANI documents (which cover a period from November 1982 through February 1984) clearly demonstrate that such reinstruction did not in fact correct the problem:

> B&R is going to indoctrinate all employees in what is expected of them regarding reporting of nonconformances (1/20/83 B&R Answer). (See CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82.)
>
> Everybody was reinstructed regarding NCR's. (See 11/8/83 answer, attached to CASE Exhibit 1,050, ANI SIS Record 366 and 366A, 10/21/83.)
>
> Need to reinstruct personnel regarding NCR's. (See CASE Exhibit 1,056, ANI SIS Record 939 371, 2/6/84.)

CASE believes that the attached summaries are self-explanatory (although the Board will have to read the reports themselves to get the entire picture).

Initially, all CASE wanted to do was to be able to use some of the documents obtained in the rate hearings, which we believed were relevant and material for the operating license hearings, in the same manner in which we would have been able to use any documents obtained on discovery in the operating license hearings (having to meet the same burden of proving relevancy and materiality as for any such documents). We did not at that time attach any other special significance to them. It is Applicants' actions which have now given these documents such special signficance and which necessitated CASE's filing this Motion; and, after having done this very rough trending, we now believe that they do indeed have special signficance and importance for these proceedings.

CASE's Motions

For the reasons stated in the preceding, CASE moves that the Board admit the attached ANI documents (CASE Exhibit 1,023 through 1,060) into the record of these proceedings, to be used as any other documents so admitted can be used. It should be noted that this will not delay the proceedings in any way; we do not believe that testimony regarding these documents is necessary -- they speak for themselves.

In addition, we move that the Board accept into the record the attached pages from Applicants' FSAR (17.1-39, May 31, 1979; 17.1-39, Amendment 41, July 11, 1983; 17.1-40, May 31, 1979; and 17.1-41, August 7, 1981). These documents are discussed on page 3 of the summary on "ANI REPORTS -- ARC

STRIKES", where it is stated in CASE's discussion:

> "Further, Applicants' proposed handling of the problem by use of IR's and punch lists in some instances in effect removed this problem from the established program of using NCR's to report nonconforming conditions (which was in effect until 7/11/83; see attached page 17.1-39, 5/31/79, and the revision to it, page 17.1-39, Amendment 41, 7/11/83, and pages 17.1-40, and 17.4-41 which were current as of 7/11/83), and is relevant to another portion of CASE's proposed new contention, use of inadequate or less restrictive (than NCR's) methods of dealing with nonconformances."

These FSAR pages are an important part of our case. We believe that it is necessary to admit <u>these particular pages</u> into evidence. Although Applicants' FSAR is an Exhibit in these proceedings (Applicants' Exhibit 3), it is our understanding that only the <u>current</u> FSAR pages are kept as part of the record. At least one page (17.1-39, 5/31/79), has already been revised; our FSAR copy is not completely up-to-date, and we do not know whether the other referenced pages are still current (we only know that they are the pages which were in effect as of 7/11/83). It is therefore necessary to admit these pages in order to have a complete record on this important point.

We further move that, since this pleading was prepared rather hurriedly, should the Board require further clarification before it is able to rule favorably on CASE's Motion, CASE be given the opportunity to supplement this pleading.

Respectfully submitted,

Juanita Ellis

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ATTACHMENTS

Summaries:

ANI REPORTS -- ARC STRIKES

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES

DESIGN, ETC.

DOCUMENT CONTROL

VIOLATION OF HOLD POINTS

INTIMIDATION

MINIMUM WALL

TESTS

TRAINING

WELDING

FSAR pages (discussed on page 3 of summary on ANI REPORTS -- ARC STRIKES):

17.1-39, May 31, 1979

17.1-39, Amendment 41, July 11, 1983
17.1-40, May 31, 1979
17.1-41, August 7, 1981

CASE EXHIBIT NO.	DESCRIPTION AND SUMMARY TO WHICH EXHIBIT IS APPLICABLE
1,023	ANI SIS Record 939 314, 10/14/82 DESIGN DOCUMENT CONTROL VIOLATION OF HOLD POINTS INTIMIDATION WELDING

1,024 ANI SIS Report 932 11-006, 10/14/82 and 11-006-1, 10/27/82

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DOCUMENT CONTROL
MINIMUM WALL
TRAINING
WELDING

1,025 ANI SIS Record 939 322A, 11/11/82

VIOLATION OF HOLD POINTS
INTIMIDATION

1,026 ANI SIS Record 939 327, 11/18/82

ARC STRIKES
PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DOCUMENT CONTROL
MINIMUM WALL
TRAINING
WELDING

1,027 ANI SIS Report 932 10-016, 12/20/82

DESIGN
DOCUMENT CONTROL
WELDING

1,028 ANI SIS Report 932 18-005, 1/10/83

DESIGN
DOCUMENT CONTROL
WELDING

1,029 ANI SIS Record 939 334, 1/13/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL

1,030 ANI SIS Record 939 339, 3/1/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL

1,031 ANI SIS Record 939 341, 3/8/83

DESIGN
TESTS

1,032 ANI SIS Record 939 346, 4/21/83

DOCUMENT CONTROL
TESTS

1,033 ANI SIS Report 932 9-002A, 4/21/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
WELDING

1,034 ANI SIS Record 939 347, 4/21/83

DOCUMENT CONTROL
TRAINING
WELDING

1,035 ANI SIS Report 932 G-044, 5/26/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
TRAINING
WELDING

1,036 ANI SIS Record 939 353, 6/2/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES

1,037 ANI SIS Record 939 355, 6/7/83

DESIGN
DOCUMENT CONTROL

1,038 ANI SIS Report 932 4-003-2, 6/22/83

DESIGN
DOCUMENT CONTROL
WELDING

1,039 ANI SIS Report 932 G-051, 6/29/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
INTIMIDATION
WELDING

1,040 ANI SIS Report 932 10-022, 6/30/83

DESIGN
DOCUMENT CONTROL

1,041 ANI SIS Record 939 356, 7/1/83

DESIGN
DOCUMENT CONTROL

1,042 ANI SIS Record 939 357, 7/2/83

DESIGN
TRAINING
WELDING

1,043 ANI SIS Record 939 362A, 8/3/83

VIOLATION OF HOLD POINTS
INTIMIDATION

1,044 ANI SIS Record 939 361A, 8/11/83

DESIGN
DOCUMENT CONTROL

1,045 ANI SIS Record 939 363A, 8/18/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
INTIMIDATION
TESTS
TRAINING

1,046 ANI SIS Record 939 364, 8/23/83 (follow-up to CASE Exhibit 1,032, ANI SIS Record 939 346, 4/21/83)

DOCUMENT CONTROL
TESTS
TRAINING

1,047 ANI SIS Report 932 16-009, 9/27/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN

1,048 ANI SIS Report 932 10-024, 10/5/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DOCUMENT CONTROL
WELDING

1,049 ANI SIS Record 939 365, 10/7/83

DOCUMENT CONTROL
WELDING

1,050 ANI SIS Record 939 366 and 366A, 10/21/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DOCUMENT CONTROL
TRAINING

1,051 ANI SIS Record 939 369, 11/9/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
WELDING

1,052 ANI SIS Record 939 367-A, 10/31/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
INTIMIDATION
WELDING

1,053 ANI SIS Record 939 367-B, 11/18/83

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
INTIMIDATION
WELDING

1,054 ANI SIS Report 932 10-030, 1/5/84

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN

1,055 ANI SIS Report 932 10-031, 1/24/84

DOCUMENT CONTROL

1,056 ANI SIS Record 939 371, 2/6/84

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
TRAINING

1,057 ANI SIS Report 932 5-002 and 5-002A, 1/23/84 and 2/10/84

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
TESTS
WELDING

1,058 ANI SIS Report 932 10-032, 2/17/84

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
TRAINING
WELDING

1,059 ANI SIS Report 932 10-033, 4/13/84

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DOCUMENT CONTROL

1,060 ANI SIS Report 932 10-034, 4/18/84

PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES
DESIGN
DOCUMENT CONTROL
VIOLATION OF HOLD POINTS
TESTS
WELDING

NOTE: The preceding is not an all-encompassing listing of categories into which each document falls; it is intended only to give a quick overview of the applicability of the Exhibits.

ANI REPORTS -- ARC STRIKES

Arc Strikes represent a continuing problem at Comanche Peak which Applicants have not corrected (or have not been able to correct) over a period of several years.

In addition to representing a continuing problem in and of itself, the fact that this problem has continued to recur over a period of many years, when combined and trended with other recurring problems, also indicates a breakdown in the Applicants' QA/QC program in that they have failed to take proper measures which would prevent recurrence (in violation of 10 CFR Part 50, Appendix B, Criterion XVI). As such, it is one of many possible examples which are important in the context of the global issues regarding Applicants' noncompliance with 10 CFR Part 50, Appendix B (see discussion in Board's 3/15/84 Memorandum (Clarification of Open Issues), bottom of page 4 continued top of page 5). This is also the type of information which would be included as part of CASE's Trends or Patterns of Non-Conforming Conditions (see discussion in CASE's 4/2/84 Motions Regarding Board's 3/15/84 Memorandum (Clarification of Open Issues), pages 18 and 19). Also, this problem is relevant to portions of CASE's proposed new contention which we will be filing in the near future.

This problem cannot be viewed in a vacuum from other related information already in the record, and it is necessary to include enough of it here for the Board to understand the reason CASE believes the recently obtained ANI documents are important.

A brief scanning of CASE Exhibit 38 (admitted into evidence 6/9/82, at Tr. 1349), the Brown & Root Quality Assurance Department Nonconformance Log,

reveals that this has been a continuing problem identified on Nonconformance Reports (NCR's). In addition, we call the Board's attention to CASE Exhibit 510, 12/18/78, NCR C-1296R1, especially pages 1, 3, and 4. (This is one of the exhibits which were accepted into evidence in accordance with the Board's 12/7/82 Order (Proposed Findings of Fact; CASE Exhibits) following submission of CASE's 10/18/82 Response to Board's Directive Regarding CASE Exhibits; these exhibits were accepted into evidence in the May 1982 hearings.) This document indicates one of the reasons it is so important to control arc strikes, at least in regard to rebar. It states that according to the "CRSI Handbook for Placing Reinforcing Bars," Handbook Section 10-11 states:

> "'Simply starting a spark against a bar . . . or any similar operation that concentrates high heat at one point of a bar creates what is called a 'notch' effect. Tests have shown that this can reduce the strength of a bar to 35 to 40 percent of its capacity'." (Emphasis added.)

The information contained in Reports and Records of the Authorized Nuclear Inspector (ANI) obtained by CASE in the Texas Utilities Electric Company (TUEC) rate hearings indicates the ANI's concerns regarding this continuing problem. The fact that the ANI had such strong comments regarding this problem increases its importance, since these items should have already been inspected, checked, and verified under Applicants' QA/QC program.

As indicated below, this problem also indicates a failure in Applicants' training program and has serious implications because of the

continuing receipt and use of pipe which has or is near to having minimum wall violations (see discussion in ANI REPORTS -- MINIMUM WALL, included herein).

Further, Applicants' proposed handling of the problem by use of IR's and punch lists in some instances in effect removed this problem from the established program of using NCR's to report nonconforming conditions (which was in effect until 7/11/83; see attached page 17.1-39, 5/31/79, and the revision to it, page 17.1-39, Amendment 41, 7/11/83, and pages 17.1.40, and 17.1-41 which were current as of 7/11/83), and is relevant to another portion of CASE's proposed new contention, use of inadequate or less restrictive (than NCR's) methods of dealing with nonconformances.

From ANI Reports and Records:

ANI: "Since surface defects no deeper than 1/16" need be repaired and these areas were ground upon, they must have been more serious defects or arc strikes." (See CASE Exhibit 1,024, ANI SIS Report 11-006, 10/14/82, and 11-006-1, 10/27/82.) (Closed with CASE Exhibit 1,026, ANI SIS Record 939 327.)

B&R 1/7/83 Answer: "In the past year or so, arc strikes have been a major nonconforming condition as evidenced by the number of IR's and NCR's issued to identify and correct them." (Emphasis added.) (See CASE Exhibit 1,026, ANI SIS Record 939 327, 11/18/82.)

ANI, page 2: "It is very evident that the training and indoctrination program outlined in Section III of the QA Manual is not being implemented, due to the number of arc strikes and base metal non conformances being found by ANI's and Q.C. Inspectors during walkdowns and at non destructive examinations...Due to numerous sections of pipe being received that are so close to minimum wall at time of receiving, it becomes even more critical that all arc strikes and base metal non conformances are reported and documented promptly." (See CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82.)

1/7/83 B&R Answer: Arc strikes and base metal defects shall be handled as follows (see CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82):

(1) Discovered on N-stamped components, ID'd and documented on NCR;

(2) Discovered prior to system walkdown by QC, documented on IR (Inspection Report);

(3) Discovered during system walkdown by QC, entered on system punchlist and documented on an IR;

(4) Discovered after system pressure testing, documented on NCR.

ANI REPORTS -- PROMPT IDENTIFICATION AND CORRECTION OF NONCONFORMANCES

CASE has always been concerned with the prompt identification and correction of nonconformances. Criterion XV of 10 CFR Part 50, Appendix B, is specifically titled "Nonconforming Materials, Parts, or Components," and Criterion XVI is titled "Corrective Action." CASE believes that these are among the most important requirements of an effective QA/QC program. The Licensing Board also has always expressed concern with these matters (see especially Board's 12/28/83 Memorandum and Order (Quality Assurance for Design), pages 2-7).

Clearly a breakdown in this important aspect of Applicants' QA/QC program goes to the very heart of CASE's Contention 5. As such, it is important in the context of the global issues regarding Applicants' noncompliance with 10 CFR Part 50, Appendix B (see discussion in Board's 3/15/84 Memorandum (Clarification of Open Issues), bottom of page 4 continued top of page 5). This is also the type of information which would be included as part of CASE's Trends or Patterns of Non-Conforming Conditions (see discussion in CASE's 4/2/84 Motions Regarding Board's 3/15/84 Memorandum (Clarification of Open Issues), pages 18 and 19). Also, this problem is relevant to portions of CASE's proposed new contention which we will be filing in the near future.

The following summary of information contained in Reports and Records of the Authorized Nuclear Inspection (ANI) obtained by CASE in the Texas Utilities Electric Company (TUEC) rate hearings indicates that there has been a serious, continuing, documented, problem of inadequate corrective action at Comanche Peak. We believe that the ANI information is of vital

importance to our case, since it represents the views of individuals who not only inspect, but who also review documentation and construction after it has been reviewed by Applicants' own inspectors.

From ANI Reports and Records:

ANI: (Regarding base metal defects, grinding of welds, minimum wall, document control, etc.): Response does not address the larger problem of instruction to field personnel to prevent the same problem in the future. "I would like to stress that this problem is-or-could be larger than this single instance and warrants immediate attention." (See CASE Exhibit 1,024, ANI SIS Report 11-006, 10/14/82, and 11-006-1, 10/27/82.)

ANI: Corrective action - not promptly taken (see CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82).

Training: ANI not totally satisfied with B&R's response to #327; B&R is going to indoctrinate all employees in what is expected of them regarding reporting of nonconformances (1/20/83 B&R Answer). (See CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82.)

Serious Breakdown -- Reporting of Nonconformances -- ANI, page 2: "It is very evident that the training and indoctrination program outlined in Section III fo the QA Manual is not being implemented, due to the number of arc strikes and base metal non conformances being found by ANI's and Q.C. Inspectors during walkdowns and at non destructive examinations...Due to numerous sections of pipe being received that are so close to minimum wall

at time of receiving, it becomes even more critical that all arc strikes and base metal non conformances are reported and documented promptly." (See CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82.)

Reporting of arc strikes and base metal defects: 1/7/83 B&R Answer: Arc strikes and base metal defects shall be handled as follows (see CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82):

(1) Discovered on N-stamped components, ID'd and documented on NCR;

(2) Discovered prior to system walkdown by QC, documented on IR (Inspection Report);

(3) Discovered during system walkdown by QC, entered on system punchlist and documented on an IR;

(4) Discovered after system pressure testing, documented on NCR.

NCR's -- voided after being closed, without ANI notification, based on fallacious suppositions. (See CASE Exhibit 1,029, ANI SIS Record 939 334, 1/13/83.)

Document Control -- ANI: Response was returned unsatisfactory because: no corrective action is addressed concerning this generic problem, or for the correction of illegible drawing in the files, nor the ones issued from DCC; the problem mentioned here concerns no CMC with the documentation when presented for final review. A final review cannot be performed if you do not have the correct design document in hand. (See CASE Exhibit 1,030, ANI SIS Record 939 339, 3/1/83.)

Corrective Action -- ANI: No action had been taken by B&R to stop further processing after the non-conformance was discussed; when discovered again, non-conformance was identified and resulted in generation of an NCR. ANI requested a review of Unit 2 to identify possible other instances of similar nonconformances; and a demonstration of the control features of B&R's program that assure the issuance of conforming Class 1 attachment material in the field.

B&R 6/7/83 Answer: none in Unit 2; present control features will assure issuance of conforming Class I attachment material to the field. (See CASE Exhibit 1,033, ANI SIS Report 932 9-002A, 4/21/83.)

NCR's -- thousands. (See CASE Exhibit 1,035, ANI SIS Report 932 G-044, 5/26/83.)

Corrective Action -- on process sheets, not NCR's. (See CASE Exhibit 1,035, ANI SIS Report 932 G-044, 5/26/83.)

NCR's -- "At this time, ANI's are receiving NCR's which have the Q.A. review signed and dated prior to Engineering signing and dating . . ." (See CASE Exhibit 1,036, ANI SIS Record 353, 6/2/83.)

NCR did not correct nonconforming condition. (See CASE Exhibit No. 1,039, ANI SIS Report G-051, 6/29/83.)

Open SIS Reports listed; see especially p. 5 and 6 of B&R's answer regarding deficiencies in issue, revisions, and follow-up of corrective action requests; (see CASE Exhibit 1,045, ANI SIS Record 939 363A, 8/18/83).

ANI's semi-annual ANSI N626 Audit, 7/13-14/83, (Attachment 8) (especially regarding nonconformance reports' resolution and deficiencies in issue, revisions, and follow-up of corrective action requests.

NCR's -- generic (listing of open ones); page 7 of answer; improper closure of outdated NCR's.

ANI's won't sign until corrected; CAR S-54; thousands of drawings were involved (page 9 of answer); CAR's voided (see Attachment 8, HSB audit).

Established CP Pipe Support and Oversite Group which "will be responsible for organizing CP resources into an effective Hanger Team capable of moving hanger packages from their present location and status to the vault in the most expeditious manner possible, not foregoing any of the engineering or regulatory requirements."-- new hanger team, "due to urgency of the pipe support problems" -- Attachment 10.

3 Hanger Task Groups (HTG) established -- Attachment 11; see CASE Exhibit 1,045, ANI SIS Record 939 363A, 8/18/83.)

Closure of NCR's affecting piping deviations - might have caused further distortion and/or movement, creating a problem of greater magnitude; Generic NCR M2807. (See CASE Exhibit 1,047, ANI SIS Report 932 16-009, 9/27/83.)

11 supports were fabricated without described "control of welding materials" -- should be reported as nonconforming condition (See CASE Exhibit 1,048, ANI SIS Report 932 10-024, 10/5/83.)

NCR's (see CASE Exhibit 1,050, ANI SIS Record 366 and 366A, 10/21/83):

voided which should not be;

cannot track;

being presented to ANI's for review without having the referenced drawings' revision No.;

Trend categories for NCR's are inconsistent;

NCR had never been reviewed by Action Addressee; being revised by organizations other than organization that originally prepared them;

info added without being revised;

do not give required information;

state closed when was voided;

transferred to other area without being tracked;

IR's issued after ANI acceptance of hanger packages;

procedures inadequate re: what is to be written up on NCR as opposed to IR;

IR's not trended;

IR trend categories inconsistent;

no objective evidence QC Leads reviewing IR's;

CP-QAP 11.1 says write an IR on everything except N stamped and final accepted items;

B&R's QA Manual 16.4.1; (August & September, there was no QAM requirement that adequately addressed final acceptance and the initiation of an NCR for the condition; on 10/10/83, B&R QAM Section 16, Paragraph 16.3.1 was revised to clarify this item; page 3 of 12/5/83 answer.)

Training -- Everybody reinstructed (see 11/8/83 answer).

Trending -- Amendment to Quarterly Report for 3rd Qtr. of 1983 issued 11/1/83 for IR's; all future Qtr. Reports will include an IR trend (page 2 of answer). (See CASE Exhibit 1,050, ANI SIS Record 366 and 366A, 10/21/83.)

Corrective Action -- has not resulted in correction of generic problem.

Major (generic) problem -- non-conforming material used on attachments for Class I attachments. (See CASE Exhibit 1,051, ANI SIS Record 939 369, 11/9/83; see also: 939 360; 932: 9-002, 9-002A (CASE Exhibit 1,033), 9-002-1, 9-002-2, and 9-002B.)

NCR's -- any discrepancies found in indepth search for possible usage on small and large bore hangers will be addressed on individual NCR's; see CASE Exhibit 1,051, ANI SIS Record 939 369, 11/9/83.

ANI: Corrective Action -- response to 367 and 367A not acceptable; when one examines the impact of the items identified on B&R's programmatic compliance with ASME Section III, there is cause for Inspector concern in the area of corrective action; an identified condition that renders hardware or supporting documentation unacceptable for ASME certification is in every case significant; nonconformance is corrected but the cause is not addressed. (See CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and CASE Exhibit 1,053, ANI Sis Record 939 367-B, 11/18/83.)

ANI stated (see page 2, CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and especially CASE Exhibit 1,053, ANI SIS Record 939 367-B, 11/18/83, page 2 of 5):

> "I cannot comprehend the animosity and facetious of a response that makes reference to the (ANI) Inspector's 'personal assumptions', 'misconceptions' and 'blind-siding'. . . It should be understood that a 939 monitoring report is not an 'indictment' of Brown & Root's program but is a required mechanism for the ANI to assure full compliance with ASME quality requirements." (Emphases added.)

Welding -- ANI (see CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and CASE Exhibit 1,053, ANI SIS Record 939 367-B, 11/18/83):

"It is difficult to understand how 1727 identified welding discrepancies are not deemed significant enough to warrant corrective action to preclude repetition." (emphasis added);

hundreds of welds previously accepted have been rejected by NCR's and IR's and subsequently trended in category C-16;

ANI: "The Inspector felt that considering the documented rejection of hundreds of previously accepted welds, B&R QA would be sufficiently concerned to evaluate those previous inspections." (emphasis added);

"The large number of NCR's and/or Unsat IR's..." (Answer 12/27/83, page 1);

"Items rejected during final acceptance inspection were predominately pre-1982 fabrication and installation activities, and not subjected to the current acceptance criteria." (emphasis added) (12/27/83 Answer, page 1);

"The greater than 50% QC rejection rate for pre-1982 work..." (emphasis added) (12/27/83 Answer, page 1);

"...proposed revision to B&R QA Manual will be submitted to the ANI's for review by 1/15/84, which will identify alternative methods for documenting corrective action." (12/27/83 Answer, page 2).

Nonconforming material -- Class 1 piping attachment material installed in the field; Class 2 pressure retaining material after installation in Class 1 fabrication. (See CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and CASE Exhibit 1,053, ANI SIS Record 939 367-B, 11/18/83; see also CASE Exhibit 1,051, SIS Record 939 369, 11/9/83.)

Major problem -- use of applied force during fabrication of component supports: unauthorized use of a porta-power to spread the horizontal members of a box support in order to achieve required clearance. ANI stated: "I have been informed that Pipe Support Engineering takes exception to any corrective action...Engineering claims to 'factor' in stresses imposed on weldments and pipe support members by forcibly 'springing' those members. This rationale is not acceptable to the ANIA...Failure to address this problem will result in perpetuation of craft personnel using applied force and issuance of NCR's by QC." (Emphases added.)

Note by CASE: This ties in with and adds credibility to deposition of CASE Witness Bob Messerly regarding use of polar crane to force 32" main

steam line into position (see pages 25-32 of 4/14/84 Messerly NRC Deposition, attached to CASE's 8/3/83 letter to Board under Subject of Record Regarding Discouragement from Reporting Nonconforming Conditions at Comanche Peak Nuclear Plant); also with testimony by CASE Witness Charles Atchison that he had observed "cold springing" of two lines from reactor coolant pump compartment number three (see discussion on page 46 of Board's 7/29/83 Proposed Initial Decision (Concerning aspects of construction quality control, emergency planning and Board questions); closed with Board's 9/23/83 Memorandum and Order (Emergency Planning, Specific Quality Assurance Issues and Board Issues), page 36).

ANI: "This 932 closed based on PSE Chief Engineer Jay Ryan assuming responsibility. (Signed) M. Coats 5/16/84"

See CASE Exhibit 1,054, ANI SIS Report 10-030, 1/5/84.

NCR's -- voided; used to upgrade supports from Class 2 to Class 1.

Major problem (though not specifically identified by ANI as such) -- upgrading supports from Class 2 to Class 1; possibly with non-conforming material.

Training -- need to reinstruct personnel re: NCR's. (See CASE Exhibit 1,056, ANI SIS Record 939 371, 2/6/84.)

Impact Testing -- Supports found which have welded attachments which require impact testing but the detail sketch does not specify this as a requirement. (See CASE Exhibit 1,057, ANI SIS Report 932 5-002A, 2/10/84.)

Subsequent revision of Design Specifications mandates material meet

impact requirements. Deficiencies were not ID'd until completion or near completion of fabrication. Some are being recertified; Answer 2/17/84, attached to CASE Exhibit 1,057, ANI SIS Report 932 5-002A.)

Re: hidden welds on support, in regards to interpass temperature while welding to embed plates. Mr. Lopez admitted he did not know the thickness of the embed plate he was welding to, nor did he check the interpass temperature during welding. (See CASE Exhibit 1,058, ANI SIS Report 932 10-032, 2/17/84.)

Training -- 3/9/84: Welder retrained; QC department instructed to monitor preheat and interpass temperatures 2 days per week, to be implemented by 3/12/84. (See attachment to CASE Exhibit 1,058, ANI SIS Report 932 10-032.)

Note by CASE: This ANI Report is especially important regarding corrective action because Applicants had been on notice regarding this problem not only through the prefiled testimony of Henry and Darlene Stiner (see page 10, line 14, through page 12, line 10, stricken at Tr. 9955/21-9960/24), but also through the affidavit of Henry and Darlene Stiner filed 7/28/83 (see Affidavit of Henry and Darlene Stiner, page 4, line 1, through page 6, line 25, attached to CASE's 7/28/83 letter to the Board under subject of Objections to Board's Findings and CASE's Answer to Applicants' 7/15/83 Summary of the Record Regarding Weave and Downhill Welding). However, corrective action was apparently not taken until 3/9/84, to be implemented by 3/12/84, and apparently consisted only of instructing the QC

department to monitor preheat and interpass temperatures two days a week.

In addition, this is contrary to testimony in the operating license hearings by Applicants' witnesses, and this ANI Report was in fact written up at almost the exact time Applicants' welding witnesses were testifying in operating license hearings that they and everybody they ever knew of or even heard of always checked the heat input when welding. (See, for example, testimony of Applicants' Witnesses Clifton R. Brown at Tr. 11,465-11,466, 11,468, 11,486; Fred E. Coleman at Tr. 11,535-11,537, 11,567, 11,570-11,571; Isaiah Pickett at Tr. 11,615-11,620, 11,643, 11,651-11,652; Armand M. Braumuller and Salvador Fernandez at Tr. 11,663-11,664, 11,668, 11,670; and perhaps others -- we are still working on our welding findings.)

(It should be noted that the NRC Staff is also looking into the matter of proper use of preheat at Comanche Peak.)

To CASE, perhaps the most important aspect of this is not that Applicants did not respond to the 7/28/83 allegations of Henry and Darlene Stiner, but the way Applicants responded to them -- by apparently ignoring the problem, then by attempting to keep testimony by Henry and Darlene Stiner out of the record, then by attempting to mislead the Board regarding preheat at Comanche Peak, and next, by attempting to prevent CASE from getting the ANI Reports into the hands of the Board. And finally, by putting in place a partial remedy which, CASE submits, is too little too late.

Numerous IR's which are not being numbered. (See CASE Exhibit 1,059, ANI SIS Report 932 10-033, 4/13/84.)

5/3/84 Answer (attached to 932 10-033): Sat IR's do not require an ID No.; Unsat IR's require assignment of serial Nos. traceable to a log, for tracking purposes.

Impact Testing -- welded attachments to Large Bore Main Steam and Feed Water Piping; ANI: "Due to repeated identification of non-compliance with Design Specification requirements for notch toughness material to be used in above applications request that all packages on these systems be re-presented to the ANI for establishment of hold points." (See CASE Exhibit 1,060, ANI SIS Report 932 10-034, 4/18/84.)

5/8/84 Answer (attached to CASE Exhibit 1,060, ANI SIS Report 932 10-034): W. E. Baker, Pipe Welding Engineer, has instructed his personnel to route the subject packages to ANI.

5/16/84 (attached to CASE Exhibit 1,060, ANI SIS Repoort 932 10-034): Acceptable for closure; PSE is in process of reviewing all affected supports.

ANI REPORTS -- DESIGN, ETC.

The ANI Reports and Records listed here may have applicability to the Walsh/Doyle Allegations (stated in the Board's 3/15/84 Order, page 20, to be: "Now also referred to as Design Decision allegations, since the Board shares many of these concerns. Obviously a continuing, litigable concern."). In addition, there are some which may be pertinent and material to the Motions for Summary Disposition on design and design QA issues which Applicants have filed. We are asking Messrs. Walsh and Doyle to review them for applicability.

Further, some of these are important in the context of the global issues regarding Applicants' noncompliance with 10 CFR Part 50, Appendix B (see discussion in Board's 3/15/84 Memorandum (Clarification of Open Issues), bottom of page 4 continued top of page 5). Some are also the type of information which would be included as part of CASE's Trends or Patterns of Non-Conforming Conditions (see discussion in CASE's 4/2/84 Motions Regarding Board's 3/15/84 Memorandum (Clarification of Open Issues), pages 18 and 19). In addition, some of these are relevant to portions of CASE's proposed new contention which we will be filing in the near future.

From ANI SIS Records and Reports:

ANI: Hundreds of modification hanger process control packages (both in process and completed) are in nonconformance with ASME NA-5241, NA4540, NA-4452; work done beyond the scope of work required by CMC or new revision to

blueline = status of material verification and visual examination of welds is indeterminate and must be categorized as being deficient (see CASE Exhibit 1,023, ANI SIS Record 939 314, 10/14/82).

ANI (page 1): "...why does open #8 address all welds, and what objective evidence exists in the field to indicate all other welds having been previously inspected?" 12/27/82 B&R Answer: "As far as objective evidence existing in the field to indicate all other welds have been previously inspected nothing currently exists, as the original package is in the vault. The QC inspectors are inspecting to current modification packages, that have been initiated by Welding Engineering." (Emphasis added.) (See CASE Exhibit 1,027, ANI SIS Report 932 10-016, 12/20/82.)

Grinding of CB&I Weld connecting the piping to the containment liner; in this case penetration piping is also the process piping.

No code data report covering the welds connecting the pipe to the liner.

Code requirements not met -- letter from CB&I (copy attached) states that the penetration piping does not meet the requirements of the 1974 Code because of differences of NDE requirements. (See CASE Exhibit 1,028, ANI SIS Report 932 18-005, 1/10/83; closed 1/13/83 by issue of ANI SIS Record 939 334.)

Code requirements not met (see CASE Exhibit 1,028, 18-005, preceding); ANI, p. 2: "Contrary to the above, the subject parts are not in 'full'

compliance with the ASME Code. They still do not meet the requirements of NA-1140 (c). (emphasis in the original). Answer: "DCA #16,054 to MS-100 and SS-14 has been issued adopting NCA-1140 of 1980 Edition Summer 81 Addenda. This provides the Owner designating any parts of the Component applicable Code Edition and Addenda." ANI marked satisfactory, "Concur that NCA-1140 of 80 Ed. S81 Addenda will resolve the problem." (See CASE Exhibit 1,029, ANI SIS Record 939 334, 1/13/83; reopens 939 51, closes CASE Exhibit 1,028, 932, 18-005.)

(This ties in with CASE's concerns regarding Applicants' picking and choosing portions of the ASME code to comply with, without proper justification or consideration of other aspects which might be affected, and with a purpose which appears to be to lessen code requirements. See CASE's 4/25/84 letter to the Board, which was denied as a Motion for Discovery.)

Tests -- hydrostatic tests held at lower PSIG than design pressure. (See CASE Exhibit 1,031, ANI SIS Record 939 341, 3/8/83.)

Changes to controlled drawings, written in by hand in ink; drawing illegible.

Major (generic) problem -- drawing control -- ANI (page 2): "This has become a continuing problem with the DRG group, Control #83 drawings. This does not include the Iso's taken back for illegibility when presented with documentation or missing CMC's in packages." (See CASE Exhibit 1,030, ANI SIS Record 939 339, 3/1/83.)

Response was returned unsatisfactory because: no corrective action is addressed concerning this generic problem, or for the correction of illegible drawing in the files, nor the ones issued from DCC; the problem mentioned here concerns no CMC with the documentation when presented for final review. A final review cannot be performed if you do not have the correct design document in hand. (See CASE Exhibit 1,030, ANI SIS Record 939 339, 3/1/83.)

Non-conforming material -- welded attachments to Class 1 piping -- see HSB 932 #9-002, HSB 932 #9-002-2, HSB 932 #9-002-2, NCR #M4311, NCR #M5735.

Corrective Action -- No action had been taken by B&R to stop further processing after the non-conformance was discussed; when discovered again, non-conformance was identified and resulted in generation of an NCR. ANI requested a review of Unit 2 to identify possible other instances of similar nonconformances; and a demonstration of the control features of B&R's program that assure the issuance of conforming Class 1 attachment material in the field. B&R 6/7/83 Answer: none in Unit 2; present control features will assure issuance of conforming Class I attachment material to the field. (See CASE Exhibit 1,033, ANI SIS Report 932 9-002A, 4/21/83.)

Major (generic) problem -- support fabrication and subsequent inspection (e.g., undersized fillet welds).

Document (drawing) control -- uncontrolled drawings. (See CASE Exhibit 1,035, ANI SIS Report 932 G-044, 5/26/83.)

Document Control -- controlled stamp not used. (See CASE Exhibit 1,037, ANI SIS Record 939 355, 6/7/83.)

Document Control and Welding -- vague weld symbols. (See CASE Exhibit 1,038, ANI Sis Report 932 4-003-2, 6/22/83.)

NCR did not correct nonconforming condition. Document Control -- as-constructed drawings. ANI stated (pages 2 and 3) that pipe support engineer "questioned the integrity and knowledge of Brown & Root personnel and myself. If this is to be a continuing situation, perhaps it would be best not to explain reasons for our (ANI's) actions, since this is not the first time that an ANI has taken harsh verbal abuse from Engineering people. . . . At this time, I am requesting that if Engineering has a problem concerning the ANI's they contact you (Gordon Purdy, B&R QA Manager) or your designee(s), and do not communicate directly to us. (Emphases added.)

8/1/83 Answer from G. R. Purdy, Site QA Manager: "I share your concern over the rather flippant response provided by Engineering . . . the Project environment is currently conducive to frustrations. . ." (Emphases added.) (See attachment to G-051.)

Weld symbols on VCD do not show true weld configuration. (See CASE Exhibit 1,039, ANI SIS Report 932 G-051, 6/19/83.)

Document Control (removal and reinstallation of snubbers with an IRN). (See CASE Exhibit 1,040, ANI SIS Report 10-022, 6/30/83.)

Document Control -- lack of control of stamps (numerous drawings in field). Major (generic) problem -- uncontrolled documents (drawings). (See CASE Exhibit 1,041, ANI SIS Record 939 356, 7/1/83.)

Serious Breakdown -- ANI: "Upon discussion with QCI Lead . . . he understands the requirement for NDE (nondestructive examination) of full fillet welds is for only inprocess inspections. . . The Q.C. inspectors knew nothing about a requirement for PT of full fillets. (These are very knowledgeable inspectors . . .) It is apparent that there is a severe breakdown of communication between QA, upper management QC, and the QC inspectors in the field involved in VCD walkdowns." (Emphases added.) "For this reason, and the hangers listed in this 939 ALL Class 1 VCD walkdowns are indeterminate. I am also requesting that ALL QC inspectors and their leads receive documented training into the criteria of inspecting Class 1 supports which may have full fillet welds included in the hanger." (Emphases in the original.)

Note: Closed because no Class I hanger packages have been presented to ANI for final acceptance; will be reopened if any discrepancies are found at that time. (See CASE Exhibit 1,042, ANI SIS Record 939 357, 7/2/83.)

No response to 361 received; CAR S54R1 has not been closed or extended; improperly marked drawings and uncontrolled drawings. (Document Control Satellites are identified, including breakdown of each satellite's location, etc.; see CASE Exhibit 1,044, ANI SIS Record 939 361A, 8/11/83.)

N-5 -- ANI's have rejected majority of submitted N-5's; one subsystem N-5 for SF-1 was submitted for ANI signature with an open CAR in effect against component supports for the Spent Fuel Heat Exchangers.

(Hanger Task Groups discussed -- p. 8 of answer.)

ANI Access -- ANI's are consistently being denied access (hydro tests; N-5; vault); incorrect interpretation of program was cause (Attachment 3, from Gordon Purdy).

(Open SIS Reports listed - p. 5 and 6 of answer.)

Document Control:

(ANI's can no longer accept inprocess inspections to unintelligible CMC's, etc.);

drawings: many drawings ID'd shims as primary support members (page 10 of answer);

drawings: some drawings do not reflect other supports (including Class 5) attached to the structure of the support (page 10 of answer);

design: early NPSI designs differentiate between primary and secondary members, some Class 1 drawings ID primary members (impacts material traceability requirements) while others do not (page 11 of answer);

ANI confidence in inspections performed to Engineering hanger sketches as revised by CMC is zero;

hundreds of NCR's and IR's ID'd on final walkdowns to As-Built VCD/DRD drawings (answer, page 13);

the historical aspects of the CPSES pipe support program are a reality...the historical trail would often be confusing and cumbersome (answer, page 14);

see also Attachments 5 and 7;

design change not changed on VCD to indicate as-built condition (Attachment 8, HSB audit), "Design analysis safety factors are implemented to account for these dimensional difference." "Use-as-is." Common problem.

Manual not found, not controlled, etc. (see Attachment 8, HSB audit); (manual discontinued, see Answer, Attachment 9.)

ANI's semi-annual ANSI N626 Audit, 7/13-14/83, (Attachment 8).

Corrective Action (see also Document Control) --ANI's won't sign until corrected; CAR S-54; thousands of drawings were involved (page 9 of answer); CAR's voided (see Attachment 8, HSB audit).

(DCA 18475, to Specification MS-100, to reflect that all embed plate material is A-36 unless noted otherwise on the drawing; page 10 of answer.)

(Established CP Pipe Support and Oversite Group -- new hanger team, "due to urgency of the pipe support problems" -- Attachment 10.)

(3 Hanger Task Groups (HTG) established -- Attachment 11.) see CASE Exhibit 1,045, ANI SIS Record 939 363A, 8/18/83.)

NCR's -- Closure of NCR's affecting piping deviations - might have caused further distortion and/or movement, creating a problem of greater magnitude; Generic NCR M2807. (See CASE Exhibit 1,047, ANI SIS Report 932 16-009, 9/27/83.)

Corrective Action -- has not resulted in correction of generic problem.

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Major problem -- use of applied force during fabrication of component supports: unauthorized use of a porta-power to spread the horizontal members of a box support in order to achieve required clearance. ANI stated: "I have been informed that Pipe Support Engineering takes exception to any corrective action...Engineering claims to 'factor' in stresses imposed on weldments and pipe support members by forcibly 'springing' those members. This rationale is not acceptable to the ANIA...Failure to address this problem will result in perpetuation of craft personnel using applied force and issuance of NCR's by QC." (Emphases added.)

ANI: "This 932 closed based on PSE Chief Engineer Jay Ryan assuming responsibility. (Signed) M. Coats 5/16/84"

See CASE Exhibit 1,054, ANI SIS Report 10-030, 1/5/84.

NCR's -- voided; used to upgrade supports from Class 2 to Class 1. (See CASE Exhibit 1,056, ANI SIS Record 939 371, 2/6/84.

Major problem (though not specifically identified by ANI as such) -- upgrading supports from Class 2 to Class 1; possibly with non-conforming material. (See CASE Exhibit 1,056, ANI SIS Record 939 371, 2/6/84.)

Training -- need to reinstruct personnel re: NCR's. (See CASE Exhibit 1,056, ANI SIS Record 939 371, 2/6/84.)

Impact Testing -- Supports found which have welded attachments which require impact testing but the detail sketch does not specify this as a requirement. (See CASE Exhibit 1,057, ANI SIS Report 932 5-002A, 2/10/84.)

(Subsequent revision of Design Specifications mandates material meet impact requirements. Deficiencies were not ID'd until completion or near completion of fabrication. Some are being recertified; Answer 2/17/84, attached to CASE Exhibit 1,057, ANI SIS Report 932 5-002A.)

Re: hidden welds on support, in regards to interpass temperature while welding to embed plates. Mr. Lopez admitted he did not know the thickness of the embed plate he was welding to, nor did he check the interpass temperature during welding. (See CASE Exhibit 1,058, ANI SIS Report 932 10-032, 2/17/84.)

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5/8/84 Answer (attached to CASE Exhibit 1,060, ANI SIS Report 932 10-034): W. E. Baker, Pipe Welding Engineer, has instructed his personnel to route the subject packages to ANI.

5/16/84 (attached to CASE Exhibit 1,060, ANI SIS Repoort 932 10-034): Acceptable for closure; PSE is in process of reviewing all affected supports.

ANI REPORTS -- DOCUMENT CONTROL

The problem of inadequate document control is closely related to the lack of prompt identification and correction of nonconformances. Criterion VI of 10 CFR Part 50, Appendix B, is specifically titled "Document Control;" however, when CASE uses the term, we mean it in a very broad sense, to encompass other Criteria insofar as they depend upon accurate and adequate documentation in order to be effective. These additional Criteria include (but are not limited to): III, IV, V, VIII, X, XI, XIV, XV, XVI, XVII, and XVIII.

CASE believes that the extensive and continuing, uncorrected problems with document control and records retrievability have contributed to the construction and design of Comanche Peak's now being indeterminate at best and deficient at worst.

Clearly a breakdown in this important aspect of Applicants' QA/QC program goes to the very heart of CASE's Contention 5. As such, it is important in the context of the global issues regarding Applicants' noncompliance with 10 CFR Part 50, Appendix B (see discussion in Board's 3/15/84 Memorandum (Clarification of Open Issues), bottom of page 4 continued top of page 5). This is also the type of information which would be included as part of CASE's Trends or Patterns of Non-Conforming Conditions (see discussion in CASE's 4/2/84 Motions Regarding Board's 3/15/84 Memorandum (Clarification of Open Issues), pages 18 and 19). Also, this problem is relevant to portions of CASE's proposed new contention which we will be filing in the near future.

The following summary of information contained in Reports and Records of the Authorized Nuclear Inspector (although only a part of the total picture which we plan to present to the Board soon) helps to indicate the magnitude of the continuing uncorrected problems with document control.

From ANI Records and Reports:

Document Control -- hundreds of modification hanger process control packages (both in process and completed) are in nonconformance with ASME NA-5241, NA4540, NA-4452; work done beyond the scope of work required by CMC or new revision to blueline = status of material verification and visual examination of welds is indeterminate and must be categorized as being deficient (see CASE Exhibit 1,023, ANI SIS Record 939 314, 10/14/82).

Welding -- repairs accomplished (attempted) by grinding; no documentation found concerning these repairs being accomplished prior to release of material to field; areas not marked as required and no documentation of PT, UT or minimum wall checked could be found.

CP-CPM 6.9D states that minor defects will be removed by grinding; however, minimum wall must be checked and documented; it was not. (see CASE Exhibit 1,024, ANI SIS Report 11-006, 10/14/82, and 11-006-1, 10/27/82.)

ANI Access -- ANI not given opportunity for involvement in installation or inspection activities re: snubbers (hold points); "If Brown & Root

intends to present quality records documenting ASME inspection activities to the ANI at the time of execution of N-5s those records that did not provide for ANI involvement will be considered unacceptable." (See CASE Exhibit 1,025, ANI SIS Record 322A, 11/11/82.)

Document Control -- ANI (page 1): "...why does open #8 address all welds, and what objective evidence exists in the field to indicate all other welds having been previously inspected?" 12/27/82 B&R Answer: "As far as objective evidence existing in the field to indicate all other welds have been previously inspected nothing currently exists, as the original package is in the vault. The QC inspectors are inspecting to current modification packages, that have been initiated by Welding Engineering." (See CASE Exhibit 1,027, ANI SIS Report 932 10-016, 12/20/82.)

Grinding of CB&I Weld connecting the piping to the containment liner; in this case penetration piping is also the process piping.

Document Control -- no code data report covering the welds connecting the pipe to the liner.

Code requirements not met -- letter from CB&I (copy attached) states that the penetration piping does not meet the requirements of the 1974 Code because of differences of NDE requirements. (See CASE Exhibit 1,028, ANI SIS Report 932 18-005, 1/10/83; closed 1/13/83 by issue of CASE Exhibit 1,029, ANI SIS Record 939 334.)

Document Control -- changes to controlled drawings, written in by hand in ink; drawing illegible. (See CASE Exhibit 1,029, ANI SIS Record 939 339, 3/1/83.)

Major (generic) problem -- drawing control -- ANI (page 2): "This has become a continuing problem with the DRG group, Control #83 drawings. This does not include the Iso's taken back for illegibility when presented with documentation or missing CMC's in packages."

Corrective Action -- Response was returned unsatisfactory because: no corrective action is addressed concerning this generic problem, or for the correction of illegible drawing in the files, nor the ones issued from DCC; the problem mentioned here concerns no CMC with the documentation when presented for final review. A final review cannot be performed if you do not have the correct design document in hand. (See CASE Exhibit 1,030, ANI SIS Record 939 339, 3/1/83.)

Corrective Action -- No action had been taken by B&R to stop further processing after the non-conformance was discussed; when discovered again, non-conformance was identified and resulted in generation of an NCR. ANI requested a review of Unit 2 to identify possible other instances of similar nonconformances; and a demonstration of the control features of B&R's program that assure the issuance of conforming Class I attachment material in the field. B&R 6/7/83 Answer: none in Unit 2; present control features will assure issuance of conforming Class I attachment material to the field. (See CASE Exhibit 1,033, ANI SIS Report 932 9-002A, 4/21/83.)

Control of Inspections -- Civil engineer was going to delete PT; concern of ANI is that there are parts of welds on 4 units which have not been subjected to NDE; there is no objective evidence that root of weld joints was prepared properly; welds are not being examined properly. (See CASE Exhibit 1,034, ANI SIS Record 939 347, 4/21/83.)

Document (drawing) control -- uncontrolled drawings. (See CASE Exhibit 1,035, ANI SIS Report 932 G-044, 5/26/83.)

Document Control -- controlled stamp not used. (See CASE Exhibit 1,037, ANI SIS Record 939 355, 6/7/83.)

Document Control -- vague weld symbols. (See CASE Exhibit 1,038, ANI Sis Report 932 4-003-2, 6/22/83.)

Document Control -- ANI: "The disposition to their NCR did not, in my opinion, correct the non-conforming condition. It states that Engineering had sufficient information. While this is good for their purpose, it does not satisfy the requirements of Reference 2 (NA 3355) or Reference 3 (NA 4420). Also, since Brown & Root must now certify that all requirements have been met, it is essential that the people doing VCD walkdowns be in possession of clear and concise information to work with, (Reference 3)." (Emphasis added.)

Weld symbols on VCD do not show true weld configuration. (See CASE Exhibit 1,039, ANI SIS Report 932 G-051, 6/19/83.)

Document Control (removal and reinstallation of snubbers with an IRN). (See CASE Exhibit 1,040, ANI SIS Report 10-022, 6/30/83.)

Document Control -- lack of control of stamps (numerous drawings in field).

Major (generic) problem -- uncontrolled documents (drawings). (See ANI CASE Exhibit 1,041, SIS Record 939 356, 7/1/83.)

Document Control -- no response to 361 received; CAR S54R1 has not been closed or extended; improperly marked drawings and uncontrolled drawings.

Document Control Satellites are identified, including breakdown of each satellite's location, etc. (see CASE Exhibit 1,044, ANI SIS Record 939 361A, 8/11/83.)

Open SIS Reports listed - p. 5 and 6 of answer.

Document Control:

(ANI's can no longer accept inprocess inspections to unintelligible CMC's, etc.);

drawings: many drawings ID'd shims as primary support members (page 10 of answer);

drawings: some drawings do not reflect other supports (including Class 5) attached to the structure of the support (page 10 of answer);

design: early NPSI designs differentiate between primary and secondary members, some Class 1 drawings ID primary members (impacts material traceability requirements) while others do not (page 11 of answer);

ANI confidence in inspections performed to Engineering hanger sketches as revised by CMC is zero;

hundreds of NCR's and IR's ID'd on final walkdowns to As-Built VCD/DRD drawings (answer, page 13);

the historical aspects of the CPSES pipe support program are a reality...the historical trail would often be confusing and cumbersome (answer, page 14);

see also Attachments 5 and 7;

design change not changed on VCD to indicate as-built condition (Attachment 8, HSB audit), "Design analysis safety factors are implemented to account for these dimensional difference." "Use-as-is." Common problem.

Manual not found, not controlled, etc. (see Attachment 8, HSB audit); (manual discontinued, see Answer, Attachment 9.)

ANI's semi-annual ANSI N626 Audit, 7/13-14/83, (Attachment 8).

Corrective Action (see also Document Control) --ANI's won't sign until corrected; CAR S-54; thousands of drawings were involved (page 9 of answer); CAR's voided (see Attachment 8, HSB audit).

Training -- Attachment 5, document control.

Established CP Pipe Support and Oversite Group -- new hanger team, "due to urgency of the pipe support problems" -- Attachment 10.

3 Hanger Task Groups (HTG) established -- Attachment 11.

See CASE Exhibit 1,045, ANI SIS Record 939 363A, 8/18/83.)

NCR's -- should be reported as such. (See CASE Exhibit 1,048, ANI SIS Report 932 10-024, 10/5/83.)

Document Control -- Major (generic) problem -- lack of control of welding material, traceability. (See CASE Exhibit 1,049, ANI SIS Record 939 365, 10/7/83; see also CASE Exhibit 1,048, ANI SIS Report 932 10-024, 10/5/83.)

NCR's (see CASE Exhibit 1,050, ANI SIS Record 366 and 366A, 10/21/83):

voided which should not be;

cannot track;

being presented to ANI's for review without having the referenced drawings' revision No.;

Trend categories for NCR's are inconsistent;

NCR had never been reviewed by Action Addressee; being revised by organizations other than organization that originally prepared them;

info added without being revised;

do not give required information;

state closed when was voided;

transferred to other area without being tracked;

IR's issued after ANI acceptance of hanger packages;

procedures inadequate re: what is to be written up on NCR as opposed to IR;

IR's not trended;

IR trend categories inconsistent;

no objective evidence QC Leads reviewing IR's;

CP-QAP 11.1 says write an IR on everything except N stamped and final accepted items;

B&R's QA Manual 16.4.1; (August & September, there was no QAM requirement that adequately addressed final acceptance and the

initiation of an NCR for the condition; on 10/10/83, B&R QAM Section 16, Paragraph 16.3.1 was revised to clarify this item; page 3 of 12/5/83 answer.)

Training -- Everybody reinstructed (see 11/8/83 answer).

Trending -- Amendment to Quarterly Report for 3rd Qtr. of 1983 issued 11/1/83 for IR's; all future Qtr. Reports will include an IR trend (page 2 of answer). (See CASE Exhibit 1,050, ANI SIS Record 366 and 366A, 10/21/83.)

Corrective Action -- has not resulted in correction of generic problem.

Major (generic) problem -- non-conforming material used on attachments for Class I attachments. (See CASE Exhibit 1,051, ANI SIS Record 939 369, 11/9/83; see also: 939 360; 932: 9-002, 9-002A (CASE Exhibit 1,033), 9-002-1, 9-002-2, and 9-002B.)

NCR's -- any discrepancies found in indepth search for possible usage on small and large bore hangers will be addressed on individual NCR's. (See CASE Exhibit 1,051, ANI SIS Record 939 369, 11/9/83.)

Corrective Action -- ANI: response to 367 and 367A not acceptable; when one examines the impact of the items identified on B&R's programmatic compliance with ASME Section III, there is cause for Inspector concern in the area of corrective action; an identified condition that renders hardware or supporting documentation unacceptable for ASME certification is in every

case significant; nonconformance is corrected but the cause is not addressed. (See CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and CASE Exhibit 1,053, ANI Sis Record 939 367-B, 11/18/83.)

Intimidation of ANI -- page 2: ANI stated (see CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and especially CASE Exhibit 1,053, ANI SIS Record 939 367-B, 11/18/83, page 2 of 5):

> "I cannot comprehend the animosity and facetious of a response that makes reference to the (ANI) Inspector's 'personal assumptions', 'misconceptions' and 'blind-siding'. . . It should be understood that a 939 monitoring report is not an 'indictment' of Brown & Root's program but is a required mechanism for the ANI to assure full compliance with ASME quality requirements."

Nonconforming material -- Class 1 piping attachment material installed in the field; Class 2 pressure retaining material after installation in Class 1 fabrication. (See CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and CASE Exhibit 1,053, ANI SIS Record 939 367-B, 11/18/83; see also CASE Exhibit 1,051, SIS Record 939 369, 11/9/83.)

Document Control -- allowing QC inspectors to line thru current procedure, etc. (See CASE Exhibit 1,055, ANI SIS Report 10-031, 1/24/84.)

NCR's -- voided; used to upgrade supports from Class 2 to Class 1.

Major problem (though not specifically identified by ANI as such) -- upgrading supports from Class 2 to Class 1; possibly with non-conforming material.

Need to reinstruct personnel re: NCR's. (See CASE Exhibit 1,056, ANI SIS Record 939 371, 2/6/84.)

Impact Testing -- Supports found which have welded attachments which require impact testing but the detail sketch does not specify this as a requirement. (See CASE Exhibit 1,057, ANI SIS Report 932 5-002A, 2/10/84.)

(Subsequent revision of Design Specifications mandates material meet impact requirements. Deficiencies were not ID'd until completion or near completion of fabrication. Some are being recertified; Answer 2/17/84, attached to CASE Exhibit 1,057, ANI SIS Report 932 5-002A.)

Re: hidden welds on support, in regards to interpass temperature while welding to embed plates. Mr. Lopez admitted he did not know the thickness of the embed plate he was welding to, nor did he check the interpass temperature during welding. (See CASE Exhibit 1,058, ANI SIS Report 932 10-032, 2/17/84.)

3/9/84: Welder retrained; QC department instructed to monitor preheat and interpass temperatures 2 days per week, to be implemented by 3/12/84. (See attachment to CASE Exhibit 1,058, ANI SIS Report 932 10-032.)

Document Control -- numerous IR's which are not being numbered. (See CASE Exhibit 1,059, ANI SIS Report 932 10-033, 4/13/84.)

5/3/84 Answer (attached to 932 10-033): Sat IR's do not require an ID No.; Unsat IR's require assignment of serial Nos. traceable to a log, for tracking purposes.

Impact Testing -- welded attachments to Large Bore Main Steam and Feed Water Piping; "Due to repeated identification of non-compliance with Design Specification requirements for notch toughness material to be used in above applications request that all packages on these systems be re-presented to the ANI for establishment of hold points." (See CASE Exhibit 1,060, ANI SIS Report 932 10-034, 4/18/84.)

5/8/84 Answer (attached to CASE Exhibit 1,060, ANI SIS Report 932 10-034): W. E. Baker, Pipe Welding Engineer, has instructed his personnel to route the subject packages to ANI.

5/16/84 (attached to CASE Exhibit 1,060, ANI SIS Repoort 932 10-034): Acceptable for closure; PSE is in process of reviewing all affected supports.

ANI REPORTS -- VIOLATION OF HOLD POINTS

The violation of hold points represent a continuing problem at Comanche Peak which Applicants have not corrected (or have not been able to correct) over a period of several years.

In addition to representing a continuing problem in and of itself, the fact that this problem has continued to recur over a period of many years, when combined and trended with other recurring problems, also indicates a breakdown in the Applicants' QA/QC program in that they have failed to take proper measures which would prevent recurrence; this is a violation of 10 CFR Part 50, Appendix B, Criterion XVI. An additional aspect of this particular problem is that it constitutes a subtle but continuing intimidation and harassment of QC inspectors and ANI inspectors at the plant; this is a violation of 10 CFR Part 50, Appendix B, Criterion I. (See discussion in ANI REPORTS -- INTIMIDATION.)

This is one of many possible examples which are important in the context of the global issues regarding Applicants' noncompliance with 10 CFR Part 50, Appendix B (see discussion in Board's 3/15/84 Memorandum (Clarification of Open Issues), bottom of page 4 continued top of page 5). This is also the type of information which would be included as part of CASE's Trends or Patterns of Non-Conforming Conditions (see discussion in CASE's 4/2/84 Motions Regarding Board's 3/15/84 Memorandum (Clarification of Open Issues), pages 18 and 19). Also, this problem is relevant to portions of CASE's proposed new contention which we will be filing in the near future.

Further, because of the continuing nature of this problem, CASE believes that it should have been factored into Applicants' factors of safety as a reduction in those factors; we do not believe Applicants have done this. This is therefore applicable to Applicants' Motion for Summary Disposition on safety factors.

A brief scanning of CASE Exhibit 38 (admitted into evidence 6/9/82, at Tr. 1349), the Brown & Root Quality Assurance Department Nonconformance Log, reveals that this has been a continuing problem identified on Nonconformance Reports (NCR's). As indicated in the following, this has also been identified as an area of serious concern to the ANI's.

From ANI Records and Reports:

ANI Access -- not given opportunity to review for hold points; not provided with information that defines the scope of the work (see CASE Exhibit 1,023, ANI SIS Record 939 314, 10/14/82).

ANI Access -- ANI not given opportunity for involvement in installation or inspection activities re: snubbers (hold points); "If Brown & Root intends to present quality records documenting ASME inspection activities to the ANI at the time of execution of N-5s those records that did not provide for ANI involvement will be considered unacceptable." (See CASE Exhibit 1,025, ANI SIS Record 322A, 11/11/82.)

ANI Access -- on many occasions, refused access to areas in which Code related work was being performed: Reactor Bldg. 1, Diesel Generator Bldg. 1, Fuel Building several times (effect of this is that construction decides when ANI's may have access). (See CASE Exhibit 1,043, ANI SIS Record 939 362A, 8/3/83.)

(Note by CASE: Obviously, ANI hold points could not have been followed if the ANI's could not even get into the buildings.)

Impact Testing -- welded attachments to Large Bore Main Steam and Feed Water Piping; "Due to repeated identification of non-compliance with Design Specification requirements for notch toughness material to be used in above applications request that all packages on these systems be re-presented to the ANI for establishment of hold points." (Second emphasis added.) (See CASE Exhibit 1,060, ANI SIS Report 932 10-034, 4/18/84.)

5/8/84 Answer (attached to CASE Exhibit 1,060, ANI SIS Report 932 10-034): W. E. Baker, Pipe Welding Engineer, has instructed his personnel to route the subject packages to ANI.

5/16/84 (attached to CASE Exhibit 1,060, ANI SIS Repoort 932 10-034): Acceptable for closure; PSE is in process of reviewing all affected supports.

ANI REPORTS -- INTIMIDATION

The following ANI Reports and Records were identified by Mr. Gordon Purdy during his recent deposition in the intimidation portion of these proceedings. Since it concerns the intimidation hearings, we will not elaborate at great length here upon the significance of these documents. However, as stated previously, we believe that they indicate very subtle and finally more direct harassment and intimidation of the Authorized Nuclear Inspectors (ANI's) at Comanche Peak. Additional importance and significance should be accorded these documents due to the fact that these are not only inspectors, but inspectors who review items which should have already been inspected, checked, and verified under Applicants' QA/QC program. The fact that this has occurred recently is also of importance.

From ANI Records and Reports

ANI Access -- not given opportunity to review for hold points; not provided with information that defines the scope of the work (see CASE Exhibit 1,023, ANI SIS Record 939 314, 10/14/82).

ANI Access -- ANI not given opportunity for involvement in installation or inspection activities re: snubbers (hold points); "If Brown & Root intends to present quality records documenting ASME inspection activities to the ANI at the time of execution of N-5s those records that did not provide for ANI involvement will be considered unacceptable." (See CASE Exhibit 1,025, ANI SIS Record 322A, 11/11/82.)

Intimidation of ANI's: ANI stated that pipe support engineer "questioned the integrity and knowledge of Brown & Root personnel and myself. If this is to be a continuing situation, perhaps it would be best not to explain reasons for our (ANI's) actions, since this is not the first time that an ANI has taken harsh verbal abuse from Engineering people. . . . At this time, I am requesting that if Engineering has a problem concerning the ANI's they contact you (Gordon Purdy, B&R QA Manager) or your designee(s), and do not communicate directly to us." (Emphases added.) (See CASE Exhibit 1,039, ANI SIS Report 932 G-051, pages 2 and 3, 6/29/83.)

8/1/83 Answer from G. R. Purdy, Site QA Manager: "I share your concern over the rather flippant response provided by Engineering . . . the Project environment is currently conducive to frustrations. . ." (Emphases added.) (See 8/1/83 attachment to CASE Exhibit 1,039, ANI SIS Report 932 G-051.)

ANI Access -- on many occasions, refused access to areas in which Code related work was being performed: Reactor Bldg. 1, Diesel Generator Bldg. 1, Fuel Building several times (effect of this is that construction decides when ANI's may have access). (See CASE Exhibit 1,043, ANI SIS Record 939 362A, 8/3/83.)

ANI Access -- ANI's are consistently being denied access (hydro tests; N-5; vault); incorrect interpretation of program was cause (Attachment 3, from Gordon Purdy). (See CASE Exhibit 1,045, ANI SIS Record 939 363A, 8/18/83.)

Intimidation of ANI -- ANI: "I cannot comprehend the animosity and facetious of a response that makes reference to the (ANI) Inspector's 'personal assumptions', 'misconceptions' and 'blind-siding'." (Emphases added.) (See: CASE Exhibit 1,053, ANI SIS Record 367-B, 11/18/83, page 2; referring to CASE Exhibit 1,052, ANI SIS Record 367-A, 10/31/83 and attached 11/8/83 response to M. Coats, ANI, from J. T. Blixt, QC Group Supervisor.)

ANI REPORTS -- MINIMUM WALL

The problem of minimum wall pipe has been a recurring one at Comanche Peak for many years, although Applicants would have the Board believe that this is a problem which they have taken care of. However, CASE does not believe that this issue has been adequately dealt with, as discussed below.

There is already a history in the record of these proceedings regarding minimum wall violations. When CASE filed its 10/18/82 Response to Board's Directive Regarding CASE Exhibits (pages 30 and 31), we withdrew all but a couple of typical NCR's to illustrate (along with the information in the NCR log, CASE Exhibit 38, accepted into evidence 6/9/82, at Tr. 1349) the extent of the problem. (See CASE Exhibits 406 and 493, accepted into evidence in accordance with the Board's Order (Proposed Findings of Fact; CASE Exhibits) of 12/7/82, and admitted into evidence in the May 1983 hearings; we withdrew CASE Exhibits 404, 405, and 407 through 440 because of their sheer bulk.) We call the Board's attention in particular to CASE Exhibits 449 through 459 (admitted at the same time), which are various revisions of Design Change Authorizations (DCA's) which give the history and information regarding this problem. Numerous NCR's which had been previously closed out were reopened under one huge NCR (No. 462) which was about a foot thick.

In addition, CASE Witness Charles Atchison testified regarding minimum wall violations during the July 1982 hearings, which was addressed by the Board in its 7/29/83 Proposed Initial Decision (Concerning aspects of construction quality control, emergency planning and Board questions), at pages 46-47:

"Mr. Atchison's final allegation was that minimum wall thickness violations had occurred in piping /201/. He testified that an NCR had been written on this matter and had led to two backfit programs /202/. As far as he knew the NCR had not been closed /203/. Since an NCR had been written on the problem and there are controls requiring that there be an appropriate disposition, we find that this allegation demonstrates the correct working of the quality assurance program and does not present an allegation that we should pursue sua sponte."

"/201/ Atchison Testimony, CASE Ex. 650, at 63.
"/202/ Id. at 63-64.
"/203/ Id. at 64."

However, the Board's Order does not deal with another aspect of this problem, and there is nothing in the record of these proceedings to indicate that it has been considered by Applicants. CASE believes that it should have been factored into Applicants' factors of safety as a reduction in those factors; we do not believe Applicants have done this. This is therefore applicable to Applicants' Motion for Summary Disposition on safety factors.

The following information from ANI Reports and Records indicates the ANI's serious concern about this problem and supports CASE's position.

From ANI Reports and Records:

Welding repairs accomplished (attempted) by grinding; no documentation found concerning these repairs being accomplished prior to release of material to field; areas not marked as required and no documentation of PT, UT or minimum wall checked could be found." (Emphasis added.) (See CASE Exhibit 1,024, ANI SIS Report 932 11-006, 10/14/82, and 11-006-1, 10/27/82)

Minimum Wall -- CP-CPM 6.9D states that minor defects will be removed by grinding; however, minimum wall must be checked and documented; it was not. (See CASE Exhibit 1,024, ANI SIS Report 11-006, 10/14/82, and 11-006-1, 10/27/82.)

Serious Breakdown -- Reporting of Nonconformances -- ANI, page 2: "It is very evident that the training and indoctrination program outlined in Section III fo the QA Manual is not being implemented, due to the number of arc strikes and base metal non conformances being found by ANI's and Q.C. Inspectors during walkdowns and at non destructive examinations...Due to numerous sections of pipe being received that are so close to minimum wall at time of receiving, it becomes even more critical that all arc strikes and base metal non conformances are reported and documented promptly." (First emphasis added; second emphasis in the original.) (See CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82.)

ANI REPORTS -- TESTS

The following ANI Reports and Records were initially planned for other use (as indicated elsewhere in this pleading). However, they also raise serious questions regarding: Applicants' compliance with their own procedures during tests; the adequacy of such tests; and Applicants' commitment to quality (rather than speed). As such, CASE plans to include these as part of our answer to Applicants' 8/7/84 Motion for Authorization to Issue a License to Load Fuel and Conduct Certain Precritical Testing.

Tests -- hydrostatic tests held at lower PSIG than design pressure. (See CASE Exhibit 1,031, ANI SIS Record 939 341, 3/8/83.)

Test Control -- procedures inadequate. (See CASE Exhibit 1,032, ANI SIS Record 939 346, 4/21/83.)

ANI's are consistently being denied access (hydro tests; N-5; vault); incorrect interpretation of program was cause (Attachment 3, from Gordon Purdy).

Testing -- pretest concurrence declined by ANI's. (See CASE Exhgibit 1,045, ANI SIS Record 939 363A, 8/18/83.)

Impact Testing -- Supports found which have welded attachments which require impact testing but the detail sketch does not specify this as a requirement. (See CASE Exhibit 1,057, ANI SIS Report 932 5-002A, 2/10/84.)

(Subsequent revision of Design Specifications mandates material meet impact requirements. Deficiencies were not ID'd until completion or near completion of fabrication. Some are being recertified; Answer 2/17/84, attached to CASE Exhibit 1,057, ANI SIS Report 932 5-002A.)

Impact Testing -- welded attachments to Large Bore Main Steam and Feed Water Piping; "Due to repeated identification of non-compliance with Design Specification requirements for notch toughness material to be used in above applications request that all packages on these systems be re-presented to the ANI for establishment of hold points." (See CASE Exhibit 1,060, ANI SIS Report 932 10-034, 4/18/84.)

5/8/84 Answer (attached to CASE Exhibit 1,060, ANI SIS Report 932 10-034): W. E. Baker, Pipe Welding Engineer, has instructed his personnel to route the subject packages to ANI.

5/16/84 (attached to CASE Exhibit 1,060, ANI SIS Repoort 932 10-034): Acceptable for closure; PSE is in process of reviewing all affected supports.

ANI REPORTS -- TRAINING

Inadequate training of QC inspectors and others at CPSES has long been a concern of CASE's and our witnesses. (It was most recently raised again by CASE Witness Henry Stiner in regard to qualifications and training of welders. Portions of Mr. and Mrs. Stiner's testimony on page 3 of their prefiled testimony, which was bound in following Tr. 10,333, were stricken at Tr. 9934/7-9937/12 as being a new issue. Although we have not had time to go back and research the past testimony of our other witnesses, we still believe that this was raised by several of them during the July 1982 hearings.)

Recently, documents obtained for use in the intimidation hearings (in the form of surveys of QC Inspectors done in 1979) indicate that this was a strong concern of QC Inspectors in that time frame. Although Applicants were on notice at least in 1979 that this was a serious problem, they failed to promptly identify and correct it as such, and the ANI Reports and Records indicate a continuing problem with training of QC Inspectors and others at Comanche Peak. Applicants' failure to promptly correct this problem is a violation of 10 CFR Part 50, Appendix B, Criterion XVI. In addition, we expect that this will be an issue raised in our new proposed contention which we will be filing soon.

From ANI Reports and Records:

ANI: Response does not address the larger problem of instruction to field personnel to prevent the same problem in the future. ANI: "I would

like to stress that this problem is-or-could be larger than this single instance and warrants immediate attention." (Emphasis added.) (Closed out "Reviewed and discussed; no response necessary").

Regarding requirements for base metal repair - p. 2 -- ANI: "After reviewing the requirements for base metal repair and finding none of which have been met, it is the belief of this inspector that there is a serious breakdown in instruction to field personnel concerning this area which poses a potential threat to code, QA Manual, and procedure compliance." (Emphasis added.) (See CASE Exhibit 1,024, ANI SIS Report 11-006, 10/14/82, and 11-006-1, 10/27/82.)

Training -- See Serious Breakdown -- Reporting of Nonconformances; ANI not totally satisfied with B&R's response to #327; B&R is going to indoctrinate all employees in what is expected of them regarding reporting of nonconformances (1/20/83 Answer).

ANI, page 2: "It is very evident that the training and indoctrination program outlined in Section III of the QA Manual is not being implemented, due to the number of arc strikes and base metal non conformances being found by ANI's and Q.C. Inspectors during walkdowns and at non destructive examinations...Due to numerous sections of pipe being received that are so close to minimum wall at time of receiving, it becomes even more critical that all arc strikes and base metal non conformances are reported and documented promptly." (First emphasis added; second emphasis in the original.) (See CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82.)

1/7/83 B&R Answer: Arc strikes and base metal defects shall be handled as follows (see CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82):

(1) Discovered on N-stamped components, ID'd and documented on NCR;

(2) Discovered prior to system walkdown by QC, documented on IR (Inspection Report);

(3) Discovered during system walkdown by QC, entered on system punchlist and documented on an IR;

(4) Discovered after system pressure testing, documented on NCR.

Control of Inspections -- Civil engineer was going to delete PT; concern of ANI is that there are parts of welds on 4 units which have not been subjected to NDE; there is no objective evidence that root of weld joints was prepared properly; welds are not being examined properly.

Code requirements not met -- welding and examinations -- (See Control of Inspections, CASE Exhibit 1,034, ANI SIS Record 939 347, 4/21/83.)

Major (generic) problem -- support fabrication and subsequent inspection (e.g., undersized fillet welds).

Welding -- check left till final walkdown.

NCR's -- thousands.

Corrective Action -- on process sheets, not NCR's.

Document (drawing) control -- uncontrolled drawings.

(See CASE Exhibit 1,035, ANI SIS Report 932 G-044, 5/26/83.)

Control of inspections - welding and examinations.

Training -- NDE and PT of full fillet welds; All QC inspectors re: inspecting full fillet welds on Class 1 supports.

Serious breakdown -- everyone involved in VCD walkdowns; ALL Class 1 VCD walkdowns are indeterminate; lack of training of ALL QC inspectors re: inspecting full fillet welds on Class 1 supports. (Emphases in the original.) (See CASE Exhibit 1,042, ANI SIS Record 939 357, 7/2/83.)

Note: Closed because no Class I hanger packages have been presented to ANI for final acceptance; will be reopened if any discrepancies are found at that time.

N-5 -- ANI's have rejected majority of submitted N-5's; one subsystem N-5 for SF-1 was submitted for ANI signature with an open CAR in effect against component suports for the Spent Fuel Heat Exchangers.

Hanger Task Groups discussed -- p. 8 of answer.

ANI Access -- ANI's are consistently being denied access (hydro tests; N-5; vault); incorrect interpretation of program was cause (Attachment 3, from Gordon Purdy). (See CASE Exhibit 1,045, ANI SIS Record 939 363A, 8/18/83.)

Document Control (see CASE Exhibit 1,045, ANI SIS Record 939 363A, 8/18/83, see also Corrective Action):

(ANI's can no longer accept inprocess inspections to unintelligible CMC's, etc.);

drawings: many drawings ID'd shims as primary support members (page 10 of answer);

drawings: some drawings do not reflect other supports (including Class 5) attached to the structu e of the support (page 10 of answer);

design: early NPSI designs differentiate between primary and secondary members, some Class 1 drawings ID primary members (impacts material traceability requirements) while others do not (page 11 of answer);

ANI confidence in inspections performed to Engineering hanger sketches as revised by CMC is zero;

hundreds of NCR's and IR's ID'd on final walkdowns to As-Built VCD/DRI drawings (answer, page 13);

the historical aspects of the CPSES pipe support program are a reality...the historical trail would often be confusing and cumbersome (answer, page 14);

see also Attachments 5 and 7;

design change not changed on VCD to indicate as-built condition (Attachment 8, HSB audit), "Design analysis safety factors are implemented to account for these dimensional difference." "Use-as-is." Common problem.

Manual not found, not controlled, etc. (see Attachment 8, HSB audit); (manual discontinued, see Answer, Attachment 9.)

ANI's semi-annual ANSI N626 Audit, 7/13-14/83, (Attachment 8). (See CASE Exhibit 1,045, ANI SIS Record 939 363A, 8/18/83.)

Testing -- pretest concurrence declined by ANI's.

NCR's -- generic (listing of open ones); page 7 of answer; improper closure of outdated NCR's.

Corrective Action (see also Document Control) -- ANI's won't sign until corrected; CAR S-54; thousands of drawings were involved (page 9 of answer); CAR's voided (see Attachment 8, HSB audit).

Training -- See especially Attachment 5, document control.

Established CP Pipe Support and Oversite Group -- new hanger team, "due to urgency of the pipe support problems" -- Attachment 10.

3 Hanger Task Groups (HTG) established -- Attachment 11.

Test Control -- procedure does not comply with NA-4420. (See CASE Exhibits 1,045, ANI SIS Record 939 363, 8/23/83, and ANI SIS Record 939 363A, 8/18/83.)

NCR's (see CASE Exhibit 1,050, ANI SIS Record 366 and 366A, 10/21/83):

voided which should not be;

cannot track;

being presented to ANI's for review without having the referenced drawings' revision No.;

Trend categories for NCR's are inconsistent;

NCR had never been reviewed by Action Addressee; being revised by organizations other than organization that originally prepared them;

info added without being revised;

do not give required information;

state closed when was voided;

transferred to other area without being tracked;

IR's issued after ANI acceptance of hanger packages;

procedures inadequate re: what is to be written up on NCR as opposed to IR;

IR's not trended;

IR trend categories inconsistent;

no objective evidence QC Leads reviewing IR's;

CP-QAP 11.1 says write an IR on everything except N stamped and final accepted items;

B&R's QA Manual 16.4.1; (August & September, there was no QAM requirement that adequately addressed final acceptance and the initiation of an NCR for the condition; on 10/10/83, B&R QAM Section 16, Paragraph 16.3.1 was revised to clarify this item; page 3 of 12/5/83 answer.)

Training -- Everybody reinstructed (see 11/8/83 answer).

Trending -- Amendment to Quarterly Report for 3rd Qtr. of 1983 issued 11/1/83 for IR's; all future Qtr. Reports will include an IR trend (page 2 of answer). (See CASE Exhibit 1,050, ANI SIS Record 366 and 366A, 10/21/83.)

NCR's -- voided; used to upgrade supports from Class 2 to Class 1.

Major problem (though not specifically identified by ANI as such) --

upgrading supports from Class 2 to Class 1; possibly with non-conforming material.

Training -- need to reinstruct personnel re: NCR's. (See CASE Exhibit 1,056, ANI SIS Record 939 371, 2/6/84.)

Welding -- re: hidden welds on support, in regards to interpass temperature while welding to embed plates. Mr. Lopez admitted he did not know the thickness of the embed plate he was welding to, nor did he check the interpass temperature during welding. (See CASE Exhibit 1,058, ANI SIS Report 932 10-032, 2/17/84.)

Training -- 3/9/84: Welder retrained; QC department instructed to monitor preheat and interpass temperatures 2 days per week, to be implemented by 3/12/84. (See attachment to CASE Exhibit 1,058, ANI SIS Report 932 10-032.)

Note: Important because his was written up at almost the exact time Applicants' welding witnesses were testifying in operating license hearings that they and everybody they ever knew of or even heard of always checked the heat input when welding.

See also Corrective Action, Document Control, etc.

ANI REPORTS -- WELDING

Hundreds of modification hanger process control packages (both in process and completed) are in nonconformance with ASME NA-5241, NA4540, NA-4452; work done beyond the scope of work required by CMC or new revision to blueline = status of material verification and visual examination of welds is indeterminate and must be categorized as being deficient (see CASE Exhibit 1,023, ANI SIS Record 939 314, 10/14/82).

Welding repairs accomplished (attempted) by grinding; no documentation found concerning these repairs being accomplished prior to release of material to field; areas not marked as required and no documentation of PT, UT or minimum wall checked could be found.

CP-CPM 6.9D states that minor defects will be removed by grinding; however, minimum wall must be checked and documented; it was not.

ANI: "Since surface defects no deeper than 1/16" need be repaired and these areas were ground upon, they must have been more serious defects or arc strikes." (Closed with 939 327.)

Regarding requirements for base metal repair - p. 2 -- ANI: "After reviewing the requirements for base metal repair and finding none of which have been met, it is the belief of this inspector that there is a serious breakdown in instruction to field personnel concerning this area which poses a potential threat to code, QA Manual, and procedure compliance." (See CASE Exhibit 1,024, ANI SIS Report 11-006, 10/14/82, and 11-006-1, 10/27/82.)

Serious Breakdown -- Reporting of Nonconformances -- ANI, page 2: "It is very evident that the training and indoctrination program outlined in

Section III fo the QA Manual is not being implemented, due to the number of arc strikes and base metal non conformances being found by ANI's and Q.C. Inspectors during walkdowns and at non destructive examinations...Due to numerous sections of pipe being received that are so close to minimum wall at time of receiving, it becomes even more critical that all arc strikes and base metal non conformances are reported and documented promptly."

1/7/83 B&R Answer: Arc strikes and base metal defects shall be handled as follows (see CASE Exhibit 1,026, ANI SIS Record 327, 11/18/82):

(1) Discovered on N-stamped components, ID'd and documented on NCR;

(2) Discovered prior to system walkdown by QC, documented on IR (Inspection Report);

(3) Discovered during system walkdown by QC, entered on system punchlist and documented on an IR;

(4) Discovered after system pressure testing, documented on NCR.

ANI (page 1): "...why does open #8 address all welds, and what objective evidence exists in the field to indicate all other welds having been previously inspected?" 12/27/82 B&R Answer: "As far as objective evidence existing in the field to indicate all other welds have been previously inspected nothing currently exists, as the original package is in the vault. The QC inspectors are inspecting to current modification packages, that have been initiated by Welding Engineering." (See CASE Exhibit 1,027, ANI SIS Report 932 10-016, 12/20/82.)

Grinding of CB&I Weld connecting the piping to the containment liner; in this case penetration piping is also the process piping.

No code data report covering the welds connecting the pipe to the liner.

Code requirements not met -- letter from CB&I (copy attached) states that the penetration piping does not meet the requirements of the 1974 Code because of differences of NDE requirements. (See CASE Exhibit 1,028, ANI SIS Report 932 18-005, 1/10/83; closed 1/13/83 by issue of CASE Exhibit 1,029, ANI SIS Record 939 334.)

Non-conforming material -- welded attachments to Class 1 piping -- see HSB 932 #9-002, HSB 932 #9-002-2, HSB 932 #9-002-2, NCR #M4311, NCR #M5735.

No action had been taken by B&R to stop further processing after the non-conformance was discussed; when discovered again, non-conformance was identified and resulted in generation of an NCR. ANI requested a review of Unit 2 to identify possible other instances of similar nonconformances; and a demonstration of the control features of B&R's program that assure the issuance of conforming Class 1 attachment material in the field. B&R 6/7/83 Answer: none in Unit 2; present control features will assure issuance of conforming Class I attachment material to the field. (See CASE Exhibit 1,033, ANI SIS Report 932 9-002A, 4/21/83.)

Civil engineer was going to delete PT; concern of ANI is that there are parts of welds on 4 units which have not been subjected to NDE; there is no objective evidence that root of weld joints was prepared properly; welds are not being examined properly. (See CASE Exhibit 1,034, ANI SIS Record 939 347, 4/21/83.)

ANI: Re: "several ANI concerns about present methods in place to identify problems with component supports and subsequent rework or repair to resolve those problems. Brown & Root QA has recognized generic deficiencies in support fabrication and subsequent inspection (e.g. undersized fillet welds). Corrective action has been implemented . . .

which dictates a final 'walkdown' of each support by QC to verify configuration, weld size, pipe to hanger clearance, etc. Final hanger package review by QES and ANI is predicated on this documented reinspection. This final inspection has resulted in thousands of NCR's which causes duplication of walkdowns and a loss of perspective in NCR processing. In view of above, Brown & Root has adopted a policy of Welding Enegineering personnel inspecting supports to final drawings prior to the final Q C inspection. Noted discrepancies are worked on process sheets rather than identified on NCR's based on a rationale that the support is still in process. This is an effort to reduce initiation of NCR's and better assure that Q C will perform final inspections on acceptable fabrication. This policy is understandable but is not supported by the content of Section 16 of the Q. A. Manual. . . .

"Repair Process Sheets generated to build up undersize welds are being transmitted to craft with an information copy of the vendor certified drawing. Even though the RPS virtually stands alone and the drawing serves only to provide location & material information Section 7 of the Q. A. M. specifically precludes use of an uncontrolled drawing for fabrication and installation activities.

"Full fillet on Class 1 support primary members should be identified in process and not left to be identified during the final walkdown." (Emphases added.) (See CASE Exhibit 1,035, ANI SIS Report 932 G-044, 5/26/83.)

Welding -- vague weld symbols. (See CASE Exhibit 1,038, ANI Sis Report 932 4-003-2, 6/22/83.)

Welding -- weld symbols on VCD do not show true weld configuration. (See CASE Exhibit 1,039, ANI SIS Report 932 G-051, 6/19/83.)

ANI: "It is apparent that there is a severe breakdown of communication between QA, upper management QC, and the QC inspectors in the field involved in VCD walkdowns. For this reason, and the hangers listed in this 939 ALL Class 1 VCD walkdowns are indeterminate. I am also requesting that ALL QC inspectors and their leads received documented training into the criteria of inspecting Class 1 supports which may have full fillet welds included in the hanger." (Emphases in the original.) (See CASE Exhibit 1,042, ANI SIS Record 939 357, 7/2/83.)

Note: Closed because no Class I hanger packages have been presented to ANI for final acceptance; will be reopened if any discrepancies are found at that time.

Lack of control of welding materials. See CASE Exhibit 1,049, ANI SIS Record 939 365, 10/7/83. (Also See ANI SIS Report 932 10-024, 10/5/83.)

Major (generic) problem -- lack of control of welding material, traceability. (See CASE Exhibit 1,049, ANI SIS Record 939 365, 10/7/83; see also CASE Exhibit 1,048, ANI SIS Report 932 10-024, 10/5/83.)

Corrective Action -- response to 367 and 367A not acceptable; when one examines the impact of the items identified on B&R's programmatic compliance with ASME Section III, there is cause for Inspector concern in the area of corrective action; an identified condition that renders hardware or supporting documentation unacceptable for ASME certification is in every case significant; nonconformance is corrected but the cause is not addressed. (See CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and

CASE Exhibit 1,053, ANI Sis Record 939 367-B, 11/18/83.)

Intimidation of ANI -- page 2: ANI stated (see CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and especially CASE Exhibit 1,053, ANI SIS Record 939 367-B, 11/18/83, page 2 of 5):

> "I cannot comprehend the animosity and facetious of a response that makes reference to the (ANI) Inspector's 'personal assumptions', 'misconceptions' and 'blind-siding'. . . It should be understood that a 939 monitoring report is not an 'indictment' of Brown & Root's program but is a required mechanism for the ANI to assure full compliance with ASME quality requirements."

Welding -- ANI (see CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and CASE Exhibit 1,053, ANI SIS Record 939 367-B, 11/18/83):

"It is difficult to understand how 1727 identified welding discrepancies are not deemed significant enough to warrant corrective action to preclude repetition." (emphasis added);

hundreds of welds previously accepted have been rejected by NCR's and IR's and subsequently trended in category C-16;

ANI: "The Inspector felt that considering the documented rejection of hundreds of previously accepted welds, B&R QA would be sufficiently concerned to evaluate those previous inspections." (emphasis added);

"The large number of NCR's and/or Unsat IR's..." (Answer 12/27/83, page 1);

"Items rejected during final acceptance inspection were predominately pre-1982 fabrication and installation activities, and not subjected to the current acceptance criteria." (emphasis added) (12/27/83 Answer, page 1);

"The greater than 50% QC rejection rate for pre-1982 work..." (emphasis added) (12/27/83 Answer, page 1);

"...proposed revision to B&R QA Manual will be submitted to the ANI's for review by 1/15/84, which will identify alternative methods for documenting corrective action." (12/27/83 Answer, page 2).

Nonconforming material -- Class 1 piping attachment material installed in the field; Class 2 pressure retaining material after installation in Class 1 fabrication. (See CASE Exhibit 1,052, ANI SIS Record 939 367-A, 10/31/83, and CASE Exhibit 1,053, ANI SIS Record 939 367-B, 11/18/83; see also CASE Exhibit 1,051, SIS Record 939 369, 11/9/83.)

Impact Testing -- Supports found which have welded attachments which require impact testing but the detail sketch does not specify this as a requirement. (See CASE Exhibit 1,057, ANI SIS Report 932 5-002A, 2/10/84.)

(Subsequent revision of Design Specifications mandates material meet impact requirements. Deficiencies were not ID'd until completion or near completion of fabrication. Some are being recertified; Answer 2/17/84, attached to CASE Exhibit 1,057, ANI SIS Report 932 5-002A.)

Note by CASE: Possible applicability to impact testing requirements regarding supports welded by Henry Stiner. Calls into question whether or not Applicants' representation to Board that he did not weld on hangers which required Charpy impact testing was in fact accurate, as well as whether or Applicants have accurate documentation which would allow them to even determine this.

Welding -- re: hidden welds on support, in regards to interpass temperature while welding to embed plates. Mr. Lopez admitted he did not know the thickness of the embed plate he was welding to, nor did he check the interpass temperature during welding. (See CASE Exhibit 1,058, ANI SIS Report 932 10-032, 2/17/84.)

Training -- 3/9/84: Welder retrained; QC department instructed to monitor preheat and interpass temperatures 2 days per week, to be implemented by 3/12/84. (See attachment to CASE Exhibit 1,058, ANI SIS Report 932 10-032.)

Note by CASE: This ANI Report is especially important regarding corrective action because Applicants had been on notice regarding this problem not only through the February 1984 prefiled testimony of Henry and Darlene Stiner (see page 10, line 14, through page 12, line 10, bound in following Tr. 10,333, stricken at Tr. 9955/21-9960/24), but also through the affidavit of Henry and Darlene Stiner filed 7/28/83 (see Affidavit of Henry and Darlene Stiner, page 4, line 1, through page 6, line 25, attached to CASE's 7/28/83 letter to the Board under subject of Objections to Board's Findings and CASE's Answer to Applicants' 7/15/83 Summary of the Record Regarding Weave and Downhill Welding). However, corrective action was apparently not taken until 3/9/84, to be implemented by 3/12/84, and apparently consisted only of instructing the QC department to monitor preheat and interpass temperatures two days a week.

In addition, this is contrary to testimony in the operating license hearings by Applicants' witnesses, and this ANI Report was in fact written

up at almost the exact time Applicants' witnesses were testifying in operating license hearings that they and everybody they ever knew of or even heard of always checked the heat input when welding. (See, for example, testimony of Applicants' Witnesses Clifton R. Brown at Tr. 11,465-11,466, 11,468, 11,486; Fred E. Coleman at Tr. 11,535-11,537, 11,567, 11,570-11,571; Isaiah Pickett at Tr. 11,6515-11,620, 11,643, 11,651-11,652; Armand M. Braumuller and Salvador Fernandez at Tr. 11,665-11,664, 11,668, 11,670; and perhaps others -- we are still working on our welding findings.) This obviously calls into question the testimony of Applicants' Witnesses in this regard (as well as in regard to their other testimony).

(It should be noted that the NRC Staff is also looking into the matter of proper use of preheat at Comanche Peak.)

To CASE, perhaps the most important aspect of this is not that Appilcants did not respond to the 7/28/83 allegations of Henry and Darlene Stiner, but the way Applicants responded to them -- by apparently ignoring the problem, then by attempting to keep testimony by Henry and Darlene Stiner out of the record, then by attempting to mislead the Board regarding preheat at Comanche Peak, and next, by attempting to prevent CASE from getting the ANI Reports into the hands of the Board. And finally, by putting in place a partial remedy which, CASE submits, is too little too late.

Impact Testing -- welded attachments to Large Bore Main Steam and Feed Water Piping; "Due to repeated identification of non-compliance with Design

Specification requirements for notch toughness material to be used in above applications request that all packages on these systems be re-presented to the ANI for establishment of hold points." (First emphasis added.) (See CASE Exhibit 1,060, ANI SIS Report 932 10-034, 4/18/84.)

5/8/84 Answer (attached to CASE Exhibit 1,060, ANI SIS Report 932 10-034): W. E. Baker, Pipe Welding Engineer, has instructed his personnel to route the subject packages to ANI.

5/16/84 (attached to CASE Exhibit 1,060, ANI SIS Repoort 932 10-034): Acceptable for closure; PSE is in process of reviewing all affected supports.

Note by CASE: Possible applicability to impact testing requirements regarding supports welded by Henry Stiner. Calls into question whether or not Applicants' representation to Board that he did not weld on hangers which required Charpy impact testing was in fact accurate, as well as whether or Applicants have accurate documentation which would allow them to even determine this.

A nonconformance report is utilized for the identification, documentation, dispositioning, and verification of deficiencies in characteristics, documentation, or procedures which render the quality of an item unacceptable or indeterminate.

All nonconforming items are tagged and segregated as defined in section 17.1.14, "Inspection and Test Status" and Section 17.1.13, "Handling, Storage, and Shipping."

Following identification and dispositioning of nonconformances, specified reviews and approvals are procedurally required for 1) "use as is" and "repair," and 2) "rework."

Upon completion of action required for disposition, repaired or reworked items are reinspected to verify that specified action and requirements are complied with.

A deficiency report is utilized for the identification, documentation, resolution, and re-evaluation of procedural violations/programatic deficiencies which are not directly related to the physical charactristics of an item. Procedures provide measures which, when initiated, assure that activities adverse to quality are suspended pending identification, documentation, and resolution. Proposed resolutions are then reviewed and approved, prior to implementation, to assure that specified requirements are complied with. Implemented resolutions are re-evaluated to assure that the resolution has provided compliance with specified requirements.

Procedures require "trending" of nonconformance and deficiency reports to identify trends adverse to quality.

Procedures require the initiation of a corrective action request for significant nonconformances/deficiencies and chronically repetitive nonconformances/deficiencies as defined in Section 17.1.16.

Procedures define the actions necessary to identify, resolve, and closeout deficiencies in characteristics, documentation, or procedures which render the quality of an item unacceptable or indeterminate.

When required by specific procedures/instructions, items identified as unsatisfactory or incomplete and which can be corrected within a reasonable period of time may be identified on an inspection report and/or deficiency report. A nonconformance report is used to document deficiencies unless another method is prescribed by a specific procedure/instruction. 41

Items identified on a nonconformance report are tagged and segregated where practical as defined in section 17.1.14, "Inspection and Test Status" and Section 17.1.13, "Handling, Storage, and Shipping."

Following disposition of nonconformance reports, specified reviews and approvals are procedurally required for 1) "use as is" and "repair," and 2) "rework."

Upon completion of action required for disposition, repaired or reworked items are reinspected to verify that specified action and requirements are complied with.

Procedures require "trending" of deficiencies identified on nonconformance reports, deficiency reports, and inspection reports to identify trends adverse to quality. 41

Procedures require the initiation of a corrective action request for significant or chronically repetitive nonconformances as defined in Section 17.1.16.

17.1.16 CORRECTIVE ACTION

TUGCO/TUSI requires that measures be established to assure that conditions adverse to quality are promptly identified, reported, and corrected. Responsibility for performing corrective action is assigned to contractors, applicable subcontractors, and vendors so that each is alert to those conditions adverse to quality within his own area of activity. In the case of significant conditions adverse to quality, which are reportable to NRC under the provisions of 10 CFR Part 50.55 (e), measures are taken to assure that the cause of the condition is determined and corrective action is implemented to preclude repetition. Corrective action procedures placed in effect require thorough investigation and documentation of significant conditions adverse to quality. The cause and corrective action is reported in writing to the appropriate levels of management and to the purchaser. This corrective action applied is subject to review by TUGCO and the prime contractor responsible for the original purchase specification.

For CPSES, the Quality Assurance Plan requires that procedures and practices be established and documented which provide assurance that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances, are promptly identified, documented, and corrected as soon as practicable, and that appropriate action be taken to correct the cause of the condition. Corrective action documentation and request forms or formal letters are used to document the corrective action-related requests, responses, and follow up. The plan requires that measures be established by the prime contractors to assure that the acceptability of rework or repairs is verified by reinspecting the item as originally inspected and that the reinspection is documented. These measures are verified by review and approval of the prime contractors' QA Program and by the subsequent audit for conformance to the approved program. Significant conditions adverse to quality are identified (such as those which, if they had remained undetected, would

have adversely affected safety-related functions), the cause of the condition is determined, and corrective action is taken to preclude repetition. Such significant conditions, their causes, and the corrective action taken are documented and reported to appropriate levels of management through established communication systems. Corrective action followup and close-out procedures provide that corrective action commitments are implemented in a systematic and timely manner and are effective.

The occurrence and magnitude of deficiencies and nonconformances requiring corrective action are evaluated by the purchaser's inspectors during surveillance and at hold point inspection and witnessing. Additionally, these areas are identified for audit purposes.

The effectiveness of the vendor's corrective action program is assessed during audits by the vendor, the prime contractor, subcontractor, and by TUGCO. Stop work authority is exercised as required.

17.1.17 QUALITY ASSURANCE RECORDS

The TUGCO/TUSI Quality Assurance program establishes procedures and practices to assure that TUGCO/TUSI and its contractors have a quality records system which provides documentary evidence of the performance of activities affecting quality. Procedures assure or shall require:

1. That records that are required to be maintained show evidence of performance of activities affecting quality. Typical records maintained include quality assurance programs and plans, design data and studies, design review reports, specifications, procurement documents, procedures, inspection and test reports, material certifications, personnel certification and test reports, audit reports, reports of nonconformances and corrective actions, as-built drawings, operating logs, calibration records, maintenance data, and failure and incident reports.

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

- CASE EXHIBIT NO. 1,023

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

#314

TO (Name and Title): Mr. Gordon Purdy		DATE: October 14, 1982	SHEET 1 OF 3
CUSTOMER'S COMPANY NAME: Brown & Root, Inc.	INSP. BRANCH: Hn	INSP. REGION OR FOREIGN COUNTRY: Houston	(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed
INSPECTION LOCATION: CPSES Glen Rose, Texas 76043		☐ Shop ☒ Field Assembly	☐ Repair/Alteration ☐ Inservice

I, the undersigned, have monitored your QA/QC manual on: ____________ (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory: Section 15 "Examination of Process Status"

Section 20 "Authorized Nuclear Inspector"

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: October 28, 1982 (Date).

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File	10-14-82	[signature]

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

[initials]	[initials]
BW	[initials]
GP	[initials]
[initials]	DRW

See Attached Response

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)
—		

I, the undersigned, have remonitored the above unsatisfactory conditions on: 11/29/82 (Date)

and found them: ☑ Satisfactory ☐ Unsatisfactory (Explain below)

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☑ Reg. Mgr. / SIS Foreign Representative ☑ Insp. File	11/29/82	[signature]

REV 11/78 (SIS)

References: Section III ASME B & PV Code

(1) NA-5241 "Stipulation of Inspections ....."
Prior to issuance of process sheets or controls required by NA-4451, the manufacturer or installer shall review them and the applicable drawings with the inspector who shall then stipulate the inspections he intends to make in order to fulfill the requirements of NA-5210.

(2) NA-4540 "Examination of Process Status"
During manufacture or installation, measures shall be established to indicate, by the use of markings such as stamps, tags, labels,routing cards, or other suitable means, the Status of Examination and tests performed upon individual items. These measures shall provide for the identification of these items which conform to examinations and test requirements and those that do not conform.

(3) NA-4452 "Process Control Check List"
Process control check lists shall be prepared, including the document numbers and revisions to which the process conforms, with space provided for reporting results of completion of specific operations.....

DISCUSSION: Hundreds of modification hanger process control packages, both in process and completed, are in noncomformance with references 1 thru 3 above.

EXAMPLES: In Process Work
Hanger CC-1-028-024-S33R-- This package was presented for ANI preliminary review. Hanger is to be modified per revised blueline (BRH Rev. 4). By comparison of BRH Rev. 3 and Rev. 4 it became obvious that to rework this hanger to meet new design requirements requires removal from its installed location. Removal will necessitate cutting out welds in order for the hanger to clear interferences and supported pipe. There is no way to determine the extent of work required.

Hanger CC-1-057-010-A33R-- This package was presented for ANI preliminary review. Hanger is to be modified per revised blueline (BRH Rev. 2). By comparison of BRH Rev. 1 (as amended by CMC 10747) and BRH Rev. 2 it appears that major rework (new material, replacement of brace and baseplates, etc.) will require removal of this support by cutting out items presently installed. There is no way to determine the extent of work required.

EXAMPLE: Completed Work
Hanger CS-1-007-015-C52R-- Multiple weld data card states

"Modified per IRN 143876". The inspected item removal notice states "Pipe Dept. Rework[illegible] Line. Removing box assembly from pipe".
This support was fabricate[illegible] to CMC 38079 Rev. 8. Rework was inspected to CMC 38079 Rev. 11. The MWDC was submitted to the ANI for rework review. This rework should have been nothing more than rebolting the hanger and making approximately 3 weldds to re-attach tube steel cut loose for the hanger to clear the pipe. However, after reviewing the package it is obvious that this support was virtually refabricated with at least 15 welds being made and new material installed.

FINDINGS:

(1) Contrary to requirements of reference 1 the ANI was not given the opportunity to review, for purposes of stipulating inspection hold points, that scope of work to be performed on hanger CS-1-077-015-C52R beyond that called for to bring the item in compliance with the latest applicable design. If a weld is cut (after statused as acceptable by examination) the ANI must have the opportunity to select an inprocess inspection hold point.

(2) Contrary to reference 1 the ANI has not been provided with information that accurately defines the scope of work. Drawings, procedures, process control documents, and other documents applicable to the extent of work must be clear, understandable, and without ambiguity.

(3) Hanger CS-1-077-015-C52R is unacceptable for final review due to noncompliance with reference 2. The status of material verification and visual examination of welds is indeterminate. The actual scope of rework performed is not defined or described by drawings, CMC, IRN, or any other document within the package. Since all Quality Control Inspections are final there is no objective evidence available that the Q.C. inspector was aware of the extent of examinations and verifications to be performed.

(4) Contrary to reference 3, all 3 examples listed were or are to be inspected to revisions of bluelines anf these revision numbers are not listed on the inspection document (i.e. MWDC). In cases where supports are fabricated and installed to typical details (CP-AA-XXX) these drawing numbers are not referenced on the inspection document.

CONCLUSIONS:

(1) In instances where modification packages are presented to the ANI for preliminary review and do not adequately describe all work (e.g. cut welds, replace material, etc.) to be accomplished, the ANI will be unable to review and forward the packages.

(2) During final review of hanger packages, those that reflect work done beyond the scope of work required by CMC or new revision to blueline must be categorized as being deficient per finding #3.

Brown & Root, Inc.

INTEROFFICE MEMO

TO: Marvin Coats DATE: November 20, 1982

FROM: P. C. Lahoti

SUBJECT: 35-1195, CPSES
SIS Report #314, dated 10/14/82
B&R Response dated 11/18/82

Revised

The following corrective action, in response to the SIS Report #314, is proposed for your concurrence.

Finding 2: Welding Engineering will list the construction operations required and the scope of the work to be performed in detail on the Weld Data Card so that the ANI will have clear understanding of the extent of the work involved.

Finding 1 & 3: The ANI should have been provided the opportunity for preliminary review of the activities performed on hanger CS-1-077-015-CS2R. The ANI shall be given the opportunity for reinspection of this hanger to assure that the hanger has been constructed to the requirements of the applicable drawing. The corrective action for the finding #2 will eliminate any future recurrence of this non compliance.

Finding 4: As agreed with the ANI, effective December 1, 1982 the QC Inspector shall indicate the revision number of the drawing or the typical detail (CP-AA-XXX) used for the inspection of the hanger. The inspections performed prior to this date do not require backfitting for referencing the revision numbers. However, the Document Review Group (DRG), when requested, will assist the ANI in ascertaining the applicable revisions of the drawings used for the past inspections.

ADDED

P. C. Lahoti
Procurement/Surveillance Supervisor

PCL/cm

cc: G. R. Purdy
T. Blixt
Bill Baker (Welding Engineering)
R. Siever
D. Leigh
QA File

Closed with 939 Number 327

CASE EXHIBIT NO. 1,024

SIS REPORT

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

11-006

TO: George Morris Site Mech III

DATE: 10-14-82 | SHEET: 1 | OF: 1

FROM: Jerry Lytle ANI

H.O./BRANCH OFFICE:

ORGANIZATION: Brown & Root

LOCATION: CPSES | STREET | CITY: Glen Rose | COUNTY: Somervelle | STATE: TX | ZIP C

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE): Same as above

CONTRACT/P.O.

REASON FOR VISIT: Full time contract

COPIES SENT TO:

☐ H.O. Eng Claim SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

1. During a routine inspection trip through the plant site I found base metal repairs in spool 202, Drawing CS-2-5B-09 between weld 9A and FW-10A. The repairs were accomplish (attempted) by grinding.

2. Brown & Roots Q.A. Manual (16.3.3) states that base metal defects will be identified and documented.

3. CP-CPM 6.9D para. 2.4 states that defects found befa installation will be documented.

4. CP-CPM 6.9D para 3.19.4.2 states minor defects will be removed by grinding - however - minimum wall must be checked, and documented

5. CP-CPM 6.9D para 3.19.8 requires PT of area and minimum wall check plus VT for Arc strikes.

6. CP-CPM 6.9D para 3.19.4.3 states a repaired area will be marked by Q.C.I. with a "Nissen Ink Marker."

7. (A) No documentation was found concerning these repairs being accomplished prior to release of material to field.

(B) There are two (2) areas of base metal that have been ground out and are not marked as required and no documentati of PT, VT or minimum wall checks could be found.

SIGNED Jerry W. Lytle

OVER

8. Conclusion: These repairs were done either prior to Q.C. notification or Q.C. did not mark the areas and document them and do required inspection or both. Since surface defects no deeper than 1/16" need be repaired (per CP-CPM 6.9D para 3.19.4.3) and these areas were ground upon, they must have been more serious defects or arc strikes.

After reviewing the requirements for base metal repair and finding none of which have been met, it is the belief of this inspector that there is a serious breakdown in instruction to field personnel concerning this area which poses a potential threat to code, QA Manual, and procedure compliance.

Ref: CP-CPM 6.9G para 3.3.1

QI-QAP 16.1-2

Cat	[illegible]
ADH W	[illegible]
BL	

BROWN & ROOT, INC.
CPSES, 35-1195

INTEROFFICE MEMO

IM# 24,384

TO: Jerry Lytle ANI TUSI DATE: October 19, 1982

FROM: G.L. Morris

SUBJECT: SIS Report #11-006

In response to your SIS Report #11-006, it was observed that grinding was performed prior to QC notification. NCR #M-4194 has been issued for violating CP-CPM-6.9D, Paragraph 3.19.4.2. Since grinding was performed prior to QC notification, checking of minimum wall and documenting VT/PT was obviously not performed by QC. This shall be performed, as applicable, in accordance with the disposition of the NCR.

G.L. MORRIS
Site Mechanical Level III

GLM/jku

cc: G.R. Purdy
P.C. Lahoti

SIS REPORT

Closed with [illegible] Number 327

11-006-1

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

G.L. Morris — Site N[illegible] Level III

DATE: 10-27-82 | SHEET: 1 | OF: 1

H.O./BRANCH OFFICE: HN

M: Jerry Lyrle ANI

ANIZATION: Brown & Root

ATION / STREET: PSES | CITY: Glen Rose | COUNTY: Somerville | STATE: TX | ZIP CODE: 76043

ON CONTACTED (GIVE NAME AND OFFICIAL TITLE): same as above

CONTRACT/P.O. NO.:

SON FOR VISIT: Full time contract

ES SENT TO:

H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

Subject: IM # 24,384 (SIS Report (11-006))

The response to SIS Report 11-006 clarifies what's to be accomplished to alleviate the stated problem as it pertains to spool 202, Drawing CS-2-SB-090 and is an acceptable solution to that particular piece.

The response does not address the larger problem of instruction to field personnel to prevent the same problem in the future. Training and instruction as provided for in Section 2 of Brown & Roots Q.A. manual is the approved method by which this problem might be prevented. The necessity for this training and/or instruction is indicated by the generation of NCR M-4194.

I would like to stress that this problem is - or - could be larger than this single instance and warrants immediate attention.

☐ OVER

Jerry W. Lyrle

REV 10-78 (SIS)

SIS REPORT

THE HARTFORD STEAM BOILER INSPECTIO[N AN]D INSURANCE COMPANY
HARTFORD, CONNECTICUT 06102

11-006-1

TO: G. L. Morris Site Mech. Level III
DATE: 10-27-82
SHEET 1 OF 1
FROM: Jerry Lyrle ANI
H.O./BRANCH OFFICE: HA
ORGANIZATION: Brown & Root
LOCATION: CPSES
STREET:
CITY: Glen Rose
COUNTY: Somerville
STATE: TX
ZIP CODE: 7604[3]
PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE): same as above
CONTRACT/P.O. NO.:
REASON FOR VISIT: Full time contract
COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

Subject: IM # 24,384 (SIS Report (11-006))

The response to SIS Report 11-006 clarifies what is to be accomplished to alleviate the stated problem as it pertains to spool 202, Drawing CS-2-SB-090 and is an acceptable solution to that particular piece.

The response does not address the larger problem of instruction to field personnel to prevent the same problem in the future. Training and instruction as provided for in Section 2 of Brown & Roots Q.A. manual is the approved method by which this problem might be prevented. The necessity for this training and/or instruction is indicated by the generation of NCR # M-4194.

I would like to stress that this problem is-or-could be larger than this single instance and warrants immediate attention.

Reviewed & discussed with
J. Lyttle
Con 17 Nov 82
[illegible]

Reviewed and discussed
no response necessary.
[signature]
7701 QR

SIGNED

☐ OVER

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

#322A

– CASE EXHIBIT NO. 1,025

CUSTOMER IDENTIFICATION

TO (Name and Title): Mr. Gordon Purdy, QA Manager

DATE: November 11, 1982 | SHEET: 1 | OF: 3

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.

INSP. BRANCH: Hn

INSP. REGION OR FOREIGN COUNTRY: Houston

(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas 76043

☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: _____ (Date) and find the following sections: (Give Numbers and Titles)

☐ Satisfactory:

☒ Unsatisfactory: (Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

This follow up is to clarify the finding identified on 939 #322 dated November 5, 1982.

Paragraph 11.1 of the Quality Assurance Manuel states:

"This section establishes the controls for inspections performed at specific stages in Brown and Root fabrication and installation activities to ensure that items meet the applicable design documents and the code." "See attached".

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: November 19, 1982 (Date).

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: ☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File | DATE SIGNED: November 11, 1982 | SIGNED (HSB Inspector): M Coats

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

See attached Im # 24,565 dated 11-19-82.

* within 5 working days after receipt of list of Pipe supports that ANI selects to witness installation of snubbers ☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED: * | DATE SIGNED: 11-19-82 | SIGNED (Customer's Representative): [signature]

I, the undersigned, have remonitored the above unsatisfactory conditions on: 11/22/82 (Date)

and found them: ☑ Satisfactory ☐ Unsatisfactory (Explain below)

RE MONITORING RESULTS

DISTRIBUTION: ☐ Reg. Mgr. / SIS Foreign Representative ☐ Insp. File | DATE SIGNED: 11/22/82 | SIGNED (HSB Inspector): M Coats

939 REV 11/78 (SIS)

References:

NA-4451 — The ..... installer shall operate under a controlled system such as process sheets, shop procedures, check-lists, travelers, or equivalent procedures.....

Example:
Process sheet - WDC, MWDC, MRS, etc.
Traveler - COT
Procedure - QI-QAP 11.1-28A
Check list- Hanger inspection form, snubber inspection check list.

NA-4510 — In process and final examinations and tests shall be established to assure conformance with documented instructions, procedures, and drawings.

NA-4530 — Check lists shall be prepared, including.....
with space provided for recording results of examinations, tests, and inspections. The check list shall include space for ..... the inspector's signature, initial, or stamp, and date for those activities which he witnesses.

NA-5241 — Prior to issuance of process sheets or controls required by NA-4451, the manufacturer or installer shall review them and the applicable drawings with the inspector who shall then stipulate the inspections he intends to make in order to fulfill the requirements of NA-5210.

Discussion: The installer is mandated to establish a method of process control and to establish a method of documenting results of inspections & examinations. Both functions may be accomplished by utulizing a process sheet or traveler. NA-5241 requires that these documents be presented to the ANI prior to issue and NA-4452 requires that spaces be provided the ANI to sign or initial and date those activities he witnesses.

Alternately, the installer may implement process control in the form of a procedure and inspection / examination verification in the form of a checklist. In this instance the requirements for check lists are delineated in NA-4530. Again there is a requirement for providing space for the ANI to sign or initial and date those activities he witnesses. This recognized alternate is the "other controls" discussed in NA-5241.

It becomes obvious that the installer must provide for preliminary review by the ANI irregardless of which form of process control / inspection he chooses to utilize.

Conclusions: (1) Brown and Root had implemented the controls for snubber installation (an installation activity under the NA certificate) by issuance of Construction Operation Travelers. These meet the intent of NA-4451 and NA-4452 and were submitted for ANI preliminary review.

(2) Brown & Root discontinued the use of COT'S and implemented the controls required by NA-4451 and NA-4530 by issuance of a construction work procedure, QA inspection procedure, and QC checklist. These meet the intent of the code except that the ANI has not been given the opportunity for involvement in installation or inspection activities.

(3) The hanger inspection report (HIR), Exhibit 11.1 of the QA manual, has been utilized by Brown & Root for some time in documenting hanger inspection activities. However, for purposes of documenting code inspection activities this document is redundant in that it repeats all inspection operations performed on the weld data card. However, the snubber installation checklist, attachment 16 to QI-QAP 11-1-28A contains inspection operations that go far beyond those indicated on the weld data card.

(4) If Brown & Root intends to present quality records documenting ASME inspection activities to the ANI at the time of execution of N-5s those records that did not provide for ANI involvement will be considered unacceptable.

Brown & Root, Inc.

INTEROFFICE MEMO

IM# 24,565

TO: M. Coats, ANI Lead DATE: November 19, 1982

FROM: D. Sanders

SUBJECT: Response to SIS
Report #322/322A.
CPSES, 35-1195

The QC Checklist, Attachment 16 to Quality Instruction QI-QAP-11.1-28A, is an added device for completing the hold points/inspection points identified on the Multiple Weld Data Card. The checklist is not used by itself, but in conjunction with the hold points already identified on the Multiple Weld Data Card.

In order to satisfy the ANI's requirements for establishing hold points for Mechanical connection installation activities with respect to snubbers, the following actions are proposed:

1. A list of pipe supports requiring snubber installation for small bore and large bore piping is attached for the ANI's use in selecting hold points for pipe supports that he wishes to witness snubber installation.
2. The ANI may mark the list showing the ipe supports he has selected to witness the snubber installation, or he may submit the selection on a separate transmittal. The list and/or the transmittal should be forwarded to the QE Supervisor.
3. Construction must notify the Quality Control Superintendent or his designee prior to installing a snubber that the ANI has established as a hold point.
4. The Quality Control Superintendent or his designee will be responsible for notifying the ANI when Construction is ready to install a snubber listed as a hold point by the ANI.
5. After completion of the installation activities, the QE Group shall submit a document package for ANI's acceptance. The package will include the pipe support Multiple Weld Data Card for ANI to sign his hold point for the snubber installation.
6. QI-QAP-11.1-28A will be revised to identify establishment of ANI hold points.

D. Sanders
QE Supervisor

DS/bm

cc: G.R. Purdy
G. Tanley
T. Blixt
SIS File
R. Siever
D. Leigh
QA File

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

- CASE EXHIBIT NO. 1,026

#327

CUST. IDENTIFICATION

TO (Name and Title): Mr. Gordon Purdy, Q.A. Manager
DATE: November 18, 1982 SHEET 1 OF 2
CUSTOMER'S COMPANY NAME: Brown & Root, Inc.
BRANCH: Houston
INSP. REGION OR FOREIGN COUNTRY: Houston
(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed
INSPECTION LOCATION: CPSES Glen Rose, Texas 76043
☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 11 - 18-82 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

☒ Unsatisfactory: (Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

Q. A. Manual Section II Quality Assurance Program.

Reference: NA 4800- Corrective Action which states in part "non-conformances are promptly identified and reported".

Reference: Brown & Root Q. A. Manual Section 16- Non-conforming Items Paragraph 16.2 "It is the responsibility of all site employee's to report items of nonconformance to their supervision or to the Site Q.A. Manager".

See Attached.

☒ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: December 3, 1982 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: ☒ Reg. Mgr. / SIS Foreign Representative ☐ Insp. ☒ File
DATE SIGNED: Nov. 19, 1982
SIGNED (HSB Inspector): Jerry W. Laytle

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if necessary)

Cost	BV
[illegible]	GW
[illegible]	[illegible]

[illegible]

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED:
DATE SIGNED:
SIGNED (Customer's Representative):

MONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: (Date)

and found them: ☐ Satisfactory ☐ Unsatisfactory (Explain below)

DISTRIBUTION: ☐ Reg. Mgr. / SIS Foreign Representative ☐ Insp. ☐ File
DATE SIGNED:
SIGNED (HSB Inspector):

939 REV. 11/78 (SIS)

Brown & Roots procedures CP-CPM 6.9D - 3.19.8 and 3.19.4 and QI-QAP 16-2 gives direction to field personnel on how to promptly and properly, report and document arc strikes and base metal non conformances.

It is very evident that the training and indoctrination program outlined in Section II of the Q A Manual is not being implemented, due to the number of arc strikes and base metal non conformances being found by ANI's and Q.C. Inspectors during walkdowns and at non destructive examinations. It is a requirement of both Code and Q. A. Manual that these non conformances be reported at the time they are first made or discovered and not left to a chance discovery during a walkdown or through casual observation as is now happening. Due to numerous sections of pipe being received that are so close to minimum wall at time of receiving, it becomes even more critical that all arc strikes and base metal non conformances are reported and documented promptly.

It is recognized by this ANI that arc strikes and damages to base metal is inherent during construction and that steps have been taken to prevent this from happening (i.e. CAR S-48), however, even the most careful welder will make an arc strike at times and mistakes are made during material handling. This is also recognized by the Code, hence the requirement of NA 4800. Since Brown & Roots Q.A. Manual recognizes it also and makes provisions for the prompt reporting and documenting, all that is needed is for it to be implemented.

Examples:

CT-2-RB-30-3 Two arc strikes Reported by ANI to Weld Tech.
SI-2-SB-14 Rev. 1 Spool 1Q2, Pc 1 Arc strikes on base metal and grinding on base metal with no Q.C. involvment. ANI found it and reported it to Q.C. inspector who documented it and handled it properly.
MS-2-RB-20 Arc strikes discovered by ANI during PT of weld excavation.
MS-2-RB-21 Numerous arc strikes discovered by ANI and brought to Q.C. inspectors attention.

Also: NCR numbers' M4154S, M4211S, M4174S, M4177S, M4181S, M4190S, M4203S R1, and M4199S. One of these NCR's was discovered while system was being insulated.

This 939 closes SIS Report # 11-006-1

Brown & Root, Inc.

INTEROFFIC EMO

IM# 24,969

TO: Marvin Coats, ANI DATE: January 28, 1983

FROM: D.L. Sanders

SUBJECT: SIS Report 327/327A.
CPSES, 35,1195

Ref: 1. ANI Office Memorandum to Russell Scott/Rusty Morris dated 1-27-83.

2. B&R Three Part Memo to M. Coats from Russell Scott dated 1-27-83.

Attachments: 1. IM#24,839 dated 1-7-83.

2. IM#24,935 dated 1-20-83.

*(To further amplify Mr. Lythle's Office Memorandum (Reference 1), Mr. Lythle identified to me that he was not totally satisfied with B&R's response to SIS Report #327, dated 12-30-82.) As a result, IM#24,839 dated 1-7-83 (Attachment 1) was issued to supervisory personnel requesting their assistance in informing personnel of the need to prevent arc strikes and report arc strikes and base metal defects promptly to the QC Group for proper identification, documentation and correction.

In addition, on 1-20-82, IM#24,935 (Attachment 2) was issued by the B&R CPSES Construction Project Manager reinforcing management's support concerning the reporting of nonconformances. Construction's indoctrination of personnel regarding their responsibilities in the prompt identification and reporting of nonconformances should be completed during the week of 1-31-83 to 2-5-83.

Upon completion of Construction's indoctrination, no further action is considered necessary by B&R.

D.L. Sanders
Q.E. Supervisor

DLS/bm

cc: G.R. Purdy
J.T. Blixt
P. Clarke, III
SIS File

* - This is not entirely correct - I was satisfied with their response, however, I did inform Mr. D. Sanders that I intended to go to the field and question the craft on their training of the subject. FOR SOME REASON, B&R decided to send an amended response - AFTER DOING THE ACTUAL TRAINING!

Brown & Root Inc.

INTEROFFICE MEMO

IM# 24,839

TO: Distribution DATE: January 7, 1983

FROM: D.L. Sanders

SUBJECT: CPSES, 35-1195
Reporting Nonconforming
Conditions.

In the past year or so, arc strikes have been a major nonconforming condition as evidenced by the number of IR's and NCR's issued to identify and correct them.

A marked improvement has been noticed in the efforts to prevent arc strikes by the use of protective barriers and covers, proper suspension of welding leads, proper grounding, etc., and reindoctrination of personnel in the cause and prevention of arc strikes. However, there are concerns that when arc strikes are made or base metal defects discovered, they may not be reported promptly or be left for chance discovery during QC walkdowns or found through casual observation.

The ASME QA Manual identifies that it is the responsibility of all site employees to report items of nonconformance. QA Instruction QI-QAP-16.1-2 specifies the following conditions and methods for reporting arc strikes and base metal defects:

1. Base metal defects and arc strikes discovered on N-stamped components shall be identified and documented in accordance with a Nonconformance Report (NCR).
2. Arc strikes and base metal defects discovered prior to system walkdown by QC shall be documented on an Inspection Report (IR).
3. Arc strikes and base metal defects discovered during system walkdown by QC shall be entered on the system punchlist and documented on an Inspection Report.
4. Arc strikes and base metal defects discovered after system pressure testing shall be documented on a Nonconformance Report.

I am requesting the assistance and cooperation of all QA/QC and Craft supervisory personnel to assure that their personnel are aware of not only the need to prevent arc strikes, but also the need to report arc strikes and base metal defects promptly to the QC Group for proper identification, documentation and correction as identified above.

Reporting Nonconforming Conditions (Cont'd)

Your response indicating that your personnel have been made aware of and understand this memo is expected by 1/21/83.

D.L. Sanders
Q.E. Supervisor

DLS/bm

Distribution: G.R. Purdy
J.T. Blixt
R. Siever
D. Woodyard
J. Patton
J. Ragan
J. Henline
W. Mansfield
J. Shaver
D. Doyle
F. Przybylski
T. Matheny
M. Todd
S. Bell
E. Opelski
R. Morris
D. Leigh
V. Wasinger
R. Gray
P. Ashcraft
G. Bennetzen
P. Lahoti
All Craft Superintendents

35-1195
1-20-83

Brown & Root Inc.

MEMORANDUM

IM# 24935

TO: Distribution

DATE: January 20, 1983

FROM: D. C. Frankum

SUBJECT: Reporting of Nonconformances

The purpose of this memo is to reinforce management support concerning the reporting of nonconformances. To ensure that all personnel are aware of their responsibility concerning this item, all employees that may have the opportunity to identify a nonconformance shall be indoctrinated in what is expected of them, and the indoctrination documented in accordance with CPM-2.2.

All employees have the responsibility of reporting items of nonconformance to their supervisor or to the QA Department. Prompt identification of nonconformances is required by the QA program, and in necessary for the timely correction of the nonconforming condition.

Everyone's cooperation in the reporting of nonconformances is expected and appreciated.

D. C. Frankum
Project Manager

DCF/km
CC: All Department Heads
All Superintendents
All Foremen

- CASE EXHIBIT NO. 1,027

SIS REPORT

10-016

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

TO: Mr. J. T. Blixt, 2E Group Supervisor

DATE: 12-20-82 | SHEET 1 OF 1

FROM: Billy Walker, ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root

LOCATION: CPSES | STREET: | CITY: Glen Rose | COUNTY: | STATE: Tx | ZIP CODE:

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE): Mr. Blixt - 2EGS

CONTRACT/P.O. NO:

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

Re: ISO# BR-X-071-004-A33R

On this date I performed a visual inspection (oper # 8 on MWDC) on the above referenced support. I deemed this support as being unsatisfactory due to rust coke and alien material on the welds.

This MWDC was issued to increase the weld size of two fillet welds (per the opposite side of the MWDC). The CMC referenced changed more than the two welds indicated, with the latest revision only addressing (per clouded area) the two welds.

Please note that oper #8 delineates "All Welds/Dwg. & WPS (V.T.) Q.C. signed oper #8 as being satisfactory on 12-20-82. How did B&R Q.C. sign off for welds which were covered with rust and dirt, etc.?

Observation:

If this MWDC was issued merely for increasing the weld size of the two fillet welds, why does oper #8 address all welds, and what objective evidence exists in the field to indicate all other welds having been previously inspected?

Your response will be appreciated

JLL	[illegible]
[illegible]	[illegible]
[illegible]	GO
[illegible]	

☐ OVER

SIGNED: Billy Walker

12 REV. 10-78 (SIS)

Brown & Root Inc.

INTEROFFICE MEMO

IM# 24,780

TO: Marvin Coats, ANI DATE: December 27, 1982

FROM: J.T. Blixt

SUBJECT: Response To SIS Report
#10-016 Dated 12-20-82.
CPSES, 35-1195

In response to your questions on this SIS Report, the B&R QC inspectors performed the original inspection and sign-offs on October 21, 1982.

On December 13, 1982 a CMC was worked as a modification package by the craft to increase the size of two fillet welds from 3/16" to ¼".

On December 20, 1982 a B&R QC inspector performed a visual examination of these two welds as addressed in the modification package, and found them acceptable.

The reason operation #8 addresses all welds is that it pertains to the specific welds addressed on the modification MWDC, and therefore not all welds on that specific hanger, are being examined.

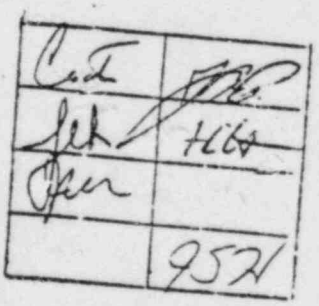
As far as objective evidence existing in the field to indicate all other welds have been previously inspected nothing currently exists, as the original package is in the vault. The QC inspectors are inspecting to current modification packages, that have been initiated by Welding Engineering.

To further clarify the welding performed on a modification package, Welding Engineering will enter in the Weld No. Block at the top of the MWDC "As Per DOA" (Description of Activities), which is shown on the reverse side of the modification MWDC.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
R. Siever
SIS File
QA FILE



Response accepted as satisfactory BW 1-4-83

10-016

SIS REPORT

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

TO: Mr. J. T. Blixt, Q.E. Group Supervisor	DATE 12-20-82	SHEET 1	OF 1
FROM: Billy Walker, ANI	H.O./BRANCH OFFICE Houston		
ORGANIZATION Brown & Root			
LOCATION CPSES	STREET	CITY Glen Rose	COUNTY	STATE Tx	ZIP CODE
PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE) Mr. Blixt - QEGS	CONTRACT/P.O. NO.		
REASON FOR VISIT Fulltime contract			

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

Re: ISO# BR-X-071-004-A33R

On this date I performed a visual inspection (oper. #8 on MWDC) on the above referenced support. I deemed this support as being unsatisfactory due to rust cake and alien material on the welds.

This MWDC was issued to increase the weld size of two fillet welds (per the opposite side of the MWDC). The CMC referenced changed more than the two welds indicated, with the latest revision only addressing (per clouded area) the two welds.

Please note that oper #8 delineates "All Welds/Dwg. & WPS (V.T.)" Q.C. signed oper #8 as being satisfactory on 12-20-82. How did B&R Q.C. sign off for welds which were covered with rust and dirt, etc.?

Observation:

If this MWDC was issued merely for increasing the weld size of the two fillet welds, why does oper #8 address all welds, and what objective evidence exists in the field to indicate all other welds having been previously inspected?

Your response will be appreciated

JWL	JRP
JH	QSH

☐ OVER

SIGNED Billy Walker

332 REV. 10-78 (SIS)

SIS REPORT

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

- CASE EXHIBIT NO. 1,028

18-005

TO: Mr. Gordon Purdy Q. A. Manager			DATE 1-10-83	SHEET 1	OF 1
FROM: Joe C. Hair ANI			H.O./BRANCH OFFICE Houston		
ORGANIZATION Brown & Root, Inc.					
LOCATION STREET CPSES	CITY Glen Rose	COUNTY Somervell	STATE Texas	ZIP CODE 76043	
PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE). Mr. Prem Lahoti Procurement Surveillance Supervisor			CONTRACT/P.O. NO.		
REASON FOR VISIT Full time nuclear contract					

COPIES SENT TO: ☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): Insp. file.

On this date I was presented NCR M4609 R1. This NCR pertains to grinding done on a CB & I weld connecting the piping to the containment liner. In this case the penetration piping is also the process piping. Upon investigating this matter, there is no code data report covering the welds connecting the pipe to the liner. A letter from CB & I states that the penetration piping does not meet the requirements of the 1974 Code because of differences of NDE requirements. The data report covering the fabrication in the CB & I shop is to the 1971 Code Summer 73 addenda. Attached is a copy of CB & I's letter.

Until there is a resolution to this SIS Report, two things cannot take place:

(1) Closing of NCR M4609 R1.

(2) Signing any data report where a penetration is the process piping for any system.

Closed 1/13/83
by issue of 939-334

Cos	GW
JCH	BE
	BB
	952

SIGNED Joe C. Hair ☐ OVER

REV 10-78 (SIS)

January 10, 1983

Attachment 3

Chicago Bridge & Iron Company

8900 Fairbanks north Houston road
p o box 40066
Houston, Texas 77040

VBR-12371

COPY TO
Clarke
ANI
Hawkins
Ainsworth
Benjamin (Houston)

telephone ... JOB NO. 35-1195

RECEIVED
JAN 02 1980
B & R DOC DIST.

PROJECT MGR.	
PROJECT ENGR.	
QA MGR.	1
PROJECT CONT. ENGR.	1
TUGCO QA	
PROJECT GEN MGR.	
ARMS	1
Subcontracts	1 (O)
VBC	1

December 28, 1979

REQUIRED READING

[illegible]	SRT
[illegible]	[illegible]
	[illegible]

Brown & Root, Inc.
P. O. Box 1001
Glen Rose, Texas 76043

Attention: Mr. D. C. Frankum
Project Manager

RE: 2-135'Ø CONTAINMENT LINERS
COMANCHE PEAK STATION
BROWN & ROOT FOR TUSI
BROWN & ROOT SUBCONTRACT #35-1195-132
GIBBS & HILL PROJECT #2323
GLEN ROSE, TEXAS
CBI CONTRACTS 74-2427/28U
CBI LETTER NUMBER HHC-473

Dear Mr. Frankum:

Your letter BRV-9561 requested that CBI proceed with the certification of the ASME Class II penetrations in Units I and II containment liners to meet the summer 1974 addendum of Section III of the ASME Code.

After extensive research, our conclusion is that the certification cannot be made within the strict letter of the Code.

Our research indicates that the materials themselves, as well as the fabrication and welding procedures, meet the summer of 1974 addendum. The problem lies with the NDE requirements.

Under the summer of 1973 addendum, NDE is in accordance with Appendix IX. The winter of 1973 addendum references Section V for all NDE. The procedures used on the work were made to comply with the summer of 1973 addendum. The RT procedure used will comply with Section V; however, the MT and PT procedures will not. The reasons they do not comply are:

1. The amperage requirements for MT by the prod method are different. Appendix IX requires 100 amps per inch of prod spacing minimum. Section V requires 90 to 110 amps per inch for thicknesses up to 3/4 inch and 100 to 125 amps per inch for thicknesses over 3/4 inch.

2. Under Section V, both MT and PT require that the surface preparation cleaning extend one inch onto the plate material from the edge of the weld. Appendix only requires cleaning of the weld.

While our MT procedure only requires 100 amps per inch minimum, our actual Q.A. records indicate that in most instances we did comply with the Section V requirements. The only exceptions were on Unit II penetrations MV-4, MV-15, and MV-19. Unfortunately the cleaning requirements of Section V were not part of the procedures and for this reason none of the penetrations can actually be certified to the summer of 1974 addendum.

If we can be of additional help on this subject, please let us know.

Roy C Alexander

ROY C. ALEXANDER
PROJECT MANAGER by CJB

RCA/ln

cc: Mr. L. A. Ashley
Brown & Root, Inc.

Mr. D. A. Voves
Brown & Root, Inc.

Mr. H. R. Rock
Gibbs & Hill, Inc.

Mr. Homer C. Schmidt
Texas Utilities Services, Inc.

Mr. J. T. Merritt
Texas Utilities Services, Inc.

FORM N-2 MANUFACTURERS DATA REPORT FOR NUCLEAR PART AND APPURTENANCES* Rev. 1

As required by the Provis[illegible] of the ASME Code Rules

Date 2-23-77
By - HS Chkd - DNG

1. (a) Manufactured by Chicago Bridge & Iron Company Birmingham, Alabama
(Name and address of Manufacturer of part)

(b) Manufactured for Brown & Root, Inc. Houston, Texas
(Name and address of Manufacturer of completed nuclear component)

2. Identification-Manufacturer's Serial No. of Part 346-4 Nat'l Bd. No. None
346-2, 347-3,

(a) Constructed According to Drawing No. 348-2, 349-2 Drawing Prepared by CBI Cont. 74-2427U

(b) Description of Part Inspected 1 Piece SA333 GR6 6"Ø Sch 40 Pipe x 6'-6 long w/attachments

(c) Applicable ASME Code: Section III, Edition 1971, Addenda date Summer 1973, Case No. 1493 Class 2

3. Remarks: Fire Main. Customer Mark MV-16. Item No. 4 thru 18 do not apply. The 1" thick liner plate marked 346-1 is to be considered as an attachment. Hydrostatic test of this part shall be performed with the component hydrostatic test performed by others
(Brief description of service for which component was designed)

We certify that the statements made in this report are correct and this vessel part or appurtenance as defined in the Code conforms to the rules of construction of the ASME Code Section III.
(The applicable Design Specification and Stress Report are not the responsibility of the part Manufacturer. An appurtenance Manufacturer is responsible for furnishing a separate Design Specification and Stress Report if the appurtenance is not included in the component Design Specification and Stress Report.)

Date 3/7 19 77 Signed Chicago Bridge & Iron Co, By R. E. Clayton
(Manufacturer)

Certificate of Authorization Expires 6/16/78 Certificate of Authorization No. N-1090

CERTIFICATION OF DESIGN FOR APPURTENANCE (when applicable)

Design information on file at N/A

Stress analysis report on file at N/A

FOR INFORMATION ONLY

Design specifications certified by N/A Prof. Eng. State _____ Reg. No. _____

Stress analysis report certified by N/A Prof. Eng. State _____ Reg. No. _____

CERTIFICATE OF SHOP INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province of Tennessee and employed by The Hartford Steam Boiler I & I Co. of Hartford, Conn. have inspected the part of a pressure vessel described in this Manufacturer's Partial Data Report on 3-7 19 77, and state that to the best of my knowledge and belief, the Manufacturer has constructed this part in accordance with the ASME Code Section III.

By signing this certificate, neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the part described in this Manufacturer's Partial Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

Date 3-7 19 77

Inspector's Signature [signature] Commissions Tenn. 612
National Board, State, Province and No.

*Supplemental sheets in form of lists, sketches or drawings may be used provided (1) size is 8½" x 11", (2) information in items 1-2 on this data report is included on each sheet, and (3) each sheet is numbered and number of sheets is recorded in item 3, "Remarks".

8

SIS REPORT

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

18-005

TO: Mr. Gordon Purdy Q. A. Manager			DATE 1-10-83	SHEET 1 OF 1
FROM: Joe C. Hair ANI			H.O./BRANCH OFFICE Houston	
ORGANIZATION Brown & Root, Inc.				
LOCATION CPSES	STREET	CITY Glen Rose	COUNTY Somervell	STATE Texas / ZIP CODE 76043
PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE) Mr. Prem Lahoti Procurement Surveilance Supervisor				CONTRACT/P.O. NO.
REASON FOR VISIT Full time nuclear contract				

COPIES SENT TO: ☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): Insp. file.

On this date I was presented NCR M4609 R1. This NCR pertains to grinding done on a CB & I weld connecting the piping to the containment liner. In this case the penetration piping is also the process piping. Upon investigating this matter, there is no code data report covering the welds connecting the pipe to the liner. A letter from CB & I states that the penetration piping does not meet the requirements of the 1974 Code because of differences of NDE requirements. The data report covering the fabrication in the CB & I shop is to the 1971 Code Summer 73 addenda. Attached is a copy of CB & I's letter.

Until there is a resolution to this SIS Report, two things cannot take place:

(1) Closing of NCR M4609 R1.

(2) Signing any data report where a penetration is the process piping for any system.

Cots	GW
Jhe	JE
	JBP
	JSW

SIGNED *Joe C. Hair* ☐ OVER

REV. 10-75 (SIS)

January 10, 1983

NCR M-1144. Pg. 1 of 7

shall not relieve the Contractor of responsibility for the adequacy of the items.

6.0 MATERIALS FOR LINERS

6.1 MATERIALS FOR LINERS

The materials specified for the components of the containment liner shall be in accordance with the following:

6.1.1 LINER PLATE

Liner plate at the containment walls and dome, liner plate at the foundation mat, special thickened insert plates in the liner, noted on the drawings as "special", embedded plates in the foundation mat, and other steel material, except as otherwise indicated on the drawings or in this Specification, shall be SA-537, Class 2.

6.1.2 PENETRATION SLEEVES

a. Unless otherwise specified on the drawings, the material for penetration sleeves shall conform to SA-333 Grade 6 seamless pipe for sleeve diameters up to and including 20 inches. Penetration sleeves larger than 20 inches in diameter shall be fabricated from rolled plate, and shall conform to SA516, Grade 70 or SA-537, Class 2. All penetration sleeves shall meet the requirements of Article NE-2000, Article NE-4000, and Article NE-5000, Subsection NE, Requirements for Class MC Components. ~~Specific sleeves which function as part of the process piping (noted on the drawings as "process piping penetration") shall meet the requirements as outlined above (with the exception of NE-4220, Forming Tolerances) and all requirements of ASME Section III, Subsection NC, Requirements for Class 2 Components.~~ Where Subsection NC and Subsection NE conflict, Subsection NC shall apply. Rev. 4 Rev. 4 Rev. 4

b. Penetrations MV-1 and MV-2 as shown on the engineering drawings shall meet the acceptance criteria, for the Charpy V-notch impact test in accordance with ASME Section III Subsection NE and paragraph 6.2 of this specification. All other process piping penetrations shall meet the acceptance criteria in accordance with ASME Section III Subsection NC, and paragraph 6.2 of this specification.

(NCL m-11462
pg 6 of 7

SIS RECORD FOR MONITORING Q.A. PROGRAMS NO- 51

To(Name and Title) PAT CLARKE - PROJECT QC MANAGER | Date 8-28-78

Customer/Manufacturer BROWN & ROOT INC | ☒ Copy to Regional Supervisor

Location (No. & Street) GPSES - OFF HWY 201 (City) NORTH OF GLENROSE (State) TEXAS (County) SOMERVELL (Zip Code) 76043

I THE UNDERSIGNED HAVE MONITORED

- O QUALITY ASSURANCE MANUAL
- O NDE PROCEDURES MANUAL
- ☒ ASME CODE
- O QUALITY ASSURANCE PROCEDURES MANUAL
- O QUALITY CONTROL PROCEDURES MANUAL

SECTION NA 1140(c) ENTITLED EFFECTIVE DATES of CODE EDITIONS ON 8-28-78

THE RESULTS ARE :

- O SATISFACTORY - NO CORRECTIVE ACTION REQUIRED
- O ACCEPTABLE - EXCEPT AS LISTED BELOW
  CORRECTIVE ACTION REQUIRED BY _____
- ☒ UNSATISFACTORY - IMMEDIATE CORRECTIVE ACTION REQUIRED

THE REFERENCED PARAGRAPH REQUIRES that "PARTS AND APPURTENANCES" be MANUFACTURED AND INSTALLED AS MANDATED by the CODE EDITION MANDATORY ON the CONTRACT DATE FOR the COMPONENT (PIPING SYSTEM). NA-1262 DEFINES PENETRATION ASSEMBLIES AS ELECTRICAL OR MECHANICAL "PARTS OR APPURTENANCES" REQUIRED TO PERMIT PIPING ... ETC. THE PENETRATION ASSEMBLIES WERE MANUFACTURED TO SUMMER '72 EDITION WHILE the COMPONENT (PIPING SYSTEM) IS REQUIRED TO SATISIFY the SUMMER '74 REQUIREMENTS.

When the above conditions have been corrected please notify me in writing so that the above section can be monitored again.

Signed By _____ Authorized Nuclear Inspector

CUSTOMER/MANUFACTURER USE ONLY

RESOLUTION (Use reverse side, if more space is required)

Date

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

– CASE EXHIBIT NO. 1,029

334

CUSTOMER IDENTIFICATION

TO (Name and Title): Mr. Gordon Purdy Q. A. Manager

DATE: January 13, 1983 | SHEET 1 OF

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.

INSP. BRANCH: Houston

INSP. REGION OR FOREIGN COUNTRY: Houston

(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas 76043

☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: _____ (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory:

Non compliance with ASME Code NA-1140 (c) "Effective dates of Code Editions"

Note: This report reopens 939 # 51 (Attachment # 1) and closes 932 # 18-005 (Attachment # 3).

See Attachments.

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: February 10, 1983 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION ☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File | DATE SIGNED: Jan. 13, 1983 | SIGNED (MSB Inspector): M Cole

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

DCA #16,054 to MS-100 and SS-14 has been issued adopting NCA-1140 of 1980 Edition Summer 81 Addenda. This provides the Owner designating any parts of the Component applicable Code Edition and Addenda.

QA Manual will be revised to include this provision of the Code.

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED: 3/15/83 | DATE SIGNED: 2/10/83 | SIGNED (Customer's Representative): DS for PLL K. E. Gunderson

MONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 2/15/83 (Date)

and found them: ☑ Satisfactory ☐ Unsatisfactory (Explain below)

Concur That NCA 1140 of 80 SO 581 Addenda Will Resolve The Problem

DISTRIBUTION ☐ Reg. Mgr. / SIS Foreign Representative ☑ Insp. File | DATE SIGNED: 2/15/83 | SIGNED (MSB Inspector): M Cole

939 REV. 11/78 (SIS)

Findings: HSB 939 # 51-2 was closed 12-16-78 based on initiation of Brown & Root NCR M-1144 (Attachment #2). However, this NCR was voided on 1-21-80 by the Brown & Root Q. A. Manager without ANI notofication.

Discussion: Brown & Root's justification for voiding NCR M-1144 Rev. 1 is based on fallacious suppositions.

(1) (a) Paragraph 2 of page 3 (NCR M-1144) states in part that: "NE-1131 describes the jurisdiction.....

(b) Paragraph 3 of page 3 states that "It's a logical inference from NA-1262 and NE-1131, that a penetration assembly with its attached piping is part of the containment system (the component).
Contrary to the above, subsection NE is not applicable (Containment liner is non ASME Code) and therefore the "Containment System" is not the "Component" of which the penetration assembly is a part. This part will be listed on the piping N-5 Data Report and therefore must be certified to the same Code Edition and Addenda date that the installation is certified to.

(2) Paragraph 8 of page 3 states "Piping penetration, as fabricated, are in full compliance with the subcontract, specification and ASME Code requirements. Hence, no NCR condition exists and this NCR is voided.
Contrary to the above, the subject parts are not in "full" compliance with the ASME Code. They still do not meet the requirements of NA-1140 (c).

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

CASE EXHIBIT NO. 1,030

339

CUSTOMER IDENTIFICATION

TO (Name and Title): Mr. Gordon Purdy

DATE: March 1, 1983 | SHEET 1 OF 2

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.

INSP. BRANCH: Houston

INSP. REGION OR FOREIGN COUNTRY: Houston

(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas 76043

☐ Shop ☒ Field Assembly ☐ Repair/ Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 2/28/83 (Date) and find the following sections:

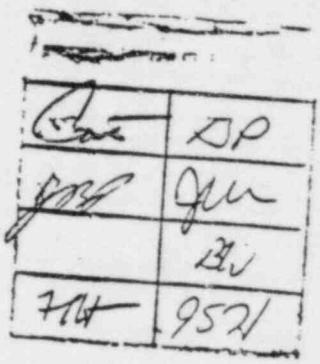
(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory:

Section VII Document Control



☐ CVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: 3/15/83 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: ☒ Reg. Mgr. / SIS Foreign Representative ☐ Insp. ☒ File | DATE SIGNED: March 1, 1983 | SIGNED (HSB Inspector): Joe C. Hair

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if necessary)

CUSTOMER'S RESOLUTION

SI-1-SB-022 - new copy ordered from DCC and old one destroyed.

FSI-1-2102-16-1-1Q3 - No record of this DWG number in QA files or in DCC. Please advise as to correct DWG number.

Further, it should be noted that if a 10 Day CMC is issued, the control drawing is not stamped but when the controlled CMC is issued it is referenced on the DWG.

☐ CVER

DATE CORRECTIVE ACTION WILL BE COMPLETED: March 29, 1983 | DATE SIGNED: March 28, 1983 | SIGNED (Customer's Representative):

I, the undersigned, have remonitored the above unsatisfactory conditions on: March 30, 1983 (Date)

and found them: ☐ Satisfactory ☒ Unsatisfactory (Explain below)

See page 2 of 2

DISTRIBUTION: ☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File | DATE SIGNED: March 30, 1983 | SIGNED (HSB Inspector): Joe C. Hair

REV 11/79

While monitoring Section IV, I discovered two (2) isometric drawings with discrepancies:

SI-1-SB-022 Changes to controlled drawings, written in by hand in ink.
FSI-1-2102-16-1-1Q3 Drawing is illegible. Also reference 932 #7-001A written 2/18/83 (CS-1-AB-213 & CS-1-RB-025). Also 939 #313.

This has become a continuing problem with the DRG group, Control #83 drawings. This does not include the Iso's taken back for illegiblility when presented with documentation or missing CMC's in packages.

If a drawing is illegible, or a CMC is missing, a final review for techinal acceptability is practically impossible. Your attention into this matter will be appreciated and if I can be of any further assistance, please notify.

Response reply:

This response is being returned unsatisfactory because:

(1) On the SI-1-SB-022 drawing, no corrective action is addressed concerning this generic problem.

(2) No corrective action is addressed for the correction of illegible drawing in the files, nor the ones issued from DCC.

(3) There is no mention of 10 day CMC's in this 939. The problem mentioned here concerns no CMC with the documentation when presented for final review. A final review cannot be performed if you do not have the correct design document in hand.

A response by April 15, 1983 will be appreciated.

REM

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

– CASE EXHIBIT NO. 1,031

#341

CUSTOMER IDENTIFICATION

TO (Name and Title): Gordon Purdy Site Q.A. Manager

DATE: March 8, 1983 | SHEET 1 OF 2

CUSTOMER'S COMPANY NAME: Brown & Root, Inc

INSP BRANCH: Houston | INSP REGION OR FOREIGN COUNTRY: Houston

(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas 76043

☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 3/8/83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory:

Section 12 Test Control

Hydrostatic test #'s ICS-107-1, ICS-108-1, and XWP-102 indicate NX-6124 is not being complied with.

Hydrostatic test #'s ICS-108-1 and ICS-107-1 were held at a test pressure of 56 PSIG. The design pressure is 220 PSIG. The basis for this reduction of pressure was "limiting components". The "limiting components", 1PI-188 and 1PI-187 are pressure indicating devices, which do not meet the criteria of components ☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: April 8, 1983 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: ☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File | DATE SIGNED: March 8, 1983 | SIGNED (HSB Inspector): [signature]

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

A CMC #72980 has been issued against the FSI drawing changing the Code boundry. SIS 12-004 issued on 3-2-83 has resolved the hydrotest #ICS-107-1 and ICS-108-1.

Hydrotest #XWP-102 was performed to test the entire system, and the test pressure was limited to 112PSIg. due to allowable maximum test pressure of several components in the system. Therefore it was not necessary to isolate part of the system for testing at higher pressure. This subject has been discussed with Mr. Coates and Mr. Tillman by P.C. Lahoti on May 16, 1983.

It was resolved that the test XWP #102 is acceptable. ☐ OVER

[initials box: 7FA, BX, 952]

DATE CORRECTIVE ACTION WILL BE COMPLETED: None | DATE SIGNED: 5/20/83 | SIGNED (Customer's Representative): [signature] Lahoti

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 5-24-83 (Date)

and found them: ☒ Satisfactory ☐ Unsatisfactory (Explain below)

Your response is satisfactory as per discussion with HSB Regional office and attached letter and drawing

DISTRIBUTION: ☒ Reg. Mgr. / SIS Foreign Representative ☑ Insp. File | DATE SIGNED: 5-24-83 | SIGNED (HSB Inspector): [signature]

119 REV 11/78 (SIS)

per NA-1210.

Hydrostatic test # XWP-102 was held at a test pressure of 112 PSIG. The design pressure is 150 PSIG. The basis for this reduction of pressure is also "limiting component". Piping in all four Iso.'s involved are welded to class 5 piping on both ends. The "limiting component" includes several vessels, at least one of which was fabricated to the rules of ASME Section VIII. It should be noted that the attached piping on two of the Iso's can be isolated via valves and flanges as installed.

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

CASE EXHIBIT NO. 1,032

346

CUSTOMER IDENTIFICATION

TO (Name and Title): Gordon Purdy, Site Q. A. Manager

DATE: April 21, 1983 | SHEET 1 OF 6

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.

INSP. BRANCH: Houston

INSP. REGION OR FOREIGN COUNTRY: Houston

(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas

☐ Shop ☒ Field Assembly ☐ Repair/ Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 4/21/83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory:

Section 12 Test Control

See Attached.

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: May 5, 1983 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr. / ☐ SIS Foreign Representative ☒ Insp. File	4/21/83	

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

See Attached QCWI No. 10.

[illegible]	[illegible]
[illegible]	DS
764	[illegible]
	9521

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)
May 2, 1983	May 3, 1983	

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 5-11-83 (Date)

and found them: ☒ Satisfactory ☐ Unsatisfactory (Explain below)

QI-QAP 12.2 rev 5 as supplemented by QCWI-10 as requiring BRP's for use at final tests is satisfactory

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr. / ☐ SIS Foreign Representative ☒ Insp. File	5-11-83	

References: ASME Section III NA 4420
Brown & Root Q. A. Manual 12.3
Brown & Root Procedure CP-CPM-6.9I

Discrepancy: NA 4420 requires "instructions, procedures, or drawings of a type appropriate to the circumstances". Brown & Root Q. A. Manual requires that provisions are included which assure monitoring is performed by QE/QC and that a means for evaluating and documenting the test results are provided. CP-CPM 6.9I provides for inspection by QC and witness by ANI, Pressure Test Data Package includes applicable drawings marked to show test boundaries, system flow diagrams will generally be used, and that additional information is recommended but not required.

CP-CPM-6.9I is inadequate for the following:

(1) System flow diagrams do not provide location, elevation, configuration, nor means for identifying Iso's. Brown & Root Iso.'s are used for all other phases of installation, and are used by QC personnel for the actual inspection of hydrostatic tests (copy of ANI file #12-002 attached).

(2) Inconsistencies noted at time of test walkdown are marked by QC on Iso.'s. On at least two tests, valves which were shown on the flow diagram and valve lineup sheets as open, were in fact closed. As Iso.'s were being used for walkdowns, this was noted on the Iso.'s enabling the test to be continued as opposed to the test being shut down for modification to be made to the flow diagram and valve lineup sheets. This enabled only a small portion of the system to be re-tested.

(3) Flow diagrams do not provide Iso. numbers, spool numbers, nor weld numbers. All Brown & Root installation records including inprocess documents and N5 Data Reports reference Iso. numbers, therefore, all final review records including those maintained by site ANI's provide for tracing by Iso. numbers. As flow diagrams do not provide this information, an adequate means for ensuring that all joints and modifications are subsequently tested is not readily available.

Thank you,

Billy Walker

SIS REPORT

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

12-002

TO: Gordon Purdy, Site 2. A. Manager

DATE: 10-12-82 | SHEET: 1 | OF: 1

FROM: Billy Walker, ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root

LOCATION: CPSES | STREET | CITY: Glen Rose | COUNTY | STATE: Tx | ZIP CODE

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE): Greg Bennetzen, Pre-op / Turnover Supervisor

CONTRACT/P.O. #:

REASON FOR VISIT: Full time contract

COPIES SENT TO:

☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file & Greg Ben.

Re: Hydro test records

As of 10-11-82, we have been supplied with current ISO's and ... B&R's "ISO Review / Mechanical Record Verification Checklist" for the purpose of updating our records with hydro test # and date. It has been noted to cause concern due ~~#~~ to the ISO Review checklist having been made in many cases, to an earlier revision than the test itself, in that the test is being recorded on welds and spools which are no longer applicable to the hardware in the field. Example: ISO # RH-1-SB-017, test # 1RH-01 - ISO review shows to have tested weld # 5 - the current rev. of the ISO shows weld # 5A

ISO # PS-1-SB-006, test # 1PS-010 - ISO review shows to have tested spool # 103 - the current rev. of the ISO shows to be spool # 1

Also, the following ISO review checklists indicate hydro test # RHR-01 being performed on 10-8-82: RH-1-SB-012, RH-1-SB-013, RH-1-SB-007, RH-1-SB-006, RH-1-SB-014, RH-1-SB-017, RH-1-SB-009, RH-1-SB-010, RH-1-SB-019, RH-1-SB-020, RH-1-SB-021, & RH-1-SB-022. ANI's have no record of witnessing test # RHR-01. After investigation, it was decided this should be test # 1RH-01, which was witnessed on 10-8-82.

Also, ISO Reviews for RH-1-SB-013 & RH-1-SB-014 include test # 1S1-006, which appears to have been performed on 10-8-82, when in reality, it was performed on 9-14-82.

SIGNED: Billy Walker

☒ OVER

12.002

In order to alleviate this confusi[on] and for us to maintain [reas]onably correct records, which will prove of consequence when N5's are submitted, we are requesting that the actual controlled ISO's which are used on the hydro tests be submitted to us prior to being forwarded to the Q.A. Vault, as these list current status of hardware, and test boundaries.

Conversation with Greg Bennetzen resulted in the following:
Due to the information contained on these iso's, he preferred not to let them out of his control, but he agreed to release them to ANI's for this purpose

DHW	JOB
JLB	CDZ

This request is being complied with up till this date and is satisfactory BW 1-4-83

Brown & Root, Inc.

QCWI - No. 10

DATE: April 27, 1983

SUBJECT: QI-QAP-12.2 Rev. 5
Paragraph 4.1 Documentation
Of Pressure Test.

This is to clarify ASME Quality Control's responsibilities for documentation of pressure tests.

Upon satisfactory completion of the pressure test the QC inspector shall sign the block stamped "Site QA" on all BRP's use for inspection of the test boundary.

The above stamp will be on the face or back of all BRP's used for pressure test and shall not cover any drawing requirements.

This clarification shall be used until paragraph 4.1 of QI-QAP-12.2 is revised.

R. Siever
QC Group Supervisor

RS/bm

cc: G.R. Purdy
J.T. Blixt
G. Morris, Jr.
D. Woodyard
J. Ragan

CASE EXHIBIT NO. 1,033

C00562 PER ATTACHED IM Coa 4/9/83

SIS REPORT

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

9-002A

TO:

FROM: G. Morris, Mechanical Level III

DATE: 4/21/83 | SHEET 1 OF 2

Marvin Coats, Lead ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc.

LOCATION	STREET	CITY	COUNTY	STATE	ZIP CODE
CPSES		Glen Rose	Somervell	Texas	76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. No.: BS 042007

REASON FOR VISIT: Full time contract

COPIES SENT TO: ☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI File.

SUBJECT: Welded Attachments to Class 1 Piping

RE: HSB 932 # 9-002

HSB 932 # 9-002-1

HSB 932 # 9-002-2

NCR # M4311

NCR # M5735

Coa	JRR
JOB	DP
JL	HA
BW	TSJ

Per your request this date, I am documenting my request that appropriate corrective action be taken by Brown & Root as a result of above referenced documents.

Above reference 932's documented my concerns that non-conforming material had been welded to ASME Class 1 piping. A subsequent review by Brown & Root resulted in issuance of NCR M4311 which documented some fourteen (14) instances of installation of non-conforming material in Reactor Unit 1.

On 3/24/83 I signed off fitup hold points on lugs for SI-2-102-403-C41S. I noted the heat number of the lug material (F91383) and pulled the RIR package in the vault. Review of the CMTR revealed that the material had not been volumetrically examined per requirements of NB-2500 (UT examination IAW SA-577). I immediately identified this to the QC Group Supervisor. On 3/30/83 Inspector Bill Parr was notified for a PT hold point on the same lugs. No action had

SIGNED

☐ OVER

SIS REPORT

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

9-002A

TO: G. Morris, Mechanical Level III

DATE: 4/21/83 | SHEET: 2 | OF: 2

FROM: Marvin Coats, Lead ANI

H.O./BRANCH OFFICE

ORGANIZATION

LOCATION STREET CITY COUNTY STATE ZIP COD

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. NO

REASON FOR VISIT

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☐ Regional Manager, SIS ☐ Other (Specify):

been taken by Brown & Root to stop further processing after the non-conformance was discussed. At this time the non-conformance was again identified and resulted in generation of NCR M5735.

As a result of the above I am requesting your assistance to accomplish the following.

(1) A review of Unit 2 installations should be initiated to disclose whether there are other instances of similiar non-conformance.

(2) Demonstrate to the Lead ANI the control features of Brown & Root's program that assure the issuance of conforming Class 1 attachment material to the field.

If I may be of assistance, please contact me at your convenience.

Thank you,

Marvin Coats

Response requested by May 5, 1983

cc: Gordon Purdy

SIGNED ☐ OVER

REV. 10-78 (SIS)

Brown & Root, Inc.

TO: Marvin Coats, Lead ANI

DATE: May 17, 1983

FROM: Ted Blixt

IM# 25,570

SUBJECT: SIS Report (932) No. 9-002A

As requested, Brown & Root has initiated a total "review of Unit 2 installations..." for "instances of similar non-conformance," but since this review will require a manual search plus Q.C. field verification, we must request a 30 day extension to your requested response date.

Ted Blixt,
QE Group Supervisor

TB/km

cc: Gordon Purdy
Ted Blixt
SIS File
QA File

TO: Ted Blixt, QE Group Supervisor

May 24, 1983

FROM: Marvin Coats

Concur with requested extension.

Marvin Coats,
Lead ANI

Coats	
DP	
	744
	952

Brown & Root, Inc.

INTEROFFICE MEMO

IM# 25,676 DATE: June 7, 1983

TO: Marvin Coats

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS/932 No. 9-002A.

A review of Unit 2, by B&R QE's has disclosed that there are no other instances similiar to NCR 5735. The present control features of Brown & Root's CPSES program will assure issuance of conforming Class I attachment material to the field.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
G.L. Morris, Jr.
QA File

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

CASE EXHIBIT NO. 1,034

#347

CUSTOMER IDENTIFICATION

TO (Name and Title): Mr. Gordon Purdy, Q. A. Manager

DATE: April 21, 1983 | SHEET 1 OF 2

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.

INSP. BRANCH: Houston

INSP. REGION OR FOREIGN COUNTRY: Houston

(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas

☐ Shop ☒ Field Assembly ☐ Repair/ Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 4/21/83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory: Section II Control of Inspections.

Paragraph 11.2 (c) Definition of Inspection sequence including types of characteristics to be measured, frequency of inspection (including in-process surveillance or monitoring activities), establishment of Q. C. holdpoints, methods of inspection, and acceptance criteria.

See Attached.

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: May 5, 1983 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION ☒ Reg. Mgr. / SIS Foreign Representative ☐ Insp. ☒ File

DATE SIGNED: 4/21/83

SIGNED (HSB Inspector): Joe C. Hair — Joe C. Hair

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

NCR M6039 was issued to resolve the lack of 100% visual examination. It should be noted that back gouging was performed in compliance with the WPS.

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED: 7/26/83

DATE SIGNED: 7/26/83

SIGNED (Customer's Representative): [signature]

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 8/3/83 (Date)

and found them: ☒ Satisfactory ☐ Unsatisfactory (Explain below)

THIS REPORT IS CLOSED BASED ON ACCEPTABLE DISPOSITION OF ABOVE NCR AND SUBSEQUENT REINSPECTIONS.

DISTRIBUTION ☐ Reg. Mgr. / SIS Foreign Representative ☐ Insp. ☐ File

DATE SIGNED: 8/3/83

SIGNED (HSB Inspector): [signature]

939 REV 11/78 (SIS)

On this date this inspector was called to the Hanger Fab Shop to witness a final PT of a full penetration weld on support MSB-2634 DCA Unit 4. Upon arrival it was noticed that the weld in question had been welded over on top and bottom by fillet welds. The full penetration welds have unique weld numbers assigned on seperate MWDC. The fillet welds also have unique numbers assigned, and are on seperate MWDC's.

Mr. Bill Sims has told me that Civil Engineer, Tom Lutz is going to delete PT because it is not required for a Class 3 plate and shell support. The concern of this inspector is that there are parts of welds on 4 units which have not been subjected to NDE. 3 units are completed and 1 unit still remains in fab shop.

The following concerns should be addressed in response of this monitoring activity.

(1) The requirements of NA 4111 have not been met for; "controlled conditions include the use of appropiate equipment, suitable environmental conditions for accomplishing the activity, and assurance that prerequisites for the given activity have been satisfied".

(2) NF-4423 Before applying weld metal on the second side to be welded, the root of double weld joints shall be prepared by suitable methods, such as chipping, grinding, or thermal gouging to sound metal. There is no objective evidence that this has been done. The configeration of the joint will limit what can be done.

(3) NF-4440 All welds shall be examined in accordance with the requirements of NF 5000.

(4) NF-5231 Class 3 Plate & Shell type support welds.
   (a) Weld joints over 1½" thick shall be PT'd or MT'd.
   (b) All other welds shall be visually examined.

SIS REPORT

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

CASE EXHIBIT NO. 1,035

G-044

TO: Gordon Purdy Q. A. Manager

DATE: 5/26/83 | SHEET: 1 | OF: 2

FROM: Marvin Coats, Lead ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc.

LOCATION	STREET	CITY	COUNTY	STATE	ZIP CODE
CPSES		Glen Rose	Somervell	Texas	76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. NO.: BS 042007

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file.

Subject: Component Supports

Re: Meeting 5/24/83 B. Baker, G. Purdy, M. Coats, B. Walker.

At the referenced meeting we discussed several ANI concerns about the present methods in place to identify problems with supports and subsequent rework repair to resolve those problems. Per request, I am documenting those concerns and your proposed remedial action as I understand them.

(1) Brown & Root Q. A. has recognized generic deficiencies in support fabrication and subsequent inspection (e.g. undersized fillet welds). Corrective action has been implemented procedurally in CP/QAP 12.1 which dictates a final "walkdown" of each support by QC to verify configuration, weld size, pipe to hanger clearance, etc. Final hanger package review by QES and ANI is predicated on this documented re-inspection. This final inspection has resulted in thousands of NCR's which causes duplication of walkdowns and a loss of perspective in NCR processing. In view of above, Brown & Root has adopted a policy of Welding Engineering personnel inspecting supports to final drawings prior to the final Q C inspection. Noted discrepancies are worked on process sheets rather than identified on NCR's based on a rationale that the support is still in process. This is an effort to reduce

SIGNED

☐ OVER

initiation of NCR's and better assurance that Q C will perform final inspections on acceptable fabrication. This policy is understandable but is not supported by the content of Section 16 of the Q. A. Manual.

(2) Repair Process Sheets generated to build up undersize welds are being transmitted to craft with an information copy of the vendor certified drawing. Even though the RPS virtually stands alone and the drawing serves only to provide location & material information Section 7 of the Q. A. M. specifically precludes use of an uncontrolled drawing for fabrication and installation activities.

(3) Full fillet on Class 1 support primary members should be identified in process and not left to be identified during the final walkdown.

Your proposed action of the above is as follows:

(1) Prepare a Q. A. M. revision for submittal to the ANIS to provide for policy outlined in item 1 above.

(2) R.P.S.'s will be issued with controlled drawing attached.

(3) Q C I identification of full fillet welds will be proceduralized to assure implementation.

Your assistance in resolving the above is appreciated.

M Cote

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

— CASE EXHIBIT NO. 1,036

#353

CUSTOMER IDENTIFICATION

TO (Name and Title): Gordon Purdy, Q. A. Manager

DATE: June 2, 1983 | SHEET 1 OF 2

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.

INSP. BRANCH: Houston

INSP. REGION OR FOREIGN COUNTRY: Houston

(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas 76043

☐ Shop ☒ Field Assembly ☐ Repair/ Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 6/2/83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ **Satisfactory:**

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ **Unsatisfactory:** Section 16 Nonconforming Items

Reference paragraph 16.4.6

Reference procedure CP-QAP 16.1

See attached sheet 2 of 2

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: June 16, 1983 (Date).

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION ☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File | DATE SIGNED: June 2, 1983 | SIGNED (HSB Inspector): Jerry W. Little

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if necessary)

See Below

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED | DATE SIGNED | SIGNED (Customer's Representative): NA Jul 6-3-83

RESULTS OF REMONITORING

I, the undersigned, have remonitored the above unsatisfactory conditions on: 6-3-83 (Date)

and found them: ☒ **Satisfactory** ☐ **Unsatisfactory** (Explain below)

Due to conversation with Q.E. Supervisor Ted Blixt this report is to be closed. Procedure CP-QAP 16.1 does control this process effectively.

DISTRIBUTION ☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File | DATE SIGNED: 6-3-83 | SIGNED (HSB Inspector): Jerry W. Little

939 REV. 11/78 (SIS)

According to the references given, the Q. E. group is responsible for the following:

(1) Reviewing NCR's for clarity, correctness, etc.

(2) Assigning NCR to "Action Addressee".

(3) Reviewing disposition for adequacy and conformance to specification and Code requirements.

A. If everything is satisfactory at this time, the following reviews and approvals are to be obtained:

(1) Engineering.
(2) TUGCO operations Q.A. (under specified circumstances).
(3) Q. A. review to indicate compliance.
(4) ANI review.

Summary: At this time, the ANI's are receiving NCR's which have the Q.A. review signed and dated prior to Engineering signing and dating, resulting in final documentation being put in the Permanent Plant Records Vault showing that Q. A. review was performed prior to the Engineering review and indicating the possibility of them being signed prior to disposition. Since it is Q. A.'s responsibility to assure compliance with the Q. A. program, the Code, and specifications, it becomes inherent they assure Engineering and TUGCO review prior to their review, it being a Q. A. Manual and specification requirement for Engineer approval of disposition of "Repair or Use As Is". NCR numbers with this problem are numerous and on file.

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

— CASE EXHIBIT NO. 1,037

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

355

CUSTOMER IDENTIFICATION

TO (Name and Title): Gordon Purdy, Q. A. Manager
DATE: June 7, 1983
SHEET 1 OF 2

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.
INSP. BRANCH: Houston
INSP. REGION OR FOREIGN COUNTRY: Houston
(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas 76043
☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 6/7/83 (Date) and find the following sections:

(Give Numbers and Titles)
☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)
☒ Unsatisfactory:

Section 7 Brown & Root Q. A. Manual.

See Attached.

Coe	CP
TLG	JRP
RAB	[illegible]
BW	[illegible]

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: June 21, 1983 (Date).

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION ☒ Reg. Mgr./SIS Foreign Representative ☒ Insp. File
DATE SIGNED: June 7, 1983
SIGNED (HSB Inspector): [signature]

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED:
DATE SIGNED: 6-8-83
SIGNED (Customer's Representative): [signature]

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 6/10/83 (Date)

and found them: ☒ Satisfactory ☐ Unsatisfactory (Explain below)

DISTRIBUTION ☐ Reg. Mgr./SIS Foreign Representative ☐ Insp. File
DATE SIGNED: 6/10/83
SIGNED (HSB Inspector): [signature]

Finding: During final review of hanger packages this date, it was noted that the majority of packages included VCD/FRD marked in the following fashion: In lieu of the red DCC stamp (indicating controlled copies) these drawings were obviously reproduced from the original controlled copies with the control number (98) overmarked with red pen. Without benefit of stamping with a controlled stamp there is no objective evidence that the subject drawings are in fact "controlled".

Additionally, several drawings that were included for information were not marked "information only" as required.

Brown & Root, Inc.

DATE: JUNE 8, 1983

TO: MARVIN COATES
SUBJECT: SIS # 355

Resoultion of the problem identified on SIS # 355 will be handled in the following manner.

A. All future preliminary review documents will have a red DCC stamp with the control # entered.

B. At the time of final review, a drawing that does not have a red control # stamp will be verified as the latest Rev. , and a red DCC control stamp will be applied with 098 control No. entered. Any questions feel free to contact me at ext. 270.

Danny Leigh
Quality Engineering Systems
Supervisor

CASE EXHIBIT NO. 1,038

SIS REPORT

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

4-003-2

TO: Gordon Purdy, Site Q. A. Manager			DATE June 22, 1983	SHEET 1	OF 5
FROM: Billy Walker, ANI			H.O./BRANCH OFFICE Houston		
ORGANIZATION Brown & Root, Inc.					
LOCATION CPSES	STREET	CITY Glen Rose	COUNTY Somervell	STATE Texas	ZIP CODE 76043
PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE) Ted Blixt, Q. E. Group Supervisor				CONTRACT/P.O. NO. BS 042007	
REASON FOR VISIT Full time contract.					

COPIES SENT TO: ☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

RE: Brown & Root supports welded to the containment liner of Unit 1

Meeting of 6-15-83

Meeting Of 6-17-83

My understanding of the actions to be performed to resolve the problems identified in the meeting of 6-15-83 concerning vague weld symbols are as follows:

(1) All NF supports welded to the containment liner "existing steel" constituents will be reinspected by QC to identify which welds actually exist.

(2) Engineering to perform calculations using only the welds designated by QC as existing.

(3) Supports failing to meet the design criteria will be addressed on NCR's, and

(4) Supports for which the welds are accepted "as is" per calculation, the Engineer will revise the drawing to indicate existing welds.

My understanding of the meeting of 6-17-83 with Ted Blixt, Engineering Representatives and myself is that the supports discussed in the meeting do meet the original design criteria, and Engineering does not wish to revise these drawings.

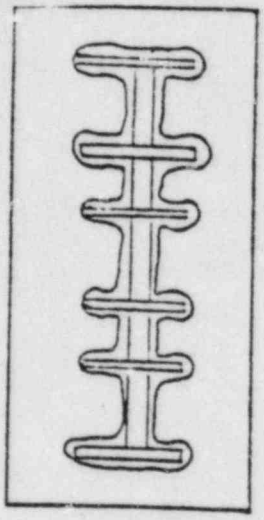
Although the weld symbols are still vague for those supports listed on pages 2 thru 5, QC verification indicates that all the joints similar to the specified joint indicated on the drawing are welded; therefore, there is no question as to whether de-

☐ OVER

SIGNED Billy Walker

Sec. A-A

BACKSIDE
Sec. A-A



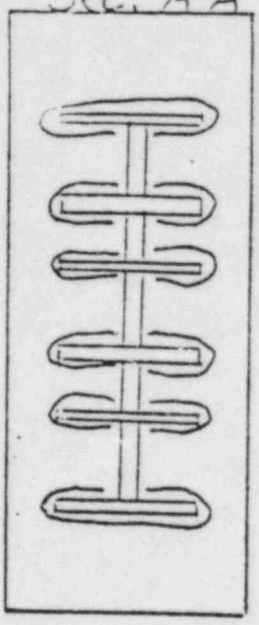
THE FOLLOWING HANGERS ARE WELDED AS SHOWN ABOVE

CT-1-068-001-C92R
CT-1-068-002-C92R
CT-1-068-003-C92R
~~CT-1-068-005-C92R~~
T-1-068-006-C92R
CT-1-068-007-C92R
CT-1-068-008-C92R
~~CT-1-068-009-C92R~~
~~CT-1-068-011-C92R~~
~~CT-1-068-018-C92R~~

Robert Daish 6/16/83

Sec. A-A

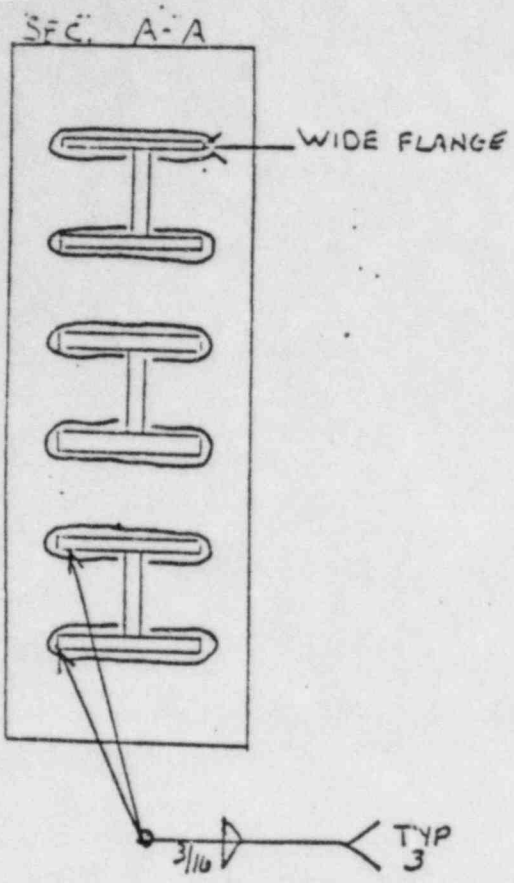
BACKSIDE
Sec. A-A

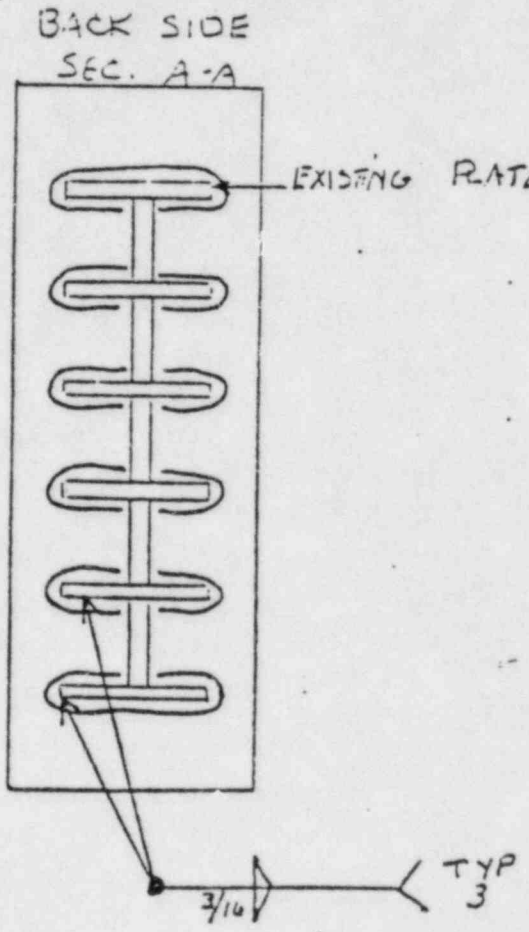


THE FOLLOWING HANGERS ARE WELDED AS SHOWN ABOVE

CT-1-068-030-C92R
CT-1-068-029-C92R
CT-1-068-028-C92R
CT-1-068-027-C92R
CT-1-068-026-C92R
CT-1-068-025-C92R
CT-1-068-024-C92R
CT-1-068-022-C92R
CT-1-068-017-C92R
CT-1-068-021-C92R
CT-1-068-020-C92R
CT-1-068-016-C92R
CT-1-068-015-C92R
CT-1-068-014-C92R
CT-1-068-013-C92R
CT-1-068-012-C92R
CT-1-068-010-C92R

Robert Daigle 6/15/83
Engineering 6/15/83



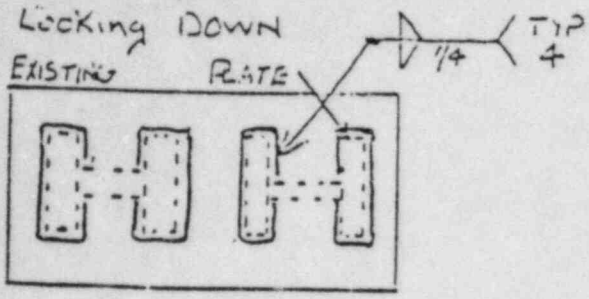


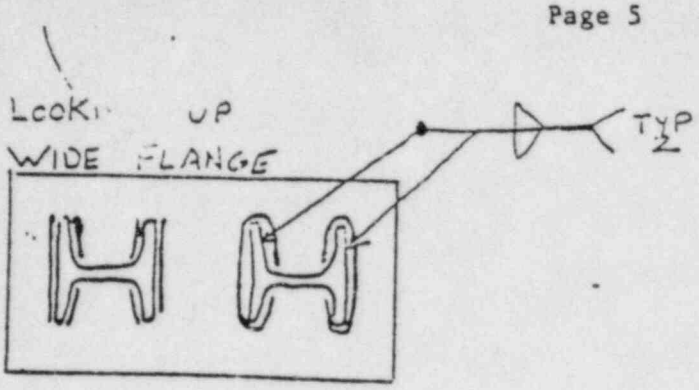
THE FOLLOWING HANGERS ARE WELDED AS SHOWN ABOVE

CT-1-092-020-C92R
CT-1-092-001-C92R
CT-1-092-002-C92R
CT-1-092-003-C92R
CT-1-092-004-C92R
CT-1-092-005-C92R
CT-1-092-006-C92R
CT-1-092-007-C92R
CT-1-092-008-C92R
CT-1-092-009-C92R
CT-1-092-010-C92R
CT-1-092-011-C92R
CT-1-092-012-C92R
CT-1-092-013-C92R
CT-1-092-014-C92R
CT-1-092-015-C92R
CT-1-092-016-C92R
CT-1-092-017-C92R
CT-1-092-018-C92R
CT-1-092-019-C92

CT-1-035-001-C92R
CT-1-035-002-C92R
CT-1-035-003-C92R
CT-1-035-004-C92R
CT-1-035-005-C92R
CT-1-035-006-C92R
CT-1-035-007-C92R
CT-1-035-009-C92R
CT-1-035-010-C92R
CT-1-035-011-C92R
CT-1-035-012-C92R
CT-1-035-013-C92R
CT-1-035-014-C92R
CT-1-035-015-C92R
CT-1-035-017-C92R
CT-1-035-018-C92R
CT-1-035-019-C92R
CT-1-035-020-C92R
CT-1-035-021-C92R

6-16-B





The following hangers are welded as shown ABOVE FOR ITEM #1

CT-1-032-002-C92R
CT-1-032-003-C92R
CT-1-032-001-C92R
CT-1-032-004-C92R
CT-1-032-005-C92R
CT-1-032-006-C92R
CT-1-032-007-C92R
CT-1-032-008-C92R
CT-1-032-009-C92R
CT-1-032-010-C92R
CT-1-032-011-C92R
CT-1-032-012-C92R
CT-1-032-013-C92R
CT-1-032-014-C92R
CT-1-032-015-C92R
CT-1-032-016-C92R
CT-1-032-017-C92R
CT-1-032-018-C92R
CT-1-032-019-C92R
CT-1-032-020-C92R
CT-1-032-021-C92R
CT-1-032-022-C92R

CT-1-091-024-C92R
CT-1-091-023-C92R
CT-1-091-022-C92R
CT-1-091-021-C92R
CT-1-091-020-C92R
CT-1-091-019-C92R
CT-1-091-018-C92R
CT-1-091-017-C92R
CT-1-091-016-C92R
CT-1-091-015-C92R
CT-1-091-014-C92R
CT-1-091-013-C92R
CT-1-091-012-C92R
CT-1-091-011-C92R
CT-1-091-010-C92R
CT-1-091-009-C92R
CT-1-091-008-C92R
CT-1-091-007-C92R
CT-1-091-006-C92R
CT-1-091-005-C92R
CT-1-091-004-C92R
CT-1-091-003-C92R
CT-1-091-002-C92R
CT-1-091-001-C92R

CT-1-090-001-C92R
CT-1-090-002-C92R
CT-1-090-003-C92R
CT-1-090-004-C92R
CT-1-090-005-C92R
CT-1-090-006-C92R
CT-1-090-007-C92R
CT-1-090-008-C92R

CT-1-030-001-C92R
CT-1-030-002-C92R
~~CT-1-030-002-C92R~~ JH 6-16-83 JH 6-16-83
CT-1-030-003-C92R
CT-1-030-004-C92R
CT-1-030-005-C92R
CT-1-030-006-C92R
CT-1-030-007-C92R
CT-1-030-008-C92R

Jeff M Tompkins

CASE EXHIBIT NO. 1,040

follow up # 10-022-1

SIS REPORT

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

10-022

TO: Gordon Purdy, Site Q. A. Manager	DATE 6/30/83	SHEET 1	OF 1
FROM: Jerry Lytle, ANI	H.O./BRANCH OFFICE Houston		

ORGANIZATION: Brown & Root, Inc.

LOCATION	STREET	CITY	COUNTY	STATE	ZIP CODE
CPSES	Box 1001	Glen Rose	Somervell	Texas	76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE) — CONTRACT/P.O. NO.: 35-1195-0561

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

DP BW GH 9571

Subject: QCWI-23 dated June 16, 1983

The subject QCWI states "that snubbers may be removed and reinstalled by construction with an IRN". Q.C. must witness this operation and document it on an Inspection Report.

I do not understand how this fits in with the program since:

(1) Brown & Root QA Manual does this? Section 10 states "an Operational Traveler shall be used for non welding installation activities".

(2) CP-CPM 9.17 paragraph 5 states "the operation will be documented by Q.C. in accordance with Q.C. procedures".

(3) QI-QAP 11.1-28A paragraph 10.2 states "the results of snubber inspections shall be documented on the Q.C. checklist" (for snubber installations).

CPM 6.3 paragraph 2.1 - "The Operational Traveler ..., serves as a fabrication/installation/inspection checklist of operations necessary to achieve a quality end product".

According to these references, QCWI-23 falls outside of your program.

☐ OVER

SIGNED Jerry W. Lytle

Brown & Root, Inc.

INTEROFFICE MEMO

IM# 25,991 DATE: August 10, 1983

TO: Marvin Coats, ANI

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS Report 932 #10-022,
10-022-1.

The following is in response to the referenced SIS Reports. QI-QAP-11.1-28A, Revision 4, Para. 10.4, titled REMOVAL/ REINSTALLATION OF SNUBBERS provides specific instructions to the QCI regarding the documentation which is required your receipt of an IRN for snubber removal.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
G.L. Morris, Jr.
QA File

Closed 932 #10-022 & 10-022-1
8/11/83

Brown & Root Inc.

INTEROFFICE MEMO

IM# 25,991 Amended DATE: August 12, 1983

TO: Marvin Coats, ANI

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS Report 932 #10-022 & 10-0221.

QI-QAP-11.1-28A, Revision 4, Para. 10.4, titled Removal/Reinstallation of Snubbers provides specific instructions to the QCI's regarding the documentation which is required upon receipt of an IRN for snubber removal. Prior to the date of issue of Revision 4, QCI's were given specific direction to document on an IR only when rework was not involved.

J.T. Blixt
QE Group SUpervisor

JTB/bm

cc: G.R. Purdy
G.L. Morris, Jr.
R. Siever

CASE EXHIBIT NO. 1,039

SIS REPORT

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

G-051

TO: Gordon Purdy, Q. A. Manager

DATE: 6/29/83 | SHEET: 1 | OF: 1

FROM: Jerry Lytle, ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc.

LOCATION: STREET: CPSES P. O. Box 1001 | CITY: Glen Rose | COUNTY: Somervell | STATE: Texas | ZIP CODE: 76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. NO: BS 042007

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file.

References:

(1) Brown & Root Quality Assurance Manual paragraph 16.4.1 - "Deficiencies in characteristics, documentation, or procedure which renders the quality of an item unacceptable or indeterminate shall be identified and documented by the Site Q. A. Manager using an NCR".

(2) NA 3355 - The last sentence reads, "The Stress Report and all such revised drawings shall be filed and distributed so that there shall be no ambiguity regarding the correctness of as constructed drawings". Note the definition of Manufacturer; "As used in this Section, the term Manufacturer means the organization or combination of organizations which constructs any item to meet the Design Specifications and the requirements of this Section". (NA 3310)

(3) NA 4420 - Second sentence; " Instructions, procedures, or drawings shall include appropriate quantitative or qualitative criteria for determining that important activities have been satisfactorily accomplished".

(4) NA 4510 (a) First sentence "In-process and final examinations and tests shall be established to assure conformance with documented instructions, procedures, and drawings.

(5) NA 4221 - "It shall be the responsibility of the Manufacturer or Installer of items to assure that all personnel performing functions, including sub-contracted services, within the scope of this Section are qualified as

SIGNED

☐ OVER

specified in this Section".

(6) NA 5112 - "Inspectors performing inspections required by this Section shall be the Inspectors who have been qualified by written examination under the rules of any State of the United States or Providence of Canada which has adopted the Code".

(7) Reference NCR M8080S Rev. 1 My note giving my reason for not agreeing with the disposition, and Mr. G. M. Chamberlain's reply.

When reviewing NCR's, there are times when an ANI feels he cannot sign either or both the review or concurrence. Due strictly to professional courtesy and as a service to our customer, we try to convey our reason(s) for not signing. It is not required by Code or ANSI or any other standard I am aware of to do this, however, as you can imagine, just not signing an NCR and not giving some reason would quickly create a very confusing situation for your people and not answer the ANI's concerns.

It was this I had in mind when I wrote a note (attached copy) concerning NCR M8080S Rev.1. The original NCR was written by QC Inspector Fred Evans while revision 1 was written by QC Inspector Thomas Ellis. Both of these inspectors have been qualified by Brown & Root, and have many years of experience between them and both satisfy the requirements of Reference 5. In this particular instance both of them identified a problem and satisfied the requirements of Reference 1 while they were working to satisfy the requirement of Reference 4. The problem was also discussed with their Lead Inspector to apprise him of the situation and get his opinion. He concurred with their decision. All of this I have first hand knowledge of since I was there at the time.

The disposition to their NCR did not, in my opinion, correct the non-conforming condition. It states that Engineering had sufficient information. While this is good for their purpose, it does not satisfy the requirements of Reference 2 or Reference 3. Also, since Brown & Root must now certify that all requirements have been met, it is essential that the people doing VCD walkdowns be in possesion of clear and concise information to work with, (Reference 3).

After reviewing the NCR and writing my note giving my reason for not signing it, the NCR was given back to the Action Addressee. Apparently he did not agree with me and wrote me a letter addressed to me. While some of his reasons are valid, I have to take exception to his last four sentences. NA 3355 does apply, a drawing should be clear enough to satisfy the requirements of Reference 2 and 3, poetry has nothing to do with this situation, and the people involved are in the industry. As stated before, the QC inspectors are qualified and certified and I myself have satisfied the requirements of Reference 6, in addition to formal schools, training, and years of experience in the fabrication and inspection industry.

It is my understanding that Mr. Chamberlains position requires him to engineer pipe supports and not give his opinion of people who do not agree with him. He has questioned the integrity and knowledge of Brown & Root personnel and myself. If this is to be a continuing situation, perhaps it would be best not to explain reasons for our actions, since this is not the first time that an

ANI has taken harsh verbal abuse from Engineering people. This does not state my personal preference, since we are all in this together in order to accomplish a common goal, just one solution to a given problem.

Any help you may be able to give would be appreciated. At this time, I am requesting that if Engineering has a problem concerning the ANI's they contact you or your designee(s), and do not communicate directly to us.

Thank you,

Jerry W. Lytle

Jerry W. Lytle, ANI

JWL/jah

Response requested by 7/13/83.

Ref: NA 3355
ASME Code Sect. III

Ambiguity of drawings shall not be.

ANI
Jerry W. Lytle

NCR M80803 Rev 1

Speed Letter.

To ANI
Jerry W

From George M Chamberlain
Pipe Support Engineering,
Large Bore

Subject CP-041-723-E63R

MESSAGE

Date 28 June 19 83

THE WELD SYMBOLS CLEARLY NOTE "2 PLS". THERE IS ONLY ONE OTHER PLACE, OTHER THAN THE LOCATION OF THE SYMBOL, THAT THE WELD CAN EXIST WITHOUT INTERFERING WITH ANOTHER SYMBOL.

THESE SYMBOLS WERE NOT MISINTERPRETED BY (1) CRAFT, (2) QC INSPECTION - ORIGINAL, (3) DRAFTSMAN (4) DRAFT'S CHECKER (5) DESIGN VERIFIER (6) DESIGN CHECKER (7) ENG. ANSWERING THE NCR AND (8) MYSELF.

NA-3355 IS NOT RELEVANT IN THIS CASE. HOW CLEAR SHOULD A DRAWING BE? CLEAR ENOUGH FOR A POET? OR CLEAR ENOUGH FOR PEOPLE INVOLVED IN THE INDUSTRY?

Signed GM Chamberlain

REPLY

Date ______ 19__

In this case - you sign the N-5 Data Report, or perhaps one of your other people will. First however, you will need an ANI to sign this NCR. If it is so clear, how come 2 experienced Q.C. Inspectors have trouble with it? If this Code reference does not suit you, let me know and I will give others. Examples: B&R Q.A. Manual para 16.4.1 (Indeterminate item), and NA 4420

(This response was not given. JWW 6/29/83)

Signed

RECIPIENT—RETAIN WHITE COPY, RETURN PINK COPY

TASK FORCE

QA RECORD

BROWN & ROOT, INC.
Quality Assurance Department Hot Ho NCR NO. M80805 Rev 1
Nonconformance Report (NCR)
CPSES-[illegible]95

DRAWING/IDENTIFICATION Rev 1	TAG/ID NUMBER Rev 2	LOCATION OR ELEVATION	RIR NO.
CC-1-041-723-E63R	BRPCC-1-EC-015	EC, 852'El Rm# 244	n/a

NONCONFORMING CONDITION Subsystem# ICC-6 Tbl# 1N01

DOCUMENT VIOLATED: Vender Certified Dwg REV. 1 PARA. N/A TREND CATEGORY C-16

Rev 1 - Weld symbols shown on V.C.D. joining item #5 to items #1 and 5 do not show true weld configuration.

Weld symbols are shown as typ. 2 places (both flare bevel and fillet). However, due to weld direction (i.e. vertical as opposed to horizontal and top + bottom as opposed to North + South) and the difference in material size for item #1 (6"x4", T.S.) and item #5 (4"x4" T.S.) it is felt that the symbols given are misleading + do not represent the true weld configuration.

Rev 1 - to clarify NCR

Rev 1 - By Thomas C. Ellis 6-24-83

REPORTED BY:	DATE:	REVIEW/APPROVAL	DATE:
Fred Evans	6-15-83	Edward J. Hoffer	6-24-83

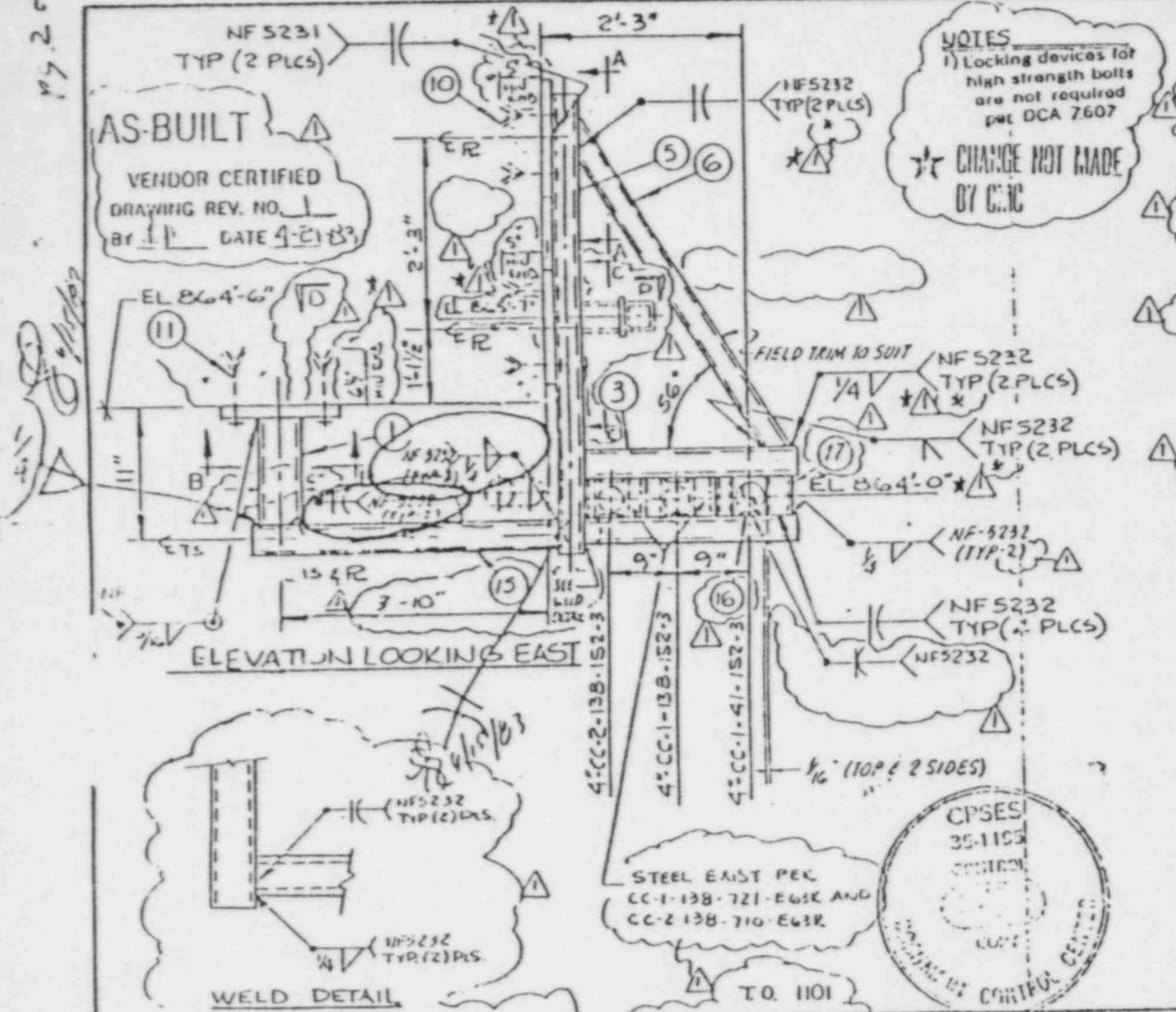
ACTION ADDRESSEE	'N' STAMPED COMPONENT	CAR NO.:	ASME CODE ITEM:
FINNPRAN	___ Yes ✓ No	n/a	✓ Yes ___ No

DISPOSITION:

A-REWORK ___ B-REPAIR ___ C-USE AS IS ✓ D-SCRAP ___ E-RETURN TO VENDOR ___

It is true that the joints are not identical, however; the longer weld interpreted the welding as they should have any engineering had sufficient information to analyze the support for certification. Therefore "use as is".

ENG. REVIEW/APPROVAL:	DATE:	QA REVIEW:	DATE:
R.M. Arnold	6-28-83	Edward J. Hoffer	6-28-83
TUGCO/QA REVIEW/APPROVAL:	DATE:	ANI REVIEW:	DATE:
n/a E.J.H.	6-24-83		
QC VERIFICATION:	DATE:	POTENTIALLY REPORTABLE ___ Yes ___ NO	
ANI CONCURRENCE:	DATE:	INITIAL/DATE:	
QA REVIEW/CLOSURE:	DATE:	WESTINGHOUSE CONCURRENCE: n/a E.J.H. 6-24-83	



ITEM NO.	QTY REQ'D	MATERIAL DESCRIPTION		PBS			
1	1	TS 6X4X.500X 0'-7 1/2" LG ASOO GR B			X		
~~2~~	~~1~~	~~TS 4X4X.500X 2'-0" LG A500 GR B~~			X		
3	2	TS 4X4X.500X2'-5" LG A500 GR B			X		
~~4~~	~~1~~	~~TS 4X4X.500X 0'-4 9/16" LG A500 GR B~~					
5	1	TS 4X4X.500X5'-3" LG A500 GR B			X		X
6	1	TS 4X4X.500X 4'-4 1/2" LG (CUT TO SUIT) A500 GR B			X		X
~~7~~	~~1~~	~~TS 4X3X.250X 0'-4 9/16" LG A500 GR B~~					X
~~8~~	~~1~~	~~PL 1 1/2" SA 36 SEE SECTION "B-B"~~					X
~~9~~	~~2~~	~~PL 1" SA-36 SEE SECTION "A-A"~~					
10	8	1" x 9" SUPER HILTI CONCRETE ANCHOR				X	
11	4	1" x 12" SUPER HILTI CONCRETE ANCHOR				X	
12	1	1" CS PL PER SECT. A-A	(SA36/SA515 GR 65)	X			X
13	1	1 1/2" CS PL PER SECT B-B	(SA36/SA515 GR 65)	X			
		APPLY ONE COAT OF [illegible] TO ALL [illegible] BE [illegible]					
14	1	1" CS PL PER SECT. C-C	(SA36/SA515 GR 55)	X			
15	1	T.S. 4" x 4" x 1/2" x 4'-3" LG	(A500 GR B)		X		

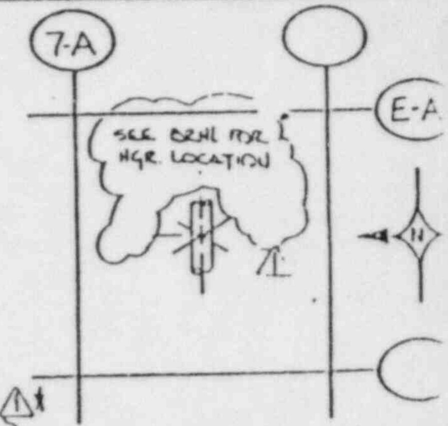
REV	DESCRIPTION	DATE	DWN.	CHKD.	APPVL
CONT	"AS BUILT" VENDOR CERTIFICATION REP				
ONLY	CPP 8692				

ASME CODE EDITION: 1974
ADDENDA: WINTER
DESIGN SPEC: MS-46-A

P.E. CERTIFICATION
N/A

PROB# AS-1-062X R.1

* WELD IS NOT REQUIRED FOR STRUCTURAL INTEGRITY



LOCATION PLAN

DATA PT	SUPPORT LOADS (Lb)					PIPE MVTS (INCHES)
SOJT	DESIGN	SERVICE LEVEL LIMITS A	B	C	D	
VERT.	—	-317 -85	-1245 +831	-1129 +1927	—	—
N-S	—	-1177 +255	-5553 +2331	-4495 +3185	—	—
E-W	—	—				+.0021 -.00-

NOTE: W.E. 10-SUPPORT: AUTHORIZED NUCL. INSP. YES [X] NO [ ] ASME CODE CLASS 3

REF. DWGS	BRHL ISO	REV	MECHANICAL	REV	ELECTRICAL	REV
	CC-1-EC-015	7	M1-0701-01	1	E1-0710-01	9
	FAB. ISO	REV	STRUCTURAL	REV	H.V.A.C.	REV
	BRP-CC-1-EC-015	8	S-0731	4	M1-0758	4

REV	DESCRIPTION	DATE	DWN	CHKD.
1	REVD AS NOTED REF. CMC 46156 R3	4-21-83		
—	& DCA 8027 REV 1 ADDED SH. 2	—		—
0	ISSUED FOR CONSTRUCTION	6-17-80		J.R.Y.

CPSES 35-1195

Brown & Root, Inc.
ENGINEERS AND CONSTRUCTORS
HOUSTON, TEXAS

CLIENT TUGCO
PLANT COMANCHE PEAK
JOB NO. 35-1195

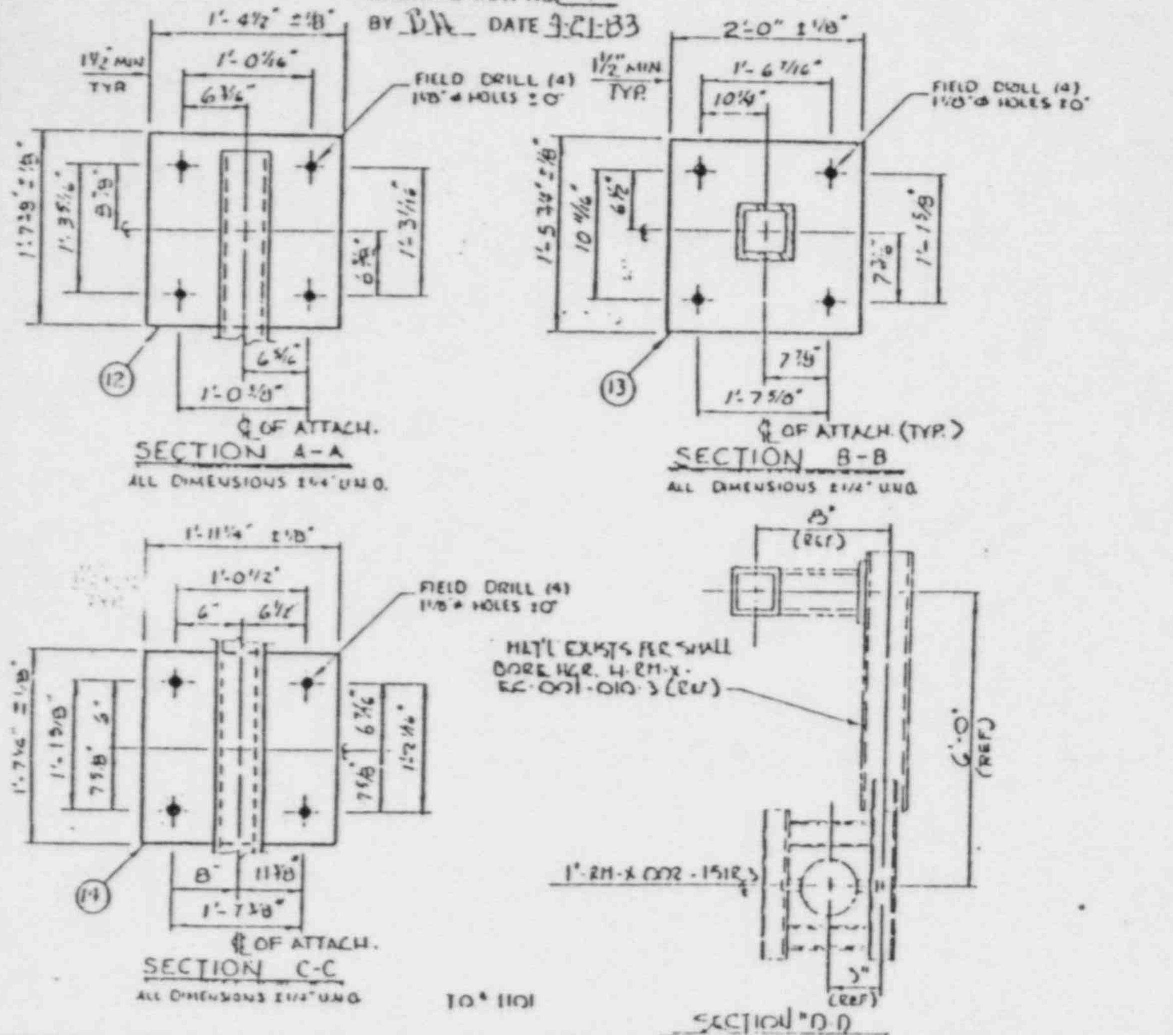
SUPPORT NO. CC-1-041-723-E(
SHEET 1 OF 2 REV. 1

FOR INFORMATION ONLY

CC6

AS-BUILT

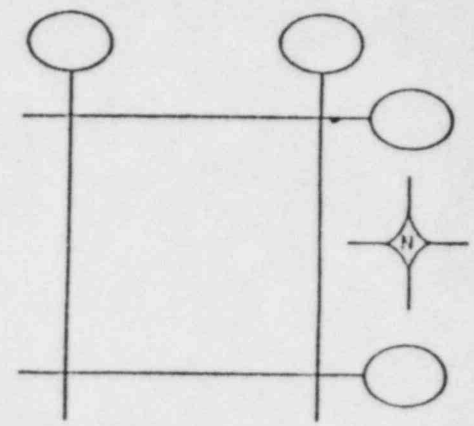
VENDOR CERTIFIED
DRAWING REV. NO. 1
BY BH DATE 9-21-83



ITEM NO	QTY REQ'D	MATERIAL DESCRIPTION		PBS	J	CSS	PRIM	SEC.	AISC
16	1	C.S. PL 5/8" x 4' x 4"	(SA 36)	X			X		
17	2	T.S. 2" x 4" x ¼" x 5 3/16" LG.	(A500 GR B)		X		X		

ASME CODE EDITION: ________
ADDENDA: ________
DESIGN SPEC: ________

P.E. CERTIFICATION



LOCATION PLAN

DATA PT	SUPPORT LOADS (LBS)				PIPE MVTS INCHES
5617	DESIGN	LEVEL A	LEVEL B	LIMIT C	D
VERT					
N-S					
E-W					

NOTE +N,E,UP -S,W,DN

AUTHORIZED NUCL. INSP. YES [X] NO [ ]
ASME CODE CLASS 3

REF. DWGS	ISO	REV	MECHANICAL	REV	ELECTRICAL	REV
	FAB. ISO	REV	STRUCTURAL	REV	H.V.A.C.	REV
	BRP. CC-1-EC-015	8				

REV	DESCRIPTION	DATE	DWN	CHKD	APPVD.
1	ISSUE FOR AS-BUILT. REF. CMC 46156 R3	9/21/83	JL	[illegible]	CA
—	(DCA7607 SEE 1101 VENDOR	~	~	~	~
~	CERTIFICATION REF CPP B437	~	~	~	~

Brown & Root, Inc.
HOUSTON, TEXAS

CLIENT TUSI
PLANT COMANCHE PEAK
JOB NO. 2323

SUPPORT NO. CC-1-041-723-E63R
SHEET 2 OF 2 REV. 1

CC6

CHECK CURRENT REVISION

Brown & Root Inc.

INTEROFFICE MEMO

TO: J.W. Lytle, ANI DATE: August 1, 1983

FROM: G.R. Purdy

SUBJECT: CPSES, 35-1195
SIS Report (932) G-051.

I apologize for being rather tardy in my response to the subject report; there was however, a degree of "footwork" to accomplish prior to completing my response.

I share your concern over the rather flippant response provided by Engineering, relative to your observation on drawing CC-1-041-723-E63R. I have discussed this matter with Project and Engineering Management, who have reinforced the policy that Quality Engineering is the proper interface between the ANIA and other Project organizations.

Although the Project environment is currently conducive to frustrations, I trust that proper implementation of the above interface function will preclude the recurrence of venting personal frustrations, and enhance the cooperation between interfacing organizations.

G.R. Purdy
Site QA Manager

GRP/bm

cc: J.T. Blixt
R. Siever
G. Bennetzen
M. McBay
F. Burgess
B. Sims
D. Snow
B. McNellie
M. Coats
SQAM File, w/attach.

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

CASE EXHIBIT NO. 1,041

#356

CUSTOMER IDENTIFICATION

TO (Name and Title)	DATE	SHEET	OF
Gordon Purdy, Site Q. A. Manager	July 1, 1983	1	2

CUSTOMER'S COMPANY NAME	INSP. BRANCH	INSP. REGION OR FOREIGN COUNTRY	(REGIONAL USE ONLY)
Brown & Root, Inc.	Houston	Houston	☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas

☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 7-1-83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory: Section VII Document Control

Paragraph 7.2.2 (b) Design documents - Verify presence of a "Release for Construction" letter or that the document contains the release criteria provided by the Engineer.

Documents not approved for use shall not be issued for construction, but may be issued as uncontrolled documents for the purposes discussed in Subsection 7.2.5

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: July 15, 1983 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr / SIS Foreign Representative ☒ Insp. File	7-1-83	▷ Jerry W. Little

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

JH	DP
GN	Byers
9030	TLH
BV	952

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)
		▷

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 8/3/83 (Date)

and found them: ☐ Satisfactory ☒ Unsatisfactory (Explain below)

THIS REPORT CLOSED BY ISSUE OF 939 #341

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☐ Reg. Mgr / SIS Foreign Representative ☐ Insp. File	8/3/83	▷ M Cate

939 REV 11-78 (SIS)

Paragraph 7.2.5 Uncontrolled Distribution

Documents may be issued for information purposes (i.e., training, inquiries, and material take-off). Such uncontrolled distribution shall be clearly identified as information type documents and shall not be used for fabrication or installation activities. Information type documents shall be marked as "Information Only", "For Training Purposes", "Bid Document", or other phrases which identify the document as an information type document.

NA 4430 Document Control

The last sentence states: "These measures shall assure that documents, including changes, are reviewed for adequacy and release by authorized personnel and distributed to and used at the location where the prescribed activity is performed".

According to Brown & Root's Q. A. Manual, the Document Control Center is the only department authorized to release and distribute design documents for construction, examination, or testing. As of this date, I have found numerous drawings in the field which have been stamped "RELEASED FOR CONSTRUCTION" but have not been issued by DCC, since there have been no control stamps on them, nor any other indication of having been through DCC. Most of these drawings have been attached to NCR's to give objective evidence that a drawing has been revised to clear a non conforming condition. This is a generic problem due to the number of uncontrolled documents found and the time span indicated from following examples:

(1) NCR M8728S Drawing GH X-080-004-3 Rev. 1 (6-29-83)

(2) NCR M8097S Drawing GH-X-AB-066A-013-3 Rev. 2 (6-24-83)

(3) Drawing VA-1-006-005-C52R in hanger package for ANI preliminary review. (6-24-83)

(4) NCR M8183 Drawing CC-1-RB-007-002-3 (7-1-83)

(5) NCR M8149S Drawing CC-1-RB-039B-003-3 Rev. 2 (7-1-83)

(6) NCR M8861S CS-1-RB-059-003-2 Rev. 2 (7-1-83)

(7) NCR M8300S Rev. 1 Drawing CS-1-112-722-C51R Rev. 3 (7-1-83)

(8) NCR M8193S Drawing CC-1-RB-007-001-3 Rev. 2 (7-1-83)

These drawings did not have any stamp on them to indicate they were for "Information Only" or any other stamp to indicate compliance with paragraph 7.2.5 of Brown & Root's Q. A. Manual.

Again, let me emphasize that this situation leaves the status of a drawing indeterminate as to meeting the requirements of Section VII of the Q. A. Manual or NA 4430. It also leaves a question of whether Q. C. Inspectors have a controlled copy of the drawing when they sign the Q.C. verification of a NCR.

RECORD FOR MONITORING Q.A./Q.C. PROGRAMS — CASE EXHIBIT NO. 1,042

THE HARTFORD STEAM BOILER INSPECTION AND INSURANCE COMPANY

HARTFORD, CONNECTICUT 06102

#357

IDENTIFICATION

TO (Name and Title): Mr. Gordon Purdy, Q. A. Manager

DATE: July 2, 1983

SHEET 1 OF 2

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.

BRANCH: Houston

INSP. REGION OR FOREIGN COUNTRY: Houston

(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas

☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Inservice

SPECIFIC RESULTS

I, the undersigned, have monitored your QA/QC manual on: 7-2 83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory: Section II Inspection Procedures and Instructions

References:

SIS Report 939 # 311A

I.M. # 24,719

NF 5212

QCWI-19

SIS 932 # G-044A

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: 7-20-83 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: ☒ Reg. Mgr./SIS Foreign Representative ☒ Insp. File

DATE SIGNED: 7 2-83

SIGNED (HSB Inspector): Joe C. Hair

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

IM # 25,852

ATTACHED

BP	JSB
Byers	JM
Crane	BW

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED:

DATE SIGNED: 7/12/83

SIGNED (Customer's Representative): R Seiner

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: July 17, 1983 (Date)

and found them: ☒ Satisfactory ☐ Unsatisfactory (Explain below)

See page 2 of 2

DISTRIBUTION: ☒ Reg. Mgr./SIS Foreign Representative ☒ Insp. File

DATE SIGNED: 7/18/83

SIGNED (HSB Inspector): Joe C. Hair

On 7-1-83 this inspector was called to witness a PT on a weld buildup for hanger CS-1-112-734-C61R. Upon arrival only ½ of the weld was prepared for a PT examination. The top half was still covered with paint and met the requirements of a full fillet. The QC Inspector, James Lloyd did not know he was supposed to PT that part of the weld. Upon discussion with QCI Lead Larry Wilkerson, he understands the requirement for NDE of full fillet welds is for only inprocess inspections.

Upon researching this subject when 939 #311A was written, A.R.M. Bill Tillman, Sr. Regional Manager Ron Howard, and SIS Manager Don Young were consulted for clarification of NF 5212 and the opininon of HSB is that if the weld meets the requirements of a full fillet, then NDE must be performed. Brown & Root Q.A. agreed to this on I.M. #24,719. Since the time #24,719 was written, other inspectors have had ANI hold points for Visual Examinations on Class 1 hangers. The Q.C. inspectors knew nothing about a requirement for PT of full fillets. (These are very knowledgeable inspectors such as John Caldwell, Tony Linzy, and Russ Hilton).

Upon investigation of other hangers on CS-1-RB 029 the following hangers were found that have had a recent VCD attachment 5 signed satisfactory.

CS-1-112-725-C61R	CS-1-112-738-C71S
CS-1-112 727-C61S	CS-1-112-731 C61S

These hangers were signed by a different inspector, Roger Walters.

It is apparent that there is a severe breakdown of communication between QA, upper management QC, and the QC inspectors in the field involved in VCD walkdowns. For this reason, and the hangers listed in this 939 ALL Class 1 VCD walkdowns are indeterminate. I am also requesting that ALL QC inspectors and their leads receive documented training into the criteria of inspecting Class 1 supports which may have full fillet welds included in the hanger.

This 939 is closed based on the following:

(1) No Class I hanger packages have been presented to ANI for final acceptance. When they are, they will be walked down by ANI to establish a confidence level that examination requirements have been met. If any discrepancies are found, this 939 will be re-opened.

This also closes 932 # G-044A.

Brown & Root, Inc.

INTEROFFICE MEMO

IM# 25,852 DATE: July 12, 1983

TO: J. Hair, ANI

FROM: R. Siever

SUBJECT: CPSES, 35-1195
SIS Report 357.

RPS 705-604 was prepared to increase west portion of weld 13 on hanger CS-1-112-734-C61R to ¼" as required by design drawing.

Weld 13 on the above hanger was PT examined inprocess and documented on MWDC 53214 by J. McCommas on 11/13/81. The only area requiring re-examination by PT is the repaired area. There was no reason to require the additional work of removing the paint and re-examination of the existing weld.

Mr. James Lloyd was correct. He did not have to PT that part of the weld that was not repaired.

The QC Lead was also correct. PT examinations of full fillet welds will be done during inprocess inspections.

At the time of final hanger walkdown any full fillet welds that have not been PT or MT examined will be documented on an unsat IR and Quality Engineering will have Welding Engineering prepare an RPS to clean and PT or MT the weld.

All ASME Class 1 hanger packages that have had construction and/or QC inspections performed since October 1982 are being reviewed to assure the required NDE has been performed.

It appears that you have been talking to the wrong people or have been misinformed in regards to communications between QA upper management, QC and QC inspectors. All QC inspectors and their Leads do receive training and at this time Brown & Root does not feel any additional training is required for Class 1 supports or full fillet weld inspections.

Brown & Root feels that the review of all Class 1 inprocess document packages prior to the final VCD walkdown will assure that no full fillet welds get through the system without having the required PT/MT examinations performed.

R. Siever
QC Group Supervisor

RS/bm
cc: G.R. Purdy
J.T. Blixt
G.L. Morris, Jr.
M. Coats, ANI

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS — CASE EXHIBIT NO. 1,043

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

#362 A

TO (Name and Title): Gordon Purdy, Site Q.A. Manager		DATE: August 3, 1983	SHEET 1 OF 2
CUSTOMER'S COMPANY NAME: Brown & Root, Inc.	INSP. BRANCH: Housto	INSP. REGION OR FOREIGN COUNTRY: Houston	(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed
INSPECTION LOCATION: CPSES Glen Rose, Texas		☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Inservice	

I, the undersigned, have monitored your QA/QC manual on: 8-3-83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory:

Section 20 Authorized Nuclear Inspectors

On many occasions ANIs have been refused access to areas in which Code related work was being performed. These areas are Reactor Building 1, Diesel Generator Building 1, and the Fuel Building on dates 1-16-83, 3 17-83, 7-10-83, 7-23-83, and 8-1-83, as well as other occasions not recorded. In some cases, access was subsequently achieved by construction personnel making an orange badge

☐ Over

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: August 17, 1983 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr./SIS Foreign Representative ☒ Insp. File	8-3-83	Billy Wilk[illegible]

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

See Attached IM#26,055

Com	JM
	JOB
	BP
	95H

☐ Over

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)
8/22/83	8/19/83	[signature]

I, the undersigned, have remonitored the above unsatisfactory conditions on: 9-7-83 (Date)

and found them: ☒ Satisfactory ☐ Unsatisfactory (Explain below)

Received 9/15/83 Com

Your response was accepted as satisfactory on 8-23-83 with above pending no recurring incidents of access refusal. It should be noted that on this date an ANI was refused access to the fuel building. (Continued on attachment)

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr./SIS Foreign Representative ☒ Insp. File	9-7-83	Billy Wilk[illegible]

REV. 11/78 (SIS)

available to the ANI. The effect of this is that construction decides when ANI's may have access.

Positive action must be taken to ensure ANI's have access to all areas anytime Code related work is being performed.

In addition, ANIs should have access to all areas regardless of whether or not work is actually being performed. This is the purpose of performing random walkdown of items prior to final document review and to walkdown prior to signing N5 Data Reports. ANIs also reserve the right to walkdown systems prior to signing the system N5 even though N5 Data Reports have already been certified for all subsystems.

Billy Walker

Brown & Root Inc.

INTEROFFICE MEMO

IM# 26,055

TO: N.C. Smith

DATE: August 18, 1983

FROM: G.R. Purdy

SUBJECT: CPSES, 35-1195
QA/ANI Access To Areas In Which
Code Related Work Is Being Conducted.

This memo is issued to confirm our previous discussions on the above subject.

In accordance with Section 20.0 of the B&R QA Manual, and Subsection NA paragraph NA-5120 of the ASME B&PV Code, the ANI/ANIS must have free access to all areas of the site during the period of assembly and testing. By Code terminology, this means that the ANI/ANIS must be permitted free access to areas until construction (i.e., N-5 Certification and Stamping) is complete.

By our mutual agreement, it is not the intent or requirement of the "RWN" access control program to restrict the freedom of access for QA/ANI/ANIS inspection personnel to perform inspection or cerification activities. However, due to incorrect interpretation of the program, several access problems have recently been encountered as outlined on the attached ANI SIS Report. To preclude recurrence of this problem, it is requested that copies of this memo be distributed to personnel responsible for implementation of the "RWN" access control program.

G.R. Purdy
Site QA Manager

GRP/bm

cc: B.J. Murray
D. Deviney
R.G. Tolson
M. Coats

SIS REPORT

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

G059

Mr. J. T. Blixt, QE Group Supervisor	DATE 8-23-83	SHEET 1	OF 1
FROM: Billy Walker, ANI	H.O./BRANCH OFFICE Houston		
ORGANIZATION Brown & Root			
LOCATION STREET CPSES	CITY Glen Rose	COUNTY	STATE Tx
PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)			CONTRACT/P.O. #
REASON FOR VISIT Full time contract			

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☐ Other (Specify):

I have reviewed your response to 939 #'s 358, 358A, and 362A and find them acceptable. Due to the nature of the conditions addressed closure will depend on continued remonitoring. I anticipate a closure date of 9-6-83, at which time a copy will be forwarded to B&R QA.

(No response to this report requested.)

Thank you

☐ OVR

SIGNED Billy Walker

attachment to
939 # 362A

SIS REPORT

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

FROM: Gordon Purdy, Site 2.0. Manager
DATE: 9-7-83 | SHEET: 1 | OF: 1

Billy Walker, ANI
H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root

LOCATION: CPSES | STREET | CITY: Glen Rose | COUNTY | STATE: Tx | ZIP CODE

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE): —

CONTRACT/P.O. NO.:

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☐ Other (Specify):

Shortly thereafter, however, ANI M. Coats received a badge from the owner for ANI access. This badge (#109) will allegedly provide access as required. In consideration of this badge issuance, I am closing this 939 as satisfactory.

Thank you
Billy Walker

☐ OVER

SIGNED
Billy Walker

REV. 10-78 SIS

939 AUDIT CHECK

Sheet 1 of 2

MANUAL SECTIONS 20 DATE 8 83 AUDIT# 362

20.1 Scope

No Questions

20.2 Access

① Does ANI have free access to all areas of the project where work or code items is being performed?

ANI's have had ~~random~~ problems achieving access to "controlled" areas such as the fuel building when attempting to inspect at hold points, random monitoring of activities, and at final review walk down Unsat

② Does ANI have access to suppliers facilities?

This has never been requested as site ANI's have not come across a need to inspect at or monitor a supplier's facility. Sat

③ Does Site QA Manager arrange access to all Code-related records when requested by ANI?

ANI's have agreed to perform final review to documents in vault at that location. ANI's have been having a little problem with adequate working facilities in the QA vault for this review. The NS group has set up space for ANI review of NS documentation. Insufficient facilities is still a problem from time to time in the QA Vault, however, this is not a code or manual violation. Sat

20.3 Hold Points

① Is ANI notified reasonably in advance when hold points are reached and items are ready for inspection?

As there is always an ANI on site while work is being performed there is no need for advance notice. ANI's are told in advance of upcoming hydrostatic/pneumatic tests Sat

939 AUDIT CHECKLIST

MANUAL SECTIONS 20 DATE 8?83 AUDIT# 362

20 4 Nonconformances

① Is ANI provided with a copy of Code related NCR's?

Yes ANI's receive copies of all code related NCR's, also ANI's perform disposition review and closure concurrence on "basis", "used", & "repair" NCR's. SET

② Is ANI given the opportunity to re-inspect and verify completion of the disposition prior to closure of the NCR?

ANI's have had no resistance when re-inspecting hardware prior to signing NCR's.

SET

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

— CASE EXHIBIT NO. 1,044

#361 A

CUSTOM. IDENTIFICA.

TO (Name and Title): Mr. Gordon Purdy, Site Q. A. Manager
DATE: August 11, 1983 | SHEET 1 OF 2
CUSTOMER'S COMPANY NAME: Marvin Coats, Lead ANI
INSP. BRANCH: Houston
INSP. REGION OR FOREIGN COUNTRY: Houston
(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed
INSPECTION LOCATION: CPSES Glen Rose, Texas
☐ Shop ☒ Field Assembly ☐ Repair/ Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 8-11-83 (Date) and find the following sections:

(Give Numbers and Titles)
☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)
☒ Unsatisfactory:

Section 7 Document Control

Requested response date on 939 # 361 was 8/10/83

Findings: (1) As of this date, there has been no response to above nor has as extension been requested.

(2) Car S-54 Rev. 1 has not been closed nor extended.

(3) ANI audit of packages in the field on 8/8/83 & 8/9/83 disclosed the following. (See attached)

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: 8/18/83 (Date).

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: ☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File | DATE SIGNED: 8/11/83 | SIGNED (HSB Inspector): M Coats

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

See attached IM# 25,015.

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED: Aug. 17, 1983 | DATE SIGNED: 8/17/83 | SIGNED (Customer's Representative): [signature]

RE. TING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 8/30/83 (Date)

and found them: ☑ Satisfactory ☐ Unsatisfactory (Explain below)

IN PLANT MONITORING REFLECTS ONLY ISOLATED INSTANCES OF INADEQUATELY STAMPED DRAWINGS.

DISTRIBUTION: ☐ Reg. Mgr. / SIS Foreign Representative ☐ Insp. File | DATE SIGNED: 8/30/83 | SIGNED (HSB Inspector): M Coats

939 REV 11/78 (SIS)

Twelve hanger packages in Task Force areas contained improperly marked drawings. Fourteen hanger packages in Unit 2 RB & DG contained drawings that had deficient "controlled" stamps.

Brown & Root Inc.

INTEROFFICE MEMO

IM - 26015 August 16, 1983

TO: Gordon Purdy

FROM: W.E. Baker

SUBJECT: Response to CAR #54 and SIS #361

Effective August 1, 1983 the new document control and distribution procedures were implemented at CPSES. A description of the new method of handling controlled drawings is contained in the attached memo from J.T. Merritt to All Department Heads, dated August 8, 1983.

In conjunction with this, Document Control Procedure DCP 3 has been revised and all Document Control Satellite Personnel have been indoctrinated to the new requirements.

In addition to the above, all Hanger Packages currently in the task force areas or in Welding Engineering are being reviewed prior to issuance to insure that all documents are current and that superceded documents have been removed or stamped Void.

The actions as described here should resolve the problems which were experienced with the previous program and have adequately addressed the concerns expressed by CAR #54 and SIS #361.

W.E. Baker

W.E. Baker

Sr. Project Welding Engineer

WEB/alt
cc: D.C. Frankum
F. Strand
J.P. Clarke

35-1195
8-8-83

TEXAS UTILITIES SERVICES INC.

P. O. BOX 1002 · GLEN ROSE, TEXAS 76043

August 8, 1983

TO: All Department Heads

SUBJECT: Document Control Center Satellites

Effective August 1, 1983 the DCC Satellites were in place and operational. Presently there are five locations as follows:

1. Satellite #300, 301, 302, 303 — (North of Const. Admin. Building)
   This Satellite serves TUGCO Start-Up, Completions and Area Management.

2. Satellite #304 — (Pipe Shop, Second Floor)
   (a.) Electrical Engineering
   (b.) TNE
   (c.) Mechanical Engineering
   (d.) Damage Study
   (e.) Civil Crafts

3. Satellite #305 — (Adjacent to Combustible Warehouse)
   (a.) Civil Engineering
   (b.) I&C Engineering
   (c.) Civil Q.C.
   (d.) Field Engineering

4. Satellite #306 — (Mechanical, Adjacent to "Church House")
   (a.) Pipe Crafts
   (b.) Millwrights
   (c.) Insulation
   (d.) Hanger Dept. (For drawings other than Construction #98 Packages)
   (e.) Instrumentation Craft
   (f.) Mechanical Q.C.

5. Satellite #307 — (Electrical, North of TG #2)
   (a.) Electrical Craft
   (b.) Electrical Q.C.

With this transition the old "control number/file custodian system" will be replaced by the Satellites which are staffed with DCC people. Several control numbers will remain for logistical or technical reasons but they will be controlled and audited by the DCC monitoring team.

The "Information Copy" will no longer be issued. All "Controlled" drawings will be issued and accounted for by the Satellites. The crafts will continue to check drawings in and out as in the past. Aperture cards and viewers will be available at each Satellite for viewing drawings when hard copies are not required.

Documents will also be distributed for purposes other than production, (physical construction) or QC inspection activities. Issuance of these documents will be as authorized (see DCP-3 #3.1.3.1) by signature of the attached list of authorizing personnel. Documents distributed in this manner will be stamped "For Office and Engineering Use Only". Xeroxed copies of authorizing signatures will not be accepted.

All "Controlled" drawings assigned to and issued from the Satellites are stamped with control numbers in the 300 series (300,301,302, etc.) in "red ink". Documents logged directly from the Central DCC will be stamped with the control number "333" in "red ink". Any control documents presently in use, not bearing the control stamp in red ink, are not authorized documents and must be returned to DCC for proper disposition.

As with any system change, we expect minor problems and frustration until the concept is understood and accepted. Your help and cooperation is essential to phase this new concept into being. Every effort should be made to keep your drawing requirements and requests to an absolute minimum and allow the Satellites to function as they are designed - reduce the number of drawings at CPSES and tighten the control of drawings.

We have made a commitment to the NRC to implement this program and make it work.

Groups not addressed herein (PSE, Welding Engineering, Production Control, Mechanical Drafting, etc.) will continue to be served from the main DCC.

Present exclusions to this concept are:

1. Procedures
2. S-910 Program
3. TUGCO Operations
4. Mail out distribution
5. Conduit numbering drawings

These will be addresed and folded into the System as time permits.

An internal audit team from DCC will assume the responsibility for auditing the Satellites and other groups to assure file integrity and accurate drawing status.

Authorization forms for "Office and Engineering Use Only" drawings will be distributed through the Satellites and at the main DCC.

Any questions regarding this new concept should be directed to Frank Strand at Ext. #263.

Your cooperation is not only expected, but mandated.

for J.T. Merritt
Asst. Project General Manager

JTM/tm

8-15-83
35-1195

Brown & Root Inc.

INTEROFFICE MEMO

TO: Mr. W.E. Baker August 15, 1983

FROM: Frank Strand, DCC Supervisor

SUBJECT: Document Control Procedural Training

REFERENCE: CAR-54

Please be advised that Satellite Personnel have been trained in Revision 16 of Procedure DCP-3. Further, the orientation classes have now been organized and are in process.

Frank M. Strand

Frank M. Strand
DCC Supervisor

FMS/tm
cc:
F.M. Strand
H.A. Hutchinson

SIS RECORD FOR MONITORING Q.A./Q.C. Pl... AMS

THE HARTFORD STEAM BOILER INSPECTIO.. and INSURANCE COMPANY
HARTFORD, CONNECTICUT 06102

— CASE EXHIBIT NO. 1,045

363A

CUSTOMER IDENTIFICATION

TO (Name and Title): GORDON FURDY SITE Q.A. MGR
DATE: 8/18/83
SHEET: 1
CUSTOMER'S COMPANY NAME: BROWN & ROOT
INSP. BRANCH:
INSP. REGION OR FOREIGN COUNTRY: HN
(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Close
INSPECTION LOCATION: CPSES GLEN ROSE, TX.
☐ Shop ☑ Field Assembly ☐ Repair/ Alteration ☐ Inser...

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: _____ (Date) and find the following sections:

(Give Numbers and Titles)
☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] CR...ntify the specific nonconformance as applicable)
☐ Unsatisfactory:

FOLLOWUP TO 363

ANI'S WILL HONOR ALL REVIEWS AND INSPECTIONS UNTIL INDICATED RESPONSE DATE.

CUSTOMER'S RESOLUTION

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and gi... date for completion of corrective action, so that items may be remonitored by: 8/25/83 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: ☐ Reg. Mgr. / SIS Foreign Representative ☐ Insp. File
DATE SIGNED: 8/18/83
SIGNED (HSB Inspector):

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

SEE RESPONSE TO SIS 363

DATE CORRECTIVE ACTION WILL BE COMPLETED: SEE ATTACHED RESPONSE
DATE SIGNED: 8/25/83
SIGNED (Customer's Representative):

MONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 8/26/83 (Date)

and found them: ☑ Satisfactory ☐ Unsatisfactory (Explain below)

CLOSED - SEE #363

DISTRIBUTION: ☑ Reg. Mgr. / SIS Foreign Representative ☑ Insp. File
DATE SIGNED: 8/26/83
SIGNED (HSB Inspector):

REV. 11/78 (SIS)

SIS RECORD FOR MONITORING Q.A./Q.C. PROGR.

THE HARTFORD STEAM BOILER INSPECTION and INSURANCE COMPANY
HARTFORD, CONNECTICUT

363

CUSTOMER IDENTIFICATION

TO (Name and Title): Mr. Gordon Purdy, Site Q. A. Manager

DATE: August 18, 1983 | SHEET: 1

CUSTOMER COMPANY NAME: Brown & Root, Inc.

INSP. BRANCH: Houston

INSP. REGION OR FOREIGN COUNTRY: Houston

(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Close

INSPECTION LOCATION: CPSES Glen Rose, Texas

☐ Shop ☒ Field Assembly ☐ Repair/ Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 8/18/83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory:

See Attached.

☐ OV

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: _____ (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: ☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File | DATE SIGNED: 8/18/83 | SIGNED (HSB Inspector): [signature]

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

SEE ATTACHED RESPONSE

☐ OV

DATE CORRECTIVE ACTION WILL BE COMPLETED: SEE ATTACHED RESPONSE | DATE SIGNED: 8/25/83 | SIGNED (Customer's Representative): [signature]

I, the undersigned, have remonitored the above unsatisfactory conditions on: 8/26/83 (Date)

and found them: ☒ Satisfactory ☐ Unsatisfactory (Explain below)

SIS RESULTS

Brown & Root response to non compliances identified is acceptable except for a few specific concerns. See 932 #G-062.

DISTRIBUTION: ☐ Reg. Mgr. / SIS Foreign Representative ☐ Insp. File | DATE SIGNED: 8/24/83 | SIGNED (HSB Inspector): [signature]

REV. 11/78 (SIS)

EXECUTION OF N-5 DATA REPORTS

(1) ANIs have rejected the majority of submitted N-5's for inaccuracies, omissions, inaccurate hydro pressure, BRP's unacceptable.

(2) The Subsystem N-5 for SF-1 was submitted for ANI signature with an open C.A.R. in effect against component supports for the Spent Fuel Heat Exchangers.

ACCESS FOR AUTHORIZED NUCLEAR INSPECTORS

ANIs are consistently being denied access in the process of performing their duties (Ref. 939 # 362A). Three occassions involved witnessing of hydro tests. On 8/17/83 I was denied access to inspect hardware associated with an N-5 I was presented. This is unacceptable and is in non compliance with NA-5120.

Six ANIs have subjected themselves to background checks and psychological testing to satisfy requirements for security access. Three other ANIs have initiated paperwork to satisfy these requirements.

MAINTENANCE OF QUALITY DOCUMENTATION AND AVAILABILITY OF SAME TO THE AUTHORIZED NUCLEAR INSPECTORS

(1) There are numerous instances of changes being made to process control records, hanger packages, hydro test packages, and other documents after final acceptance by the ANI without benefit of concurrence of the ANI. This is not acceptable.

(2) On 8/17/83 I observed Arms Indexed hanger packages in Aux. Bldg. Task Force that were retrieved from the Vault without voiding of the cover sheet signed by QES and ANI.

(3) Hartford Steam Boiler agreed that when ANI review of documentation was necessary for those records on file in the PPR Vault the ANI would do that review in the Vault.

(a) On 8/16/83 Inspector Harper requested a hanger package for review to reconcile an attaching hanger. He was denied by vault personnel.

(b) ANI's consistently lack space in the vault area to review records and complete checklists. On 8/17/83 Inspector Hair and myself had to stand and attempt to review records associated with an N-5 submitted for ANI signature.

FOLLOWUP & VERIFICATION OF ACCEPTABLE RESOLUTION OF CORRECTIVE ACTION REQUESTS

(1) A.R.M. Tillman, accompanied by myself, identified during his semi annual ANSI N626 Audit of July 13 and 14 deficiencies in

issue, revision, and follow up of C.A.R.'s S-54, S-55, and S-56. Additionally 939's 361 and 361A requested prompt resolution to C.A.R. S-54. The status of these C.A.R.'s has not changed as of 8/17/83.

(2) C.A.R. S-55 addressed lack of Program Control of component supports identified outside the scope of Mechanical Design Drawings and Specifications (i.e. Civil).
One addressed result was that ASME NF seismic supports for Spent Fuel Heat Exchangers had not been installed. Engineering responded that it could not accept responsibility for lack of identification of required installation work. Additionally Engineering stated that MS 46A (Pipe Supports) was not applicable to this scope of work and stated the "Design Drawing" was in the form of sketches to a DCA.

(a) If MS 46A is not applicable, what is the appropriate design specification?

(b) Installation to sketches outside the scope of Brown & Root's Q.A. Program is not permitted.

(c) Subsequent installation of these supports did not have ANI involvement. They are not acceptable for Code Certification.

RESPONSE TO IDENTIFIED PROGRAMMATIC (ASME) NON COMPLIANCE BY AUTHORIZED NUCLEAR INSPECTORS

Brown & Root has consistently failed to initiate corrective action and respond in a timely manner to ANI monitoring reports and SIS Reports (939, 932) that identify noncompliance. This was identified by A.R.M. Tillman during the ANSI N626 Audits. Since that time, ANI's have initiated four (4) followup 939's due to lack of response.

CONTROL AND CLOSURE OF NON CONFORMING REPORTS

There have been several instances of closure of NCR's by Quality Control that were not supported by adequate verification of completion of process control documents. Additionally on 8/11/83 NCR M7599 Rev.0 was presented to ANI for closure concurrence and was signed by the ANI. A revision Level 1 exists on this NCR and is still open. This is the fourth instance of improper closure of outdated NCR's in recent weeks. The above has resulted in ANI review of "Hard Copy Documentation" prior to concurring with closure.

RECONCILIATION OF NON CONFORMANCES BY QES GROUP

ANI's have been presented numerous hanger packages for FINAL REVIEW that still had open NCR's against them. These include supports that were generically identified on NCR's without reference to mark numbers. When rejected by ANI's these were subsequently revised. Included were supports that involved baseplates welded to the containment liner with no ANI involvement, supports (snubbers) that attached to non conforming Fisher Control Valve brackets. Additionally, N-5 Data Reports have been signed when impacted by generic NCR's. Even though these items identified on generic NCR's may have been reconciled it is not acceptable to execute

Data Reports in this manner. Prior to ANI acceptance of N-5 Data Reports ALL generic NCR's must be closed.

PRESENTATION OF HANGER PACKAGES TO ANI'S FOR FINAL REVIEW

(1) There have been several instances of ANI final review and acceptance of hanger packages that were INCOMPLETE. Subsequent to acceptance, Repair Process Sheets and other records have surfaced. In one instance the N-5 Data Report had been signed.

(2) ANI's have rejected hundreds of packages with discrepancies ranging from minor to major. These include no material identification, material unacceptable (impacts on FW hanger), NPSI hardware in ITT hanger and vice versa, QCI walked hanger to wrong revision of VCD.

DRAWING CONTROL AND DESIGN CONTROL

(1) Site ANI's have repeatedly identified on 939 monitoring reports non compliance with drawing control. VCD/DRD revisions are still being observed in Task Force areas without proper stamping. (Ref. 939 # 361 and 361A).

(2) VCD/DRD drawings have numerous inconsistencies.
   (a) Not all drawings identify existing material (e.g. embed plates).
   (b) Many drawings identify shims as primary support members. Shims are not within the scope of NF per MS 46A.
   (c) Some drawings do not reflect other supports (including Class 5) attached to the structure of the support.
   (d) Some Class 1 drawings identify primary members (impacts material traceability requirements) while others do not.
   (e) Some drawings on Large Bore Main Steam and Main Feed identify impact requirements while other do not.
   (f) Large Bore VCD's reference BRH1's for location but we are told that BRHL's are not available in controlled revised status.
   (g) Small Bore DRD's are controlled by GHH drawings but the GHH does not reflect the revision status of typical supports.
   (h) Small Bore drawings with Large Bore numbers are not supported by either GHH or BRHL.
   (i) Supports identified for revision due to Code non conformance have not been revised and are still being walked down and submitted for final review. Specifically:
      (1) Supports whose baseplates were welded to the containment liner without ANI involvement were to be revised to change NF boundary.
      (2) Supports connected to Fisher Control valves were to be declassified to non ASME status.
      (3) Diesel Exhaust Supports were to be declassified to non ASME status.

STATUS OF SUPPORTS INSPECTED AND VE[illegible]IED ON MULTIPLE WELD DATA CARDS

ANI confidence in inspections performed to Engineering hanger sketches as revised by CMC is zero. This is a result of hundreds of non conformance reports and inspection reports by QCI's identifying on final walkdowns to "As Built" VCD/DRD drawings that the support installed does not match the drawing. This ranges from minor deviations to instances where configuration is totally different.

The causes inherent in the discrepancies are a combination of inadequate inspections and deficient design documents. The ANI's can no longer accept "inprocess inspections" to unintelligible CMC's, many of which have undergone as many as fifteen revisions. Additionally, a CMC that totally changes configuration of a support cannot be considered acceptable.

CONTROL OF TESTS

ANI's have recently been forced to decline to sign pretest concurrence due to various problems. These include no provision for adequate venting or viable alternative flushing and attempt to conduct a test with a known hardware discrepancy in the pressure test boundary.

NA-3460 CERTIFICATION OF COMPLIANCE

In accordance with above paragraph the Site Authorized Nuclear Inspectors can no longer sign Data Reports, preliminary review process control documentation, review and accept final records, nor perform inprocess inspections until Brown & Root has implemented Corrective Action to resolve the non compliances identified in this report. To do so would constitute acceptance of activities that do not comply with the ASME Code.

Brown & Root, Inc.

INTEROFFICE MEMO

TO: M. Coats, LANI

DATE: August 24, 1983

FROM: G.R. Purdy, SQAM

SUBJECT: CPSES, 35-1195
Response To SIS #363.

A. Execution of N-5 Data Reports

(1) "ANIs have rejected the majority of submitted N-5's for inaccuracies, omissions, inaccurate hydro pressure, BRP's unacceptable".

Response: As of 8/19/83, 73 N-5 Code Data Reports have been processed by B&R and the ANI. Of the 73 however, only 6 N-5's have been issued to signify the completion of construction (including application of the NA-Symbol Code Stamp); the remaining 67 have been processed to certify completion of of individual isometrics, regardless of the relationship to Owner defined system/subsystems.

The total certification scope of Unit 1, Common, and Unit 2 within the Unit 1 Security Boundry potentially exceeds 1800 isometric certifications, 150 subsystem certifications, and 27 system certifications. As such, B&R and the ANIs have processed less than 4% of the Unit 1 certifications.

Our experience to date has precipitated the following action:

(a) QA Supervision has reemphasized the necessity of completeness and accuracy to personnel involved in the preparation of Code Data Reports (Attachment 1); and

(b) A program to review and correct isometrics (BRP's), prior to presentation to the ANI for certification, has been implemented from the beginning of the N-5 certification program (3/83). This effort has resulted in submitting to the ANI, drawings which B&R considered adequate definition. The Code requirements imply however, that a system of checks and balances be established between the Certificate Holder and the ANIA to resolve potential oversights.

To reinforce the systematic completion of an ASME component, and to assure the proper drawing definition of ASME components when not completely addressed by the Component Design Specification, Senior QA Supervision has been assigned direct area responsibilities as shown on Attachment 2. This program is scheduled to be fully implemented by 8/30/83.

(2) "The Subsystem N-5 for SF-1 was submitted for ANI signature with an open C.A.R. in effect against component supports for the Spent Fuel Heat Exchangers".

Response: The root cause of this concern was communications and the thoroughness of QA review prior to submitting the package to the ANI for certification. The action described in item A(1) should preclude recurrence and addresses the latter.

Further discussions have indicated our interpretation of the Engineering response to C.A.R. S-55 was incomplete. As a result, the following are currently in process:

a) The Engineering organization has reviewed C.A.R. S-55, and has provided QA with a tabulation of design and process control documents for the identified components;

b) QA will review the documents for compliance and acceptability to the B&R QA Program by 9/2/83. Any process or document not in compliance with the program will be individually identified on an NCR prior to closure of C.A.R. S-55; and

c) CP-QAP-12.3 will be revised by 9/2/83, to require the QE group to verify that any applicable hardware related C.A.R.'s are closed, prior to processing an N-5 certification.

B. Access for Authorized Nuclear Inspectors

"ANIs are consistently being denied access in the process of performing their duties (Ref. 939 #362A). Three occasions involved witnessing of hydro test. On 8/17/83 I was denied access to inspect hardware associated with an N-5 I was presenced. This is unacceptable and is in noncompliance with NA-5120. Six ANIs have subjected themselves to background checks and psychological testing to satisfy requirements for security access. Three other ANIs have initiated paperwork to satisfy these requirements".

Response: The subject of ANI access has been discussed within our organizations on several occasions. In fact, A.R.M. Tillman has participated in at least 2 of the discussions and R.M. Thompson was present in one of these. We and A.R.M. Tillman have agreed there is a distinct difference between "free access" (NA5120) and "controlled access" (USNRC Security). As also agreed, any ANI access problems should be immediately brought to the attention of myself or my designee in order to arrange access as required by NA-5120 and Section 20.0 of the B&R QA Manual. I was not aware of the above access problems until they were brought to my attention via SIS 939 - #362/362A.

To resolve the concern of access however, the following action has been taken:

a) For those areas of the project under "RWN-Startup Access Control", the previously submitted response to SIS 939 - #362A (Attachment 3) should resolve any ANI access problems.

I would reemphasize however, that any access problems encountered by the ANI staff, should be brought to the attention of any personnel shown on Attachment 2. ANI utilization of this communication link permits us to resolve problems and preclude an accumulation of "frustration factors".

b) For the "Fuel Handling Building", in which total security has been implemented due to the storage of fuel, the Manager, Plant Operations, has provided B&R QA with a limited number of access badges (Attachment 4). These badges are to be used by ANI/QA personnel in the verification, certification, and NA-Symbol stamping of the remaining Fuel Handling Building Subsystems (3). These badges do not permit access to fuel storage areas. Due to the sensitivity of fuel storage area sucurity, and the limited scope or remaining QA/ANI activity, it is best to limit access. Accordingly, we intend to issue access badges to yourself, Mr. J. Hair, or members of the QA staff directly responsible for building completion.

C. Maintenance Of Quality Documentation And Availability Of Same To The Authorized Nuclear Inspectors

(1) "There are numerous instances of changes being made to process control records, hanger packages, hydro test packages, and other documents after final acceptance by the ANI without benefit of concurrence of the ANI. This is not acceptable".

Response: B&R QA recognizes that it is unacceptable to change Code related ANI accepted documentation without concurrence of the ANI. It is a Permanent Plant Record Vault (PPRV) procedure, that changes to Code documentation must be made by B&R QA with ANI concurrence. If B&R QA identifies Code related documents that have been changed after ANI acceptance, without ANI concurrence, they will be identified on an NCR and accordingly included in the corrective action program.

It is also B&R QA's position however, that it is not necessary to involve B&R QA nor the ANI in corrections to QA documents which are not code related. Additionally, B&R QA does not consider it is necessary to involve the ANI in the addition or deletion of documents from the Owners PPRV, which will not or have not been used to document final Code compliance of a component.

(2) "On 8/17/83 I observed Arms Indexed hanger packages in Aux. Bldg. Task Force that were retrieved from the Vault without voiding of the cover sheet signed by QES and ANI".

Response: When all hanger packages were returned to B&R QA custody in early 1983 to implement the VCD/DRD Program, many of the packages had been Arms Indexed. Additionally, with the "Full Package Concept" discussed in item H, packages may be removed from the PPRV to accomplish non-Code related activities.

To insure proper routing of hanger packages, when review is required, QA in the Task Groups will void the cover sheet previously signed by QES and ANI prior to resubmitting the package for ANI review.

(3) "Hartford Steam Boiler agreed that when ANI review of documentation was necessary for those records on file in the PPR Vault the ANI would do that review in the Vault.

a) On 8/17/83 Inspector Harper requested a hanger package for review to reconcile an attaching hanger. He was denied by vault personnel.

b) ANI's consistently lack space in the vault area to review records and complete checklists. On 8/17/83 Inspector Hair and myself had to stand and attempt to review records associated with an N-5 submitted for ANI signature".

Response: As discussed in the response to item H, B&R QA will issue an isometric N-5 schedule by 9/6/33. Additionally, B&R will implement the coordinated N-5 effort (i.e., support, pipe, and equipment) by 8/30/83.

It is one of the objectives of this program, to establish an isometric status baseline acceptable to B&R and the ANI. By agreement with the PPRV, this review will be done on an isometric basis, with all necessary documents being made available in the CDR review area. It is requested that ANI Checklists be prepared at this time, in sufficient detail, to preclude multiple document retrieval cycles from the PPRV.

D. Follow-up & Verification Of Acceptable Resolution Of Corrective Action Requests

(1) "A.R.M. Tillman, accompanied by myself, identified during his semi-annual ANSI N626 Audit of July 13 and 14 deficiencies in issue, revision, and follow-up of C.A.R.'s S-54, S-55 and S-56. Additionally 939's 361 and 361A requested prompt resolution to C.A.R. S-54. The status of these C.A.R.'s has not changed as of 8/17/83".

Response: As discussed during the referenced ANSI N626 Audit, the ANI concerns relative to issue, revision, and follow-up of C.A.R.'s were to be addressed by changes to the B&R QA Manual and CPSES QA Procedures. Concurrence with our proposed resolution to the above concerns was obtained when A.R.M. Tillman approved the QA Manual changes on August 3, 1983. Additionally, the implementing Revision 5 to CP-QAP-17.1, Corrective Action Requests, was issued August 3, 1983.

With respect to the specifically identified C.A.R.'s:

a) S-54: The original response was rejected by QA following discussions between B&R QA and the ANIA (Attachment 5). Due to the magnitude of the proposed modifications to the Document Control program, the "action addressee" requested a response extension (Attachment 6) and, the response to the C.A.R. was approved 8/19/83 (Attachment 7);

b) S-55: This C.A.R. has been previously addressed in my response to item A(2); and

c) S-56: As previously discussed during the referenced ANSI N626 Audit, this C.A.R. was "Voided" and never issued.

To provide a more timely response to ANI concerns (SIS 932 or SIS 939 Reports), a new "Tickle System" has been implemented by the QE Group Supervisor, which will require response action 3 days prior to the requested response date.

(2) "C.A.R. S-55 addressed lack of Program Control of component supports identified outside the scope of Mechanical Design Drawings and Specifications (i.e., Civil). One addressed result was that ASME NF seismic supports for Spent Fuel Heat Exchangers had not been installed. Engineering responded that it could not accept responsibility for lack of identification of required installation work. Additionally Engineering stated that MS 46A (Pipe Supports) was not applicable to this scope of work and stated the "Design Drawing" was in the form of sketches to a DCA.

(a) If MS 46A is not applicable, what is the appropriate design specification?

(b) Installation to sketches outside the scope of Brown & Root's QA Program is not permitte

(c) Subsequent installation of these supports did not have ANI involvement. They are not acceptable for Code Certification".

Response: This C.A.R. has been previously addressed in my response to item A(2).

E. Response To Identified Programmatic (ASME) Noncompliance By Authorized Nuclear Inspectors

"Brown & Root, has consistently failed to initiate corrective action and respond in a timely manner to ANI monitoring reports and SIS Reports (939, 932) that identify noncompliance. This was identified by A.R.M. Tillman during the ANSI N626 Audits. Since that time, ANI's have initiated four (4) follow-up 939's due to lack of response".

Response: A review of ANI initiated SIS Reports (932's/939's) clearly shows that B&R has <u>not</u> failed to initiate corrective action when required. As indicated in the 7/13-14 ANSI N626 Audit Report (Attachment 8) however, B&R has not always been timely in responding to the reports to indicate what corrective action was being taken.

The concerns expressed by A.R.M. Tillman during the 7/13-14 ANSI N626 Audit were addressed as indicated in our response, Attachment 9, prior to receiving his Audit Report on or about the 12th of August 1983. Currently, there are 6 SIS 939's which have not been closed:

a) 385A - B&R response requested by 8/24

b) 359A - Transmitted by B&R for ANI closure 8/17

c) 360A - B&R response requested by 9/10

d) 361A - Transmitted by B&R for ANI closure 8/17

e) 362A - Transmitted by B&R for ANI closure 8/18

f) 363A - B&R response requested by 8/25 (this SIS)

Our records also indicate there are six (6) 932 SIS Reports that require response. In order to provide a more timely response to inquires written on 932 forms, it would aid B&R QA if specific concerns were identified rather than generic observations.

To assure a more timely response however, the "Tickle System" addressed in my response to item D(1) will provide more effective tracking of SIS Report closure, or will permit a more expeditious request for extensions to ANI requested response dates.

F. Control And Closure Of Nonconforming Reports

"There have been several instances of closure of NCR's by Quality Control that were not supported by adequate verification of completion of process control documents. Additionally on 8/11/83 NCR M7599, Rev. 0 was presented to ANI for closure concurrence and was signed by the ANI. A revision Level 1 exists on this NCR and is still open. This is the fourth instance of improper closure of outdated NCR's in recent weeks. The above has resulted in ANI review of "Hard Copy Documentation" prior to concurring with closure".

Response: In a conversation during early July 1983, we agreed that an exceptionally large numbers of NCR's were being generated against deficiencies that could be corrected as inprocess repairs in accordance with the 6/20/83 revision to the B&R QA Manual. The major ramifications of controlling inprocess deficiencies as NCR's were massive logistics and tracking problems.

To preclude these problems, B&R submitted a proposed change to the B&R QA Manual to clarify inprocess repairs. The proposed change was approved by the ANIA and issued on 8/3/83, along with the necessary revision to the implementing procedure, CP-QAP-11.1. Additionally, the following action is inprogress:

a) The QE Group is auditing NCR status to: identify, resolve, properly status, or submit for closure all open NCR's with an estimated completion date of 9/16/83;

b) NCR statusing will be directly provided by area groups commencing 9/16/83; and

c) The implementation of the "Full Package Concept" on 8/1/83, further discussed in my response to item H(1), should preclude recurrence of the above concern.

G. Reconciliation Of Nonconformances By QE's Group

"ANI's have been presented numerous hanger packages for FINAL REVIEW that still had open NCR's against them. These include supports that were generically identified on NCR's without reference to mark numbers. When rejected by ANI's these were subsequently revised. Included were supports that involved baseplates welded to the containment liner with no ANI involvement, supports (snubbers) that attached to nonconforming Fisher Control Valve brackets. Additionally, N-5 Data Reports have been signed when impacted by generic NCR's. Even though these items identified on generic NCR's may have been reconciled it is not acceptable to execute Data Reports in this manner. Prior to ANI acceptance of N-5 Data Reports all generic NCR's must be closed".

Response: With the exception of generic NCR's, all other items are repeated and addressed in response to items H and I.

Eight generic or multiple item ASME NCR's are still open at CPSES. The status and action on these NCR's is as follows:

NCR #	Component	Status/Action
2690	Hanger Packages not reviewed by ANI	QE evaluating, but currently required to stay open until end of job by ANI.
2807	Unit #1 PDRF's	QE to verify action complete and submit for closure by 9/2/83.
3058	Unit #2 PDRF's	QE to revise CP-QAP-16.1 as required, and breakdown to isometic boundries by 9/30/83.
3597	Redundant PDRF identification	QE to clear and submit for closure by 9/2/83.
3134	Mechanical OT's without ANI review	QE to complete research and disposition action, and submit for closure by 8/26/83.
5647 thru 5649	AF/CC repairs	Nonconforming welds identified on these NCR's will be reidentified on specific NCR's by 9/2/83.

H. Presentation Of Hanger Packages To ANI's For Final Review

(1) "There have been several instances of ANI final review and acceptance of hanger packages that were INCOMPLETE. Subsequent to acceptance, Repair Process Sheets and other records have surfaced. In one instance the N-5 Data Report had been signed".

Response: As you are aware, the program for the design, fabrication and installation of Safety Class 1, 2, and 3 pipe supports has evolved into one of the most detailed and scrutenized programs of any nuclear site. The changes in support criteria invoked through ASME Section III Subsection NF, and the expanded Regulatory Requirements invoked by IE Bulletin 79-14, has resulted in an extensive quantity of design change paper, process control documents and quality documents.

In the latter part of 1982, the Project recognized that the finalization of pipe support design, fabrication and installation had to be oriented to the VCD/DRD program. During the first half of 1983 this program was implemented for each support as the initial VCD/DRD was issued by Engineering. However, due to the expanded requirements resulting from the topics discussed above many additional deficiencies were identified resulting in numerous process control documents.

As a result of ANI, B&R, and scheduled completions concerns, Project General Management has elected to implement an alternative management technique. On 7/20/83, charter was given (Attachment 10) to establish a concentrated effort to complete pipe support installation and inspection by an integrated approach using the same procedures. The involvement of B&R QA, outlining interface functions and objectives, was issued 7/28/83 (Attachment 11) to personnel directly involved in the effort.

During program developement, we have attempted to keep the ANI abreast of actions and administrative decisions. As late as the week of August 15, 1983, the "Full Package Concept" was discussed with the ANI, with the concurrent understanding the process would be instrumental in eliminating some concerns.

Although historical packages are not totally commensurate with the current guidelines for format, these packages do in fact reflect "as-constructed" conditions and considering the referenced attachments - address ANI concern relative to package completeness.

Prior to this ANI SIS report, Engineering Management and B&R QA have pursued resolutions to concerns of revising items already in the process of certification. Attachment 12 outlines the program intended to preclude these issues. In addition, documented notice will be provided to the ANI of all packages withdrawn from the PPRV. Such notice will enable the ANI to be advised of "voiding" instances and monitor the "Full Package Concept" program.

(2) ANI's have rejected hundreds of packages with discrepancies ranging from minor to major. These include no material identification, material unacceptable (impacts on FW hanger) NPSI hardware in ITT hanger and vice versa, QCI walked hanger to wrong revision of VCD.

Response: With the implementation of the Hanger Task Groups, package review by QES is taking place directly in the area. This review is conducted in accordance with procedure CP-QAP-18.2, and documented on a checklist, Attachment 13, developed and issued by QE. To establish a consistent package format, and resolve previously identified ANI problems, IM# 25,879 (Attachment 14) was issued 7/18/83, with your concurrence.

We have conducted a statistical study of the last 660 packages submitted by QES, from the Task Groups, for ANI acceptance. Of the 660 packages, 59 have been returned from the ANI (8.6%) for the following reasons:

8	Questions not problems
8	Missing load sheets & CPP's
2	588 material
1	Need CMTR's for Class I and impact items
3	Open QC Hold Points
4	Missing documentation
1	Material verified on MIL - not matching VCD - drafting
5	WDC in wrong side of package
2	VCD - Drafting errors
1	Material not verified
1	Need new VCD - Dwg unclear
1	Incorrect Weld # for weld attachment
7	VT procedure # and Rev. not on RPS
1	Incorrect Attachment 1
10	Shims verified but no WFML
4	Existing steel Dwgs

Although B&R's goal is to provide a 99% acceptance rate, it is felt that the problem is primarily documentation and not hardware related. To further minimize packages rejected due to documentation however, Document Reviewers will be retrained in the checklist requirements by 8/29/83.

I. Drawing Control And Design Control

(1) "Site ANI's have repeatedly identified on 939 monitoring reports noncompliance with drawing control. VCD/DRD revisions are still being observed in Task Force areas without proper stamping. (Ref. 939 #361 and 361A)".

Response: The corrective action taken in response to C.A.R. S-54, was intended to resolve this problem and preclude further recurrence. It must be pointed out however, that when the C.A.R. S-54 corrective action was implemented, literally thousands of drawings were involved. It is not surprising that isolated instances occur in which hanger packages are found which contain drawings issued under the previous

program, which had been in use and acceptable for years. In fact, we have been anticipating more drawings from the previous program since the changes in the Document Control program were implemented in parallel to the new Task Groups implementation, causing massive changes in logistics.

Drawings issued under previous Document Control programs will be purged prior to submitting final hanger packages for ANI acceptance, as this item is specifically identified in step 3.C of Attachment 14. Attachment 15 has been distributed to the appropriate Task Group personnel, to preview hanger packages prior to distribution by the Package Flow Control Group.

(2) "VCD/DRD Drawings Have Numerous Inconsistencies".

(a) "Not all drawings identify existing material (e.g., embed plates)".

Response: A DCA has been issued to Specification, MS-100, to reflect that all embed material is A-36 unless noted otherwise on the drawing, by DCA 18475.

Engineering will review all drawings where embed material is not A-36 to insure the drawing reflects material type and grade; applicable drawings which do not reflect this will be revised prior to submission to the ANI.

(b) "Many drawings identify shims as primary support members. Shims are not within the scope of NF per MS 46A".

Response: As the Component Design Specification is the controlling document established by Code, B&R does not consider it necessary to backfit all previously issued drawings which identify shims.

As drawings are revised, or new designs issued, Engineering will remove shims which are identified as primary support members, unless they are primary support members.

(c) "Some drawings do not reflect other supports (including Class 5) attached to the structure of the support".

Response: By Engineering Procedure, anything attached to a safety class pipe support frame must be authorized by design change to permit reanalysis of loads.

Supports which have items attached to their frame, that are not identified on the VCD/DRD have been and will continue to be identified as deficiencies by QA in accordance with procedure CP-QAP-11.1.

(d) "Some Class 1 drawings identify primary members (impacts material traceability requirements) while others do not".

Response: As previously discussed, early NPSI designs differentiate between primary and secondary members. The remaining CPSES designs do not take credit for the increased allowables of secondary members.

Accordingly, although beyond Code requirements, material certifications for designs other than NPSI will continue to be submitted as primary members.

(e) "Some drawings on Large Bore Main Steam and Main Feed identify impact requirements while other do not".

Response: Engineering is reviewing all affected drawings to identify designs which require revision to indicate impact test requirements. Additionally, the review will identify which supports contain material accepted by "Appendix G" calculations in lieu of impact tests. Affected drawings have been reviewed, and will be revised if required prior to submission to the ANI.

(f) Large Bore VCD's reference BRHL's for location but we are told that BRHL's are not available in controlled revised status.

Response: Much like a "Piping Composite Drawing, which is referenced on a BRP (isometric), the BRHL is referenced on the BRH drawing at the time of final VCD. The piping composite and BRHL drawings are for Engineering use only. The BRHL is used to reflect support location which is not required during fabrication and installation since support location is shown on the BRH until the VCD revision is issued.

(g) "Small Bore DRD's are controlled by GHH drawings but the GHH does not reflect the revision status of typical supports".

Response: Small Bore typical drawings are issued by Engineering for incorporation into Hanger Packages by Welding Engineering. Engineering practice has been:

(1) Not to revise a typical in a way which would physically impact previous revisions to the typical;

(2) To issue as a "Special" any single typical which requires a configuration change or different installation criteria;

(3) To issue as a new typical, any revision to a previous typical which generically requires changes to support configuration or installation criteria; and

(4) To notify the constructor of any Small Bore Support that has been made unacceptable by revision to a typical.

Based on the above, the appropriate typical revision for a Small Bore Support package is the "Controlled Copy" of the typical placed in the Hanger Package by Welding Engineering, as currently issued by Engineering.

Although generally practiced, Engineering has incorporated the above practices into MS-46A by DCA 18,453 Revision 1.

Additionally, QA Procedure CP-QAP-12.1 requires the revision level of both the typical and location GHH drawings to be recorded on the VCD/DRD Inspection Checklist. QES will continue to verify the recording of this data, during document review, in accordance with item 1.A. of Attachment 14.

(h) "Small Bore drawings with Large Bore numbers are not supported by either GHH or BRHL".

Response: GHH and BRHL drawings are hanger location drawings only. Small Bore drawings with Large Bore numbers are Class 1 supports. The support location is shown directly on the drawing.

(i) "Supports identified for revision due to Code nonconformance have not been revised and are still being walked down and submitted for final review. Specifically:

(1) Supports whose baseplates were welded to the containment liner without ANI involvement were to be revised to change NF boundary.

(2) Supports connected to Fisher Control valves were to be declassified to non-ASME status.

(3) Diesel Exhaust Supports were to be declassified to non-ASME status".

Response: Items (i)(1) and (i)(2) were reported on NCR's prior to this SIS. Engineering is completing the required drawing revisions, which will be accomplished prior to certification processing.

Item (i)(3) had been addressed prior to this SIS by Engineering, Attachment 16.

Component Design Specification MS-46A has been revised by DCA 18511, to reflect that the Diesel Exhaust supports are ANS Class III, and are not subject to the Code certification process.

J. Status Of Supports Inspected And Verified On Multiple Weld Data Cards

"ANI confidence in inspections performed to Engineering hanger sketches as revised by CMC is zero. This is a result of hundreds of nonconformance reports and inspection reports by QCI's identifying on final walkdowns to "As Built" VCD/DRD drawings that the support installed does not match the drawing. This ranges from minor deviations to instances where configuration is totally different.

The causes inherent in the discrepancies are a combination of inadequate inspections and deficient design documents. The ANI's can no longer accept "inprocess inspections" to unintelligible CMC's, many of which have undergone as many as fifteen revisions. Additionally, a CMC that totally changes configuration of a support cannot be considered acceptable".

Response: The historical aspects of the CPSES pipe support program are a reality, and must be dealt with by the best means available to assure Code and Regulatory compliance. Recognizing that the historical trail would often be confusing and cumbersome, the VCD/DRD program was implemented to:

(1) Identify the "as-constructed" condition;

(2) Insure the "as-constructed" condition was properly defined through the Component Design Specification and detailed drawings;

(3) Assure the reconciliation of the "as-constructed" condition with design stress and as-built loads; and

(4) Correlate a documentation package which properly supports the design, fabrication, and installation of the "as-constructed" support.

Unfortunately, many of the supports dealt with today are 1979 and 1980 vintage design, fabrication and installation. On those packages which are abnormally cumbersome, QES Document Review has been directed to implement a detailed index of documentation references to aid in ANI review of the package.

K. Control Of Tests

"ANI's have recently been forced to decline to sign pretest concurrence due to various problems. These include no provision for adequate venting or viable alternative flushing and attempt to conduct a test with a known hardware discrepancy in the pressure test boundary".

Response: QA Procedure CP-QAP-12.2 will be revised by 9/2/83 to more specifically address QA and Construction responsibilities, in accomplishing prerequisites to hydrostatic testing, prior to submitting pretest packages for ANI concurrence or requesting ANI support to witness hydrostatic tests. It should be noted however, that the referenced hardware discrepancy (arc strike) although within a portion of the system to see test pressure

during the retest, was not part of the boundary for which the test was being conducted. Although not the most efficient practice, the worst case condition could only precipitate in subjecting the same portion of the system, with a different area of interest, to an additional retest cycle.

L. NA-3460 Certification Of Compliance

"In accordance with above paragraph the Site Authorized Nuclear Inspectors can no longer sign Data Reports, preliminary review process control documentation, review and accept final records, nor perform inprocess inspections until Brown & Root has implemented Corrective Action to resolve the Noncompliances identified in this report. To do so would constitute acceptance of activities that do not comply with the ASME Code".

Response: Clearly recognizing the ANI responsibility and authority to monitor and verify the NA Certificate holders compliance to the Code, and the approved QA Program, neither B&R QA nor Project Management totally concur with the text or implications of SIS 363.

Accordingly, B&R, Inc., as the NA Certificate holder, intends to take the following action:

1. B&R will continue to perform Safety Class 1, 2, and 3 activities which by the Code and contracturally the ANI is expected to continue monitoring as required. Should noncompliances with the Code an/or QA Program be identified, we expect the ANI to specifically report these unsatisfactory conditions as required by the Code, the approved QA Program and ANI contract;

2. Upon reaching an ANI hold point on process control documents, the ANI is expected to accept or reject the activity based upon compliance with the Code and approved QA Program. Should the activity be rejected, the ANI is expected to specifically identify the noncompliance; and

3. B&R will continue to transmit to the ANI, documentation packages for final and inprocess review; the ANI is expected to accept or specifically reject these packages.

G.R. Purdy
B&R Site QA Manager

GRP/bm

cc: J.T. Merritt
D.C. Frankum
F. Burgess
J. Finneran
J. Ryan
J. Dittmar
B. Baker
J. Johnson
R.G. Tolson
B.J. Murray
R. Taylor
G. Bunt
J.T. Blixt
R. Siever
SQAM File

Houston - R.J. Vurpillat, B&R
W.D. Tillman, Hartford

Attachment 3

Brown & Root Inc.

INTEROFFICE MEMO

IM# 26,055

TO: N.C. Smith

DATE: August 18, 1983

FROM: G.R. Purdy

SUBJECT: CPSES, 35-1195
QA/ANI Access To Areas In Which
Code Related Work Is Being Conducted.

This memo is issued to confirm our previous discussions on the above subject.

In accordance with Section 20.0 of the B&R QA Manual, and Subsection NA paragraph NA-5120 of the ASME B&PV Code, the ANI/ANIS must have free access to all areas of the site during the period of assembly and testing. By Code terminology, this means that the ANI/ANIS must be permitted free access to areas until construction (i.e., N-5 Certification and Stamping) is complete.

By our mutual agreement, it is not the intent or requirement of the "RWN" access control program to restrict the freedom of access for QA/ANI/ANIS inspection personnel to perform inspection or cerification activities. However, due to incorrect interpretation of the program, several access problems have recently been encountered as outlined on the attached ANI SIS Report. To preclude recurrence of this problem, it is requested that copies of this memo be distributed to personnel responsible for implementation of the "RWN" access control program.

G.R. Purdy
Site QA Manager

GRP/bm

cc: B.J. Murray
D. Deviney
R.G. Tolson
M. Coats

Attachment 5

Brown & Root, Inc.

INTEROFFICE MEMO

IM#25,747

DATE: June 15, 1983

TO: Frank Strand/Bill Baker

FROM: G.R. Purdy

SUBJECT: CPSES, 35-1195
Unsatisfactory Response
To CAR S-54.

As required by the Brown & Root, Inc. Quality Assurance Manual, Section 17.3 and TUGCO QA Audit Response Evaluation (dated 6/9/83), CPSES Construction Document Control, QA Audit File: TCP-68 (OTN-714) Concern No.2, "This office recognizes the fact that in accordance with established procedures activities affecting quality cannot be accomplished without controlled documents stamped with the validating designation. However, had existing procedures been adequately implemented and followed, the document in question could not have existed. TUGCO QA recommends that an additional refresher course be administered to those personnel whose job activities include the distribution or duplication of controlled documents".

Also, as required by Section 17.3 of the QAM, the corrective actions implemented to date are unsatisfactory and must be supplemented as recommended by TUGCO QA to include all personnel who distribute or duplicate controlled documents with a copy of the sign-in sheets for closure of CAR S-54, TUGCO QA Audit File: TCP-68 Open Concern No. 2, and Hartford SIS 939 No. 350.

Should you have any questions or comments concerning this CAR, please contact Rusty Morris at extension 207 or 743.

G.R. Purdy
Site QA Manager

GRP/bm

cc: D.N. Chapman, TUGCo QA
T.U. Morris, Jr., B&R QE

Attachment 6

Brown & Root, Inc.

INTEROFFICE MEMO

IM - 25974

August 4, 1983

TO: Gordon Purdy

FROM: W.E. Baker

SUBJECT: CAR-54 Response

Extensive changes in the document program are currently being made including the revision of the document control procedure DCP-3 which has been issued for comment and approval.

I am requesting a 10 day extension on the response to CAR-54 pending the approval of the referenced procedure.

W E Baker

W.E. Baker
Sr. Project Welding Engineer

WEB/tn

Attachment 7

Brown & Root, Inc.

QUALITY ASSURANCE DEPARTMENT
CORRECTIVE ACTION REQUEST

PROJECT: CPSES JOB NO 35-1195 UNIT: 1 & 2 PAGE 1 OF 1

REQUEST NO S-54 Rev. 2 GROUP ORGANIZATION B&R QA REPLY DUE DATE 6-14-83

REFERENCE DOCUMENT: CP-DCP-3 Rev. 15

CONDITION DESCRIPTION: Paragraph 3.1.2 Controlled Copy Stamp

Reproduced "Controlled" copies will be identified with the "Controlled Copy Stamp" and the control number entered in the shaded area of the stamp. Contrary to this requirement, the following VCD's (current revision levels) issued to control number 098 do not carry any stamping nor do they have a control number:

(1) DO-1-DG-030-001-3
(2) DO-1-DG-030-005-3
(3) DO-1-DG-030-007-3
(4) DO-1-DG-030-009-3
(5) DO-1-DG-030-006-3
(6) DO-1-DG-030-010-3
(7) DO-1-DG-030-011-3

Rev. 1: To identify additional Action Addressee.
Rev. 2: To incorporate DCC's and Engineering's revised responses with proposed corrective action.

REPLY REQUESTED FROM Frank Strand / B. Baker (ACTION ADDRESSEE) INITIATED BY [signature] (PROJECT QA MANAGER) 6/21/83 (DATE)

CAUSE AND CORRECTIVE ACTION:

The investigation of this subject revealed that the uncontrolled drawings were issued to the hanger packages by Engineering and not by the DCC. However, reoccurrence of this type of control problem has been eliminated with the establishment of satellite DCC's. Personnel operating the satellite DCC have been trained in Revision 16 of Procedure DCP-3.

P.S. Engineering has notified and retrained its personnel (per CPP-12,322) that whenever any copy of a drawing off the originals that exist in the PSE files, that copy is stamped by Cindy Moore's group.

PREPARED BY [signature] (NAME) AUTHORIZED BY [signature] (NAME) 9/19/83 (DATE)

CORRECTIVE ACTION VERIFIED BY _____ (DATE)

QA REVIEW CLOSURE BY _____ (DATE)

DISTRIBUTION

Attachment 8

Houston Office
The Hartford
Steam Boiler Inspection
and Insurance Co.

11104 West Airp... d., Suite 200
Stafford, Texas 7...
(713) 530-9883

August 8, 1983

Mr. Gordon Purdy
Site Quality Assurance Manager
Brown & Root, Inc.
P. O. Box 1001
Glen Rose, Texas 76043

Dear Mr. Purdy:

This will confirm that an Audit was performed on your activities at the Comanche Peak Steam Electric Station on July 13 and 14, 1983. This Audit was performed to meet the requirements of ANSI-N626.0 and the ASME Code.

During the Audit, a review of various phases of your Quality Assurance program was made. Overall, I feel you are implementing your program as required. The following items, however, were noted and require correction or clarification:

A. Non-Conformance Reports

1. NCR #M6988S-Revision 1

a. This NCR allows acceptance of a weld size smaller than that shown on the Vendor Certified Drawing. The weld shown on the VCD is 1/4 of an inch. The actual weld size is 1/8 of an inch. Quality Control verified that 3/16 of an inch is the maximum possible weld size on three sides due to flange configuration. On the remaining side, 1/4 inch is possible.

b. The resolution to this NCR is " use-as-is." In addition, the NCR states " Design analysis safety factors are implemented to account for these dimensional differences."

c. The resolution does not require a revision to the VCD to indicate the " as-built" condition.

In my opinion, paragraph 4.4 and 16.3.1 of the QA Manual require revision to design documents anytime the " as-built" condition changes.

2. NCR #M7882S

a. This NCR referrences a drawing in which piece #1 on the drawing is 1 inch too long. the tolerance referrenced on the NCR is 1/4 inch.

b. The resolution states " Use -as -is."

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c. Again, there was no means to facilitate the revision of design documents in order to show the " as-built" condition.

As we discussed, the tolerance referenced on the NCR may have been incorrect. If so, this NCR should not have been generated. If however, the NCR is valid, steps must be taken to revise appropriate design documents.

In a discussion with the Site ANI's it was determined that this is not an uncommon problem. A majority of the NCRs' of this nature that I reviewed were resolved correctly. While the number of problems of this nature is being reduced, I will recommend that you keep stressing to review people that " as-built" conditions must be addressed and specifications or drawings must be revised in cases of this nature.

B. Corrective Action Reports

1. CAR-S-56-Revision 1

a. Neither the original nor Rev. 1 were signed by the Site Quality Assurance Manager.

b. Revision 1 of this CAR was voided.

While it is agreed that revisions to documents' are covered in the Document Control section of the manual, this document is a special one. There is a description of both revisions and methods for voiding NCRs' and in my opinion, there should be a similar method described for CARs'. According to QE personnel, they revised and/or voided CARs' as they thought best.

2. CAR-S-55-Revision 1

a. The same comment applies to S-55 concerning revisions and methods of voiding as were made for S-56.

b. The due date for reply for Revision 1 was 6-15-83, however, the Site Quality Assurance Manager did not sign Revision 1 until 7-6-83. In my opinion, the due date should have been revised as well as the CAR.

c. If the due date of 6-15-83 is valid, Mr. Doug Frankum is 28 days overdue for a response. QA is well overdue for their required follow-up of 10 days after the reply due date has been established.

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It is suggested a review of this CAR be performed and clarification or correction be made.

C. ANI Monitoring

1. The following monitoring forms must be answered or a request for extension be made.

   a. Form #347 should have been answered by 5-5-83. There was no response as of 7-14-83, nor was there a request for extension.

   b. Form #350 should have been answered by 6-1-83. An extension was requested and granted to 6-10-83. There was no response as of 7-14-83 and no additional request for extension.

   c. Form #351 should have been answered by 5-31-83. There was no response as of 7-14-83 and no request for extension.

   d. Form #352 was to have been answered by 6-10-83. There was no response as of 7-14-83 and no request for extension.

Please respond to these forms as soon as possible or provide a request for extension on the response date.

D. Instructions, Procedures and Drawings

1. In a review of a document called Quality Control Work Instruction, the following items were noted:

   a. The QA Manual requires Quality Control Instructions be placed in manual form with a table of contents. In a review of these documents, in the auxiliary building with the task force, no manual was found. In addition, Quality Control Instructions must be approved by the QA Manager. No such approval was found.

   b. These documents were not shown on the Controlled Copy Holders Listing.

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and Insurance Co.

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(713) 530-9885

c. No Transmittals could be found for issuance of these documents.

In my opinion, these documents should be controlled in accordance with Section 6 of your manual. To me, a document that is incorporated into a Quality Assurance Procedure at a later date, is important enough to fall under the title of instructions and as such, must be controlled in an appropriate manner. In a discussion with Mr. Ted Blixt, it appears that these documents are similar to DCNs'. If so they should be handled in a similar manner. If not, it is suggested that a description of these documents be provided in the QA Manual.

Please correct or clarify these items to the satisfaction of Lead ANI Marvin Coats. He is being notified of these items by copy of this letter.

Your courtesy and assistance at the time of this Audit was greatly appreciated. Please thank all personnel involved.

Should you have any questions or if I can be of further assistance, please do not hesitate to call.

Yours truly,

William D. Tillman
Assistant Regional Manager
SIS Division, Houston

WDT/md

lcc: Lead ANI Marvin Coats

Attachmen 9

Brown & Root Inc.

INTEROFF MEMO

IM# 26,056 DATE: August 18, 1983

TO: Marvin Coats, ANI

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
Hartford CPSES Audit
Of July 13, & 14, 1983.

After reviewing Mr. W.D. Tillman's letter of August 8, 1983, Brown & Root, Inc. has the following responses:

Response A

1. NCR #M6988S-Revision 1 is dispositioned to rework the under-size weld and to revise the VCD.
2. NCR #M7882S is dispositioned to rework/remove the excess length of piece #1.

Response B

1. CAR-S-56-Revision 1 was never issued as the lack of the Site QA Manager's signature would indicate. This Revision 1 was voided as verbally explained to the ANIs.
2. The due date of 6/15/83 for Revision 1 was a typing error. It should have been 7/15/83. The follow-up of 10 days, per QAM Section 17.3 and CP-QAP-17.1, paragraph 3.2.5, is for investigation/verification to ensure that the required corrective action has been completed.

Response C

1. a. Form #347 was responded to on 4/26/83 by J.T. Blixt and was closed on 8/3/83.
   b. Form #350 was responded to on 5/19/83 by J.T. Blixt and was closed on 8/3/83.
   c. Form #351 was responded to on 7/14/83 by J.T. Blixt and was closed on 8/3/83.
   d. Form #352 was responded to on 7/15/83 by J.T. Blixt and was closed on 7/18/83.

Response D

1. The use of Quality Control Work Instructions has been discontinued.

Should you have any question or if we can be of further assistance, please do not hesitate to call G.L. Morris, Jr. at extension 743.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.
QA File

Attachment 10

TEXAS UTILITIES SERVICES INC.

OFFICE MEMORANDUM

To Fred Burgess Glen Rose, Texas July 20, 1983

Subject COMANCHE PEAK STEAM ELECTRIC STATION

Purpose

To establish the Comanche Peak Pipe Support and Oversite Group which will be responsible for organizing the Comanche Peak resources into an effective Hanger Team capable of moving hanger packages from their present location and status to the vault in the most expeditious manner possible, not foregoing any of the engineering or regulatory requirements.

Charter

The Pipe Support and Oversite Group will be headed by Fred Burgess. He will be assisted in this effort by a full-time representative from engineering, construction, reactor building area manager, safeguards/ auxiliary building area manager, ASME QA, non-ASME QA and a secretary. The Group is to define a process and an organizational structure with each function being described by role, scope, responsibility and authority. Once each function or position has been described, then the group is to appoint the most qualified person to that position. All of Comanche Peak is available to fill these positions. The people for any position may come from any organization, but once assigned to the position, the person then is responsible only to the Hanger Team. The only exception to this would be the regulatory requirements.

The Group will meet as deemed necessary by Mr. Burgess, but due to the urgency of the pipe support problems, it should initially be a full-time effort. The Group will be required to establish a single job-wide report for tracking and statusing. Once the Group has been established the Hanger Team, it will be the responsibility of the Group to provide an oversite function for the hanger effort and resolve and/or correct any problems.

I am requesting that Mr. Burgess report on progress of this effort no later than July 25, 1983 and periodically thereafter as required.

for J. T. Merritt, Jr.
Asst. Project General Manager

JTM:pew
cc: B. J. Murray
M. R. McBay
D. C. Frankum
J. C. Finneran
F. Burgess
G. Purdy
R. G. Tolson
J. Dittmar
R. O. Taylor

BRJ #1699

Attachment 11

Brown & Root Inc.

INTEROFFICE MEMO

DATE: July 29, 1983

TO: Distribution

FROM: G.R. Purdy

SUBJECT: CPSES, 35-1195
Hanger Task Group (HTG)
Assignment.

Effective 28 July 83, three dedicated HTG's have been established to complete safety related hanger design, fabrication, installation, and inspection in Unit 1 and Common. The staffing, objectives, and basic process flow requirements for the HTG's have been developed and/or endorsed by the PS&O Group; this group is comprised of all interfacing organizations involved in the pipe support program, including QA management.

Figure 1, attached, depicts the required QA/QC-HTG interface organization. The QA/QC Lead within each HTG will, as normal, be receiving day to day priorities and work scope assignment from Project Management, thru the HTG Lead. As required by 10 CFR 50 Appendix B, and Section III Subsection NA of the ASME B&PV Code, the QA/QC Lead will report directly to the QA organization for implementation of the CPSES/ASME QA Program. Administrative matters will be directed to the QA organization, except for HTG work schedule and payroll timesheets which will be coordinated within the HTG's by the QA/QC Lead.

Figure 2 attached, provides a Job Description for the HTG QA/QC Lead. Each Lead shall insure that QA/QC personnel under their direct/indirect supervision has a sufficiently detailed Job Description, endorsed by the HTG, to assure:

a) The ability to meet HTG objectives;
b) Time resolution to deficiencies which require QA/QC action; and
c) A primary review of hanger packages in sufficient detail to assure that only satisfactory packages are transmitted from the HTG to QES.

The QES Supervisor shall provide the QA/QC Lead with copies of all applicable transmittals dealing with hanger package processing external to the HTG. Additionally, the QES Supervisor is responsible for providing any additional information to the HTG which is necessary for HTG evaluation of package processing.

G.R. Purdy
Site QA Manager

GRP/bm
Distribution:

T. Blixt
R. Siever
G. Bennetzen
D. Woodyard
D. Snow, (4)
B. Sims, (4)
B. McNellie, (4)
F. Burgess
J. Finneran
K. Liford
B. Baker
J. Dittmar
B. Murray
R. Taylor
G. Bunt
J. Ryan

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

CASE EXHIBIT NO. 1,046

#364

IDENTIFICATION

TO (Name and Title)	DATE	SHEET 1 OF 2
Mr. Gordon Purdy, Site Q. A. Manager	August 23, 1983	1 of 2

CUSTOMER'S COMPANY NAME	INSP. BRANCH	INSP. REGION OR FOREIGN COUNTRY	(REGIONAL USE ONLY)
Brown & Root, Inc.	Houston	Houston	Follow-Up Required ☐ Closed ☐

INSPECTION LOCATION		
CPSES Glen Rose, Texas	☐ Shop X Field Assembly	☐ Repair/Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 8-23-83 (Date) and find the following sections:

(Give Numbers and Titles)

__ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

X Unsatisfactory:

Section 12 - Test Control

On 4-21-83 site ANI issued 939 # 346 addressing inadequate test procedures. This report was satisfactorily closed with Brown & Root response including QCWI #10 issued against QI-QAP -12.2 rev. 5, which was to be used until the procedure was revised. This procedure was revised on 5-12-83 without incorporation of this instruction.

See Attached.

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: 9/6/83 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
X Reg. Mgr./SIS Foreign Representative; X Insp. File	8/23/83	[signature]

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

QI-QAP-12.2, Rev. 6 was initially revised on 3/4/83 which is prior to the 4/21/83 ANI closure of 939 #346, but was not issued until 5/12/83.
QI-QAP-12.2 is now being revised to include provision for stamping of ISO's (Para. 4.1) per QCWI 10.
The other items addressed on this SIS fall within parameters of CP-CPM-6.9I (Para. 3.6.6. & 4.2) and should be directed to Brown & Roots Staff Engineer.

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)
9/19/83	9/7/83	[signature]

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: September 13, 1983 (Date)

and found them: ☐ Satisfactory X Unsatisfactory (Explain below)

See Attached

[initials/signatures]

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
X Reg. Mgr./SIS Foreign Representative; X Insp. File	9/13/83	[signature]

REV 11/78 (SIS)

The use of a calculation sheet for deviations in gauge/piping elevations is not proceduralized. 3.6.6 Δ

The use of a calculation sheet for "air in solution" is not proceduralized. 4.2

Iso.'s are not readily identified to the test package as test package does not list Iso.'s and in many cases test numbers have not been referenced on Iso.'s. The Iso.'s in many instances are not stamped indicating affected by design changes and CMC's which are within the scope of the test are not highlighted (eg. test # 1VD-616, Iso. # VD-1-SB-004A & CMC #87612 rev. 1, and Iso. # VD-1-SB-003B & CMC #87202 rev. 1). 4.1

It is the opinion of this ANI that Brown & Root's test procedure does not comply with NA-4420.

Thank you,

Billy Walker

References:

Ref. # 1 - ASME Code, Section III, Subsection NA (as adopted)
Ref. # 2 - ASME Code, Section III, Subsection NX (as adopted)
Ref. # 3 - Brown & Root Quality Assurance Manual Section 3
Ref. # 4 - Brown & Root Quality Assurance Manual Section 6
Ref. # 5 - Brown & Root Quality Assurance Manual Section 12
Ref. # 6 - Brown & Root Construction Procedure CP-CPM-6.9I
Ref. # 7 - Brown & Root Quality Assurance Procedure CP-QAP-12.2

Brown & Root's response to 939 #364 is unsatisfactory as indicated by the concerns listed as items I thru VII. Please address these concerns as soon as possible so that I may remonitor this section of the Quality Assurance Manual by 9-27-83.

I Your response that other items should be directed to Brown & Root Staff Engineer is in conflict with and/or is inconsistent with ref. #3 (para.3.2.6), ref. #4 (para. 6.3.1, 6.4.1, & 6.4.2), and ref. #1 (NA-4210).

II The use of a calculation sheet for deviations in guage 1 piping elevations is not proceduralized. Calculation sheets have been used on numerous test. This violates ref. #6 (para. 3.6.6 & 4.3). Also on many tests the pressure guages have been directly connected to the test manifold, not the component being tested. This violates ref. #5 (para. 12.2.5), ref. #6 (para. 4.3), and ref. #2 (NX-6411).

III Ref. #6 (para. 4.1.2) indicates that flow diagrams will generally be used (see IV) and provides for stamping for test sign-off. This is unacceptable as previously addressed in 939 #346. Your response to this is acceptable, but please note ref. #6 is in conflict.

IV Ref. #6 (para. 4.2) allows for minimizing air pockets by flushing or by providing calculations to show that the entrapped air is dissolved. Ref. #7 (para. 3.8.1) also allows this as an alternative when "it's highest point" is not vented. This violates ref. #2 (NX-6211). The verification of establishment of a "solid" system was one of the concerns which led to the issuance of SIS report #12-002 and subsequently 939 #346. Prior to the issuance of SIS report #12-002 (10-12-82), only flow diagrams were issued with test packages for preliminary review and final acceptance. Since flow diagrams do not indicate changes in elevations, the ANI's weren't provided with adequate information to evaluate the existing conditions to decide whether or not venting was established at all high points as is required by ref. #2 (NX-6211). The present practice of providing all Iso.'s within the inspection boundary still has a potential for error particularly in the case of multiple Iso.'s per test in which case venting may not be shown. I have provided examples of high points without vents at VIII.

V Ref. #6 (para 2.4) indicates that only a Pressure Data Sheet and the applicable drawings are required in a Pressure Test Data Package. Ref. #6 (para. 4.1.3) indicates that additional information is recommended. This is in conflict with ref. #7 (para. 12.2) which stipulates additional documents as being required.

VI Ref. #7 (para. 3.4.3) indicates that "other systems" including the Diesel Fuel Oil system may be tested with other test mediums, preferably the operations medium. The quality checklist (attachment 2 of the procedure) as referenced by ref. #7 (para. 2.3) references attachment 4 for test medium requirements. This attachment 4 delineates seven systems as requiring a test medium of oil. This violates ref. #2 (NX-6212).

VII Ref. #6 (para. 4.4.1) establishes the Test Engineer as the responsible party for venting the system. This is inconsistent with ref. #5 (para.12.2).

VIII Example of high points not vented.

A. Test # 1DO-007 - The line on DO-1-YD-008 at el. 806' slopes downward to 805'9" and rises on DO-1-DG-002 to 812' and then drops to 806'6" before rising again. There are no vents at either high point.

B. Test # 1SEC-001
   1. Valve #1MS-259 at el. 885'1" on MS-1-SB-047 was closed and not vented.
   2. FW-1-SB-026 rises from 864'3" to 867'8 9/16" and drops to about 850' with no vent at the high point.
   3. FW-1-SB-033 rises from 864'3 3/4" to 869'4 15/16" and drops to 862'6 5/16". At the top of this high point FW-1-SB-037 continues and rises to 869'11 15/16" and drops to 857'5 11/16" to valve 1FW-245 which was the pressure source. Also, FW-1-SB-033 rises 7" to 1FW-300 which was closed and not vented. There was no high point vent on FW-1-SB-037.
   4. On MS-1-SB-005, valve 1MS-050 at el. 834'7 11/16" was used as a vent. The line rises above the vent to el. 841'10 3/16" and continues on MS-1-RB-010 where it drops to 838'10" and on MS-1-RB-008 to 833'3". It also continues on MS-1-RB-010A at el. 844' where it drops to 835'11 7/8" and 833'3". There was no vent at high point.
   5. MS-1-SB-007 rises from 877'5" at MS-1-SB-016 to 881'11 5/16" at valve 1HV-2452-1 which was closed and not vented.
   6. FW-1-SB-014 rises from 856'3" to 857'6" at valve 1FW-106 which was closed and not vented.

7. MS-1-RB-002 rises from 883'6" to over 883'11" at valve 1MS-001 which was closed and not vented.
8. FSI-0122-03 Spool orientation not shown on this Iso. Any of the 8 spools in which the valve run is vertical will apply.

Billy Walker

OFFICE MEMORANDUM

12-008

TO: ANI

DATE: 10-6-83

FROM: Billy Watkins, ANI

SUBJECT: 939# 364 / Meeting with T. Blixt

On 10-4-83 I received response from T. Blixt to 939# 364 (see IM# 26257 attached) Mr. Blixt's response is unacceptable as noted below:

Concern II - no reference made to revising CP-CPM 6.9I to include reference to calculations for deviation between piping low point and gauge elevation. This item is satisfactory even though the conditions agreed upon were not referenced in the response because CP-CPM 6.9I rev. 6 does meet the required condition. (para 3.6.6)

Concern III - B&R must adopt w80 NX6211 or later to allow flushing or calculation to show air is dissolved. In addition, B&R procedures must indicate responsibility and methods.

Concern VI - B&R must adopt 1980 NX6212 to allow "other test fluids".

On this date, I met with Mr. T Blixt to address my concerns & stated his reason for the differences in the agreement were that he used Mr. Morris's notes I gave Mr. Blixt the opportunity to amend his response in lieu of my issuance of another unsat 939.

Brown & Root, Inc.

INTEROFFICE MEMO

IM# 26,257 DATE: October 4, 1983

TO: M. Coats

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS Report # 364.

This memo is written to confirm our previous discussions and as agreed between Billy Walker, ANI; Pat Clark, B&R Staff Engineer; G.L. Morris, B&R Site Mechanical Level III; and myself, the following responses are made.

Concern I "Agreed"

Concern II All QC personnel involved with the hydro testing program will be reinstructed as to correct use of calculation sheets.

Concern III No revisions or changes to CP-CPM-6.9I will be made. CP-QAP-12.2, Para. 4.1 has been revised to include provision for ISO's.

Concern IV For 1980 Summer Addenda for NX-6211 has been adopted by B&R (MS-100, Rev. 6, Para. 4.38.3.C) and CP-CPM-6.9I, Rev. 6, Para. 3.6.6 has been revised.

Concern V No problem.

Concern VI Para. 4.38.3.A to MS-100 implements Appendix 6 requirements. Note: 1983 NX-6212 allows "other test fluids" as approved by the design specifications (MS-100).

Concern VII No changes or revisions necessary.

Concern VIII "No response necessary".

Should you have any questions or comments concerning SIS Report #364 please contact G.L. Morris at extension 743.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.

SIS REPORT

THE HARTFORD STEAM BOILER INSPECTION and [illegible]URANCE COMPANY
HARTFORD, CONNECTICUT 06102

CASE EXHIBIT NO. 1,047

16-009

TO: Gordon Purdy, Site Q. A. Manager

DATE: 9/27/83 | SHEET: 1 | OF: 1

FM: Marvin Coats, Lead ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc

LOCATION	STREET	CITY	COUNTY	STATE	ZIP CODE
CPSES	Box 1001	Glen Rose	Somervell	Texas	76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. NO.: 35-1195-0561

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

Subject: Closure of NCR's Affecting Piping Deviations

(Documented on PDRF's)

Re: Generic NCR M2807

Prior to closure of subject NCR's request your assistance in resolving the following potential problem. Many of the documented deviations were identified prior to installation of component supports, components, and prior to hot functional testing. Any of the above might have caused further distortion and/or movement of the affected piping creating a problem of greater magnitude.

A reinspection by Brown & Root or assurance by Design Engineering that this does not pose a problem would be acceptable resolutions.

☐ OVER

SIGNED M Coats

32 REV. 10-78 (SIS)

Brown & Root, Inc.

INTEROFFICE MEMO

IM# 26,295 DATE: October 12, 1983

TO: M. Coats, LANI

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS Report # 16-009.

In response to your concern addressed in this SIS report, please see Engineering response attached.

If you should have any questions please contact me at extension 459.

JTB:bm

J.T. Blixt
QE Group Supervisor

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.

TEXAS UTILITIES SERVICES INC.

OFFICE MEMORANDUM

To Gordon Purdy — Glen Rose, Texas 10/07/83

Subject PORF Closure

RE: SIS 16-009, dated 9/27/83

The referenced SIS report states a concern by the ANI about documented deviations prior to installation of permanent pipe supports and prior to hot functional testing.

Engineering is presently completing the disposition of all Unit 1 PORF's by letter after evaluating each deviation per the latest as-built pipe stress analysis which provides deflections and moments of the piping system. The As-built (79-14) group is also finalizing its documentation in Unit 1 by verifying installation of supports which were not installed at the time of survey.

The intent of the Hot Functional Test program was to insure that the hot piping systems moved as predicted during warm-up. Engineering walk-downs and evaluations were performed prior to HFT to assure the piping was adequately supported to reduce the possibility of binding or over stress.

It is therefore our opinion that the PORF program is sound and being properly implemented.

M.R. McBay
Manager of Engineering

MRB:HAH:ema

cc: J.R. Johnson
F.G. Burgess
H.A. Harrison

CKM F.Y.I.

AS REPORT

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

16-009

Gordon Purdy, Site Q. A. Manager

DATE 9/27/83 | SHEET 1 | OF

M: Marvin Coats, Lead ANI

H.O./BRANCH OFFICE Houston

ORGANIZATION Brown & Root, Inc

LOCATION	STREET	CITY	COUNTY	STATE	ZIP
CPSES	Box 1001	Glen Rose	Somervell	Texas	760

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. 85-1135-C

REASON FOR VISIT
Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

Subject: Closure of NCR's Affecting Piping Deviations (Documented on PDRF's)

Re: Generic NCR M2807

Prior to closure of subject NCR's request your assistance in resolving the following potential problem. Many of the documented deviations were identified prior to installation of component supports, components, and prior to hot functional testing. Any of the above might have caused further distortion and/or movement of the affected piping creating a problem of greater magnitude.

A reinspection by Brown & Root or assurance by Design Engineering that this does not pose a problem would be acceptable resolutions.

Harvey Harrison to answer w/letter to G Purdy. Has not 10/5

SIGNED M. Coats

☐ OVER

10-78 ISIS

SIS REPORT

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

CASE EXHIBIT NO. 1,048

10-024

TO: Gordon Purdy, Site Q. A. Manager

DATE: 10/5/83 | SHEET: 1 | OF:

FROM: John S. Harper, ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc.

LOCATION	STREET	CITY	COUNTY	STATE	CODE
CPSES	Box 1001	Glen Rose	Somervell	Texas	76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. NO.: 83-1195-00

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI File

Contrary to your Quality Assurance Manual, 10.4.5, the below supports were fabricated without discribed "control of welding materials" :

H-CH-1-SB-010A-002-3

H-CH-1-SB-010A-004-3

H-CH-1-SB-010A-005-3

H-CH-1-SB-010A-006-3

H-CH-1-SB-010A-007-3

H-CH-1-SB-010A-008-3

H-CH-1-SB-010A-009-3

H-CH-1-SB-010A-010-3

H-CH-1-SB-010A-011-3

H-CH-1-SB-010A-012-3

H-CH-1-SB-010A-013-3

It appears to this inspector that this is a nonconforming condition and should be reported as such.

CLOSED PER SAT. RESPONSE OF 93% #365

John S. Harper 10/20/83

☐ OVER

SIGNED John S. Harper

REV. 10-78 (5121)

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

365

CUSTOMER'S IDENTIFICATION

TO (Name and Title): Gordon Purdy, Site Q. A. Manager	DATE: 10/7/83	SHEET: 1
CUSTOMER'S COMPANY NAME: Brown & Root, Inc.	INSP. BRANCH:	INSP. REGION OR FOREIGN COUNTRY: Houston
INSPECTION LOCATION: CPSES Glen Rose, Texas	☐ Shop ☒ Field Assembly	(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

I, the undersigned, have monitored your QA/QC manual on: 10/7/83 (Date) and find the following:

☐ Satisfactory: (Give Numbers and Titles)

☒ Unsatisfactory: (Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

Section 10 Paragraph 10.4.5 "Control of Welding Material"

Re: SIS Report (932) # 10-024

In addition to the objects reported on the above document, the following hangers are in the same category of noncompliance: H-CH-2-AB-009-004-3, H-CH-2-AB-009-007-3, and H-CH-1-SB-024-005-3.

This appears to be a generic problem.

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: October 24, 1983 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File	10/7/83	John T. Ham...

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

Answering SIS Report 939-365 referencing SIS 932-10-024. For a short period of time Welding Engineering did not issue WFML for phantom hangers. Craft did not obtain WFML for Welding of Shims on Phantom hangers. Welding material was drawn against parent hangers. Control of Welding material has ~~been~~ been maintained through parent hangers. Software phantom hangers needing welding information will have the needed information "Such as WFML, existing steel drawing and MIL (if required)". Review Personnel have been notified to be aware of this problem, to assure the welding material traceability will be maintained.

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)
	10/13/83	[signature]

I, the undersigned, have remonitored the above unsatisfactory conditions on: 10/20/83 (Date)

and found them: ☑ Satisfactory ☐ Unsatisfactory (Explain below)

INSPECTOR'S RESULTS

NOTE! THIS ALSO CLOSES SIS REPORT (932) # 10-024 (COPY ATTACHED)

932 FILE

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☑ Reg. Mgr. / SIS Foreign Representative ☑ Insp. File	10/20/83	John T. Ham...

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

CASE EXHIBIT NO. 1,049

365

TO (Name and Title): Gordon Purdy, Site Q. A. Manager
DATE: 10/7/83
SHEET: 1

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.
INSP. BRANCH:
INSP. REGION OR FOREIGN COUNTRY: Houston
(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Close

INSPECTION LOCATION: CPSES Glen Rose, Texas
☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Service

I, the undersigned, have monitored your QA/QC manual on: 10/7/83 and find the following:

☐ Satisfactory: (Give Numbers and Titles)

☒ Unsatisfactory: (Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

Section 10 Paragraph 10.4.5 "Control of Welding

Re: SIS Report (932) # 10-024

Con	BW
JAB	
	957

In addition to the objects reported on the above document, the following hangers are in the same category of noncompliance: H-CH-2-AB-009-004-3, H-CH-2-AB-009-007-3, and H-CH-1-SB-024-005-3. This appears to be a generic problem.

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: October 24, 1983 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: X Reg. Mgr. / SIS Foreign Representative / X Insp. File
DATE SIGNED: 10/7/83
SIGNED (HSB Inspector): John S. Horn

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

Answering SIS Report 939.365 referencing SIS 932-10-024. For a short period of time Welding Engineering did not issue WFML for phantom hangers. Craft did not obtain WFML for Welding of shims on phantom hangers. Welding material was drawn against parent hangers. Control of Welding material has been maintained through parent hangers. If warranted phantom hangers needing welding information will have the needed information "Such as WFML, existing stud drawing and MIL (if required)". Review Personnel have been notified to be aware of this problem, to assure the welding material traceability will be maintained.

DATE CORRECTIVE ACTION WILL BE COMPLETED:
DATE SIGNED: 10/13/83
SIGNED (Customer's Representative): TBC

I, the undersigned, have remonitored the above unsatisfactory conditions on: 10/20/83 (Date)

and found them: ☑ Satisfactory ☐ Unsatisfactory (Explain below)

NOTE: THIS ALSO CLOSES SIS REPORT (932) # 10-024
(COPY ATTACHED)

939 File

DISTRIBUTION: ☑ Reg. Mgr. / SIS Foreign Representative / ☑ Insp. File
DATE SIGNED: 10/20/83
SIGNED (HSB Inspector): John S. Horn

SIS REPORT

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

10-024

TO: Gordon Purdy, Site Q. A. Manager

DATE: 10/5/83 | SHEET: 1 | OF:

John S. Harper, ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc.

LOCATION: CPSES | STREET: Box 1001 | CITY: Glen Rose | COUNTY: Somervell | STATE: Texas | ZIP CODE: 760[illegible]

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI File

Contrary to your Quality Assurance Manual, 10.4.5, the below supports were fabricated without discribed "control of welding materials" :

H-CH-1-SB-010A-002-3

H-CH-1-SB-010A-004-3

H-CH-1-SB-010A-005-3

H-CH-1-SB-010A-006-3

H-CH-1-SB-010A-007-3

H-CH-1-SB-010A-008-3

H-CH-1-SB-010A-009-3

H-CH-1-SB-010A-010-3

H-CH-1-SB-010A-011-3

H-CH-1-SB-010A-012-3

H-CH-1-SB-010A-013-3

It appears to this inspector that this is a nonconforming condition and should be reported as such.

CLOSED PER SAT. RESPONSE OF 939 # 365

John S. Harper 10/20/83

☐ OVER

SIGNED John S. Harper

02 REV. 10-78 (SIS)

#366 Response
#366 A to close this report

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

— CASE EXHIBIT NO. 1,050 — #366

TO (Name and Title): Gordon Purdy, Site Q. A. Manager		DATE: October 21, 1983	SHEET 1 OF 3
CUSTOMER'S COMPANY NAME: Brown & Root, Inc.	INSP. BRANCH:	INSP. REGION OR FOREIGN COUNTRY: Houston	(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed
INSPECTION LOCATION: CPSES Glen Rose, Texas		☐ Shop ☒ Field Assembly	☐ Repair/Alteration ☐ Inservice

I, the undersigned, have monitored your QA/QC manual on: 10/21/83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory:

Section 16 Non Conforming Items

The following listed findings were found to be unsatisfactory. See attached sheet.

Although specific examples are given, the problems found are not limited to just these examples.

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: November 7, 1983 (Date).

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr./SIS Foreign Representative ☒ Insp. File	10/21/83	[signature]

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

[initials]	BP
[initials]	BW
[initials]	GJ
	QSJ

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)

I, the undersigned, have remonitored the above unsatisfactory conditions on: ______ (Date)

and found them: ☐ Satisfactory ☐ Unsatisfactory (Explain below)

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☐ Reg. Mgr./SIS Foreign Representative ☐ Insp. File		

(1) NCR's are being voided that should not be. Examples: M10,136 Rev. 1 - Should have been closed, M10,188 - This NCR references another NCR for justification when the two NCR's (and documents attached to them) do not deal with the same problem and/or area. M10,193 - No objective evidence given for justification.

(2) 10 open NCR's were picked at random from the log books in each task force area. Only 1 Task Force NCR Coordinator could track the NCR's any further than through ANI review, and his tracking device was not the one prescribed by Brown & Root.

(3) NCR's being presented to ANI's for review without having the referenced drawing's revision number. Examples: M 6752S Rev. 1, M 7116S Rev. 1. M 6577S Rev. 1, M 6620 Rev.1, M 7119S Rev. 2, M 6756S Rev. 1, M6619 Rev. 1, M 6188S Rev. 1.

(4) Trend categories for NCR's are inconsistent. Example: Some NCR's written for missing welds were trended C-11 or C-12, while other NCR's written for the same reason were trended C-16.

(5) NCR M 7169S Rev. 0 - Action Addressee was Finneran (Engineering). The review by Engineering was not signed on Rev. 0 and the review blocks for Engineering had been NA'd on Rev. 1; therefore, the NCR had never been reviewed by the Action Addressee, making the disposition indeterminate.

(6) NCR's being revised by organizations other than the organization that originally prepared them. Example: NCR 5803S Rev. 1 - Rev. 0 was written by Weld Engineering and was revised by the Action Addressee (Engineering).

(7) Additional information being added to NCRs without being revised (added after initial reviews). Example: NCR M 11,006S.

(8) NCR log books state NCR M 11,003 is void, but no date was entered.

(9) NCR log books do not give Action Addressee. Examples: M 11,029, M 10,050, M 10,056, and M 10,058.

(10) NCR log books do not give trend category. Examples: M 11,029, M 9650, and M 11,441.

(11) NCR log books state a NCR is closed when it was actually voided.

(12) NCR's written in one Task Force area, and entered on that log book, then transfered to another area are not being tracked. Example:
M 10,205 logged in Auxiliary Building Task Force, sent to Safeguard Task Force on 8-2-83, closed on 9-29-83 by Safeguard Task Force, and log book in Auxiliary Building Task Force shows it to still be open.

(13) Inspection Reports issued after ANI acceptance of hanger packages. Example:
CC-1-SB-035B-006-3; CC-1-SB-035B-007-3; CH-1-AB-040-009-3; CH-1-AB-042-006-3. These were found during ANI re-review.

(14) CP-QAP 11.1 and CP-QAP 16.1 are inadequate in giving Quality Control personnel direction on what is permitted to be written up on an Inspection Report and what must be written up on an NCR. Example:
AM 03097 written 10-7-83 is a clear procedural violation, but has been closed with an NCR as of 10-20-83.

(15) Trend Analysis is not being accomplished for Inspection Reports. Reference CPSES Quarterly Report on Q. A. Department and Q. A. Program Activities for the Third Quarter of 1983.

(16) Trend categories given to Inspection Reports are very inconsistent. Example:
C-16 is listed for missing welds, incomplete welds, welds needing NDE, undersized welds, slag in welds, etc., and 1 Inspection Report (AM-00027) is trended C-16 while the report has nothing to do with welds or welding.

(17) No objective evidence found that Q. C. Leads are reviewing Inspection Reports. Example:
Safeguard Task Force.

Brown & Root, Inc.

INTEROFFICE MEMO

IM# 26,404 DATE: November 8, 1983

TO: J.W. Lytle

FROM: R. Siever

SUBJECT: CPSES, 35-1195
SIS Report #366.

---

1. NCR 10,136 R.1 was void with justification. The above NCR was written against Sway Strut RH-1-002-013-C41R, Rev. 1. This strut was installed on Hanger CC-1-057-004-A33R, Rev. 4, which was documented on NCR 10,794A.

   NCR 10,193S was void with justification. Field welds 2 & 3 are full fillet welds by application, not design and as such are not nonconforming and do not need MT/PT examination.

   NCR 10,188S and Ref. NCR 5212S R.2 do reference the same problem. NCR 10,188S should not have been written on BRP-RC-1-RB-021 (piping). The nonconformance is on hanger lug for support RC-1-018-003-C51S. Justification for voiding NCR 10,188S will be revised.

2. NCR Log Books have been updated and Task Force NCR Coordinators reinstructed as to their proper use.

3. Quality personnel have been reinstructed to include revision number of drawings on NCR's.

4. Trending codes are subjective and interpretive, the codes you described in this Item C-11, component supports fabrication (incomplete/incorrect), C-12 component support installation (incomplete/incorrect), or C-16 component support welding could all be used for missing welds. Quality personnel have been reinstructed on a more consistent use of trend codes.

5. At the time this NCR (7169S R-1) was written, our procedure required Quality Engineering to disposition NCR's "Rework", without Engineering approval.

6. NCR 5803S Rev. 1 was prepared to correct the disposition of NCR 5803S Rev. 0. This revision was prepared by the engineer that made an error on his description of the disposition. We find no evidence of a nonconforming condition being revised by other than the action/addressee.

7. Quality personnel have been reinstructed.

8. Same as Item 7.

9. This condition has been corrected and personnel reinstructed.

10. Same as Item 9.

11. When an NCR is void, it is closed per CP-QAP-16.1, Para. 3.1.1.4.

12. NCR 10,205 has been closed by Auxiliary Task Force on 9/29/83. Currently in Safeguard Task Force for tracking.

13. As previously agreed to by Hartford Steam Boiler and B&R, any documentation that was generated after ANI review of a package would require the Attachment 1 to be void and the package resubmitted to ANI for review.

14. We do not feel CP-QAP-11.1 and CP-QAP-16.1 are inadequate. IR AM 03097 may result in an NCR, but this IR has not been answered as of 10/20/83.

15. An amendment to the Quarterly Report for the Third Quarter of 1983 was issued on November 1, 1983 for IR's. All future Quarterly Reports will include an IR trend.

16. This is the same finding as Item 4.

17. There is no procedural requirement that QC Leads sign IR's to indicate their review.

We feel that most of the above items, if addressed during the Audit, would have been corrected to the satisfaction of the Inspection Agency.

We also request an exit meeting to discuss any future findings identified during any of your monitoring actions.

R. Siever
QC Group Supervisor

RS/bm

cc: G.R. Purdy
J.T. Blixt
G.L. Morris, Jr.
QA File

S.I.S RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

H 366 A

CUSTOMER'S IDENTIFICATION

TO (Name and Title)		DATE	SHEET	OF
Gordon Purdy Site Q.A. Manager		December 7, 1983	1	1
CUSTOMER'S COMPANY NAME	INSP. BRANCH	INSP. REGION OR FOREIGN COUNTRY	(REGIONAL USE ONLY)	
Brown & Root, Inc		Houston	☐ Follow-Up Required	☐ Closed
INSPECTION LOCATION		☐ Shop ☒ Field Assembly	☐ Repair/ Alteration	☐ Inservice
CPSES Glen Rose, Texas				

REPORTING RESULTS

I, the undersigned, have monitored your QA/QC manual on: December 7, 83 (Date) and find the following sections: (Give Numbers and Titles)

☒ Satisfactory: This SIS report is issued to indicate satisfactory response to the Remonitoring of SIS Report # 366.

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☐ Unsatisfactory:

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: NA (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr. / ☐ SIS Foreign Representative ☐ Insp. ☒ File	10-7-83	J. W. Lyttle

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: _____ (Date)

and found them: ☐ Satisfactory ☐ Unsatisfactory (Explain below)

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☐ Reg. Mgr. / ☐ SIS Foreign Representative ☐ Insp. ☐ File		

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

#366

CUSTOMER IDENTIFICATION

TO (Name and Title)		DATE	SHEET	OF
Gordon Purdy, Site Q. A. Manager		October 21, 1983	1	3
CUSTOMER'S COMPANY NAME	INSP BRANCH	INSP REGION OR FOREIGN COUNTRY	(REGIONAL USE ONLY)	
Brown & Root, Inc.		Houston	☐ Follow-Up Required	☐ Closed
INSPECTION LOCATION				
CPSES Glen Rose, Texas		☐ Shop ☒ Field Assembly	☐ Repair/Alteration	☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 10/21/83 (Date) and find the following sections:

☐ Satisfactory: (Give Numbers and Titles)

☒ Unsatisfactory: (Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

Section 16 Non Conforming Items

The following listed findings were found to be unsatisfactory. See attached sheet.

Although specific examples are given, the problems found are not limited to just these examples.

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: November 7, 1983 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr./SIS Foreign Representative ☒ Insp. File	10/21/83	[signature]

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

See attached IM 26,404.

[initials]	DP
[initials]	[initials]
	RB
	9521

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)
November 9, 1983	Nov. 9, 1983	[signature]

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 11/11/83 (Date)

and found them: ☐ Satisfactory ☒ Unsatisfactory (Explain below)

See Attached.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr./SIS Foreign Representative ☒ Insp. File	11/11/83	[signature]

DATE: November 11, 1983

TO: Gordon Purdy

FROM: Jerry W. Lytle

SUBJECT: Response to IM# 26,404
SIS Report #366

Response given, IM# 26,404 is acceptable except for the following items:

(1) NCR 10,193S - Non conforming condition as written by the originator states the fillet welds in question "are full fillets requiring MT/PT". Justification for voiding would be referenced to a procedure, Code interpretation, etc., not an evaluation by a Q.C. Lead.

(6) The non conforming condition of Rev. 0 of NCR 5803S was also changed by Rev. 1, not just the disposition.

(13) Response as stated is correct; however, this response does not address the problem as stated - i.e., deficiencies discovered after final acceptance is a non conforming condition per Brown & Root Q. A. Manual.

(14) CP-QAP 11.1 gives direction to Q.C. Inspector to write an Inspection Report (unsat) on everything except "N" stamped and final accepted items. This is in conflict with Brown & Roots Q. A. Manual, 16.4.1, which states (among other things) "a procedural violation shall be identified and documented on an NCR".

(17) CP-QAP 11.1 - 2.2 states "Q.C.Leads will review Inspection Reports". Without their initials or some other device, there is no objective evidence of their review.

Most, if not all, of the listed items were addressed to the involved Q.A. personnel in the field, as exemplified by item 2 of the report. Additionally, as stated on the original report, the problems extend beyond just these examples.

Brown & Root Inc.

INTEROFFICE MEMO

IM# 26,537 December 5, 1983

TO: M. Coats, LANI

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
Unsatisfactory Remonitoring
On SIS #366.

Finding #1.

"NCR 10,193S - Nonconforming conditions as written by the originator states the fillet welds in question "are full fillets requiring MT/PT". Justification for voiding would be referenced to a procedure, code interpretation, etc., not an evaluation by a QC Lead".

Requirement: QAM 16.4.4 Voiding an NCR - ".... he shall provide justification for such a disposition on the NCR, and shall sign for closure".

Requirement: CP-QAP-16.1, Rev. 20, Para. 3.1.1.4, Voiding an NCR - "....he shall provide justification for such a disposition on the NCR and shall sign for closure....".

B&R disagrees with the inspector's statement that "Justification for voiding would be referenced to a procedure, code interpretation, etc., not an evaluation by a QC Lead". In fact, if B&R did comply with the inspector's request, it would be in non-compliance with QA Manual Section 16.4.4 which inpart states "The QE, cognizant supervisor or higher authority may, during processing, disposition an NCR to state "Not a nonconforming condition" or similar wording. He "shall provide justification for such a disposition on the NCR and shall sign for closure:. Further, as required by the "Document Violated" QE-QAP-11.1-28, Rev. 22, Para. 4.4.1.1 (ref. "Nonconforming Condition" entry NCR #10,193S), "QCI shall evaluate all Class 1 fillet welds to determine if they are full fillet welds", and per the reply to Brown & Root's ASME code require #N183-092, the QCE's justification that "Not designed full fillets" is a valid evaluation of the code and procedure requirements. Thus, unless the inspector can provide additional references, there appears to be no valid committments to substantiate the inspectors concern.

Since all of the ANI's "specific examples" of NCR's being voided that should not be", were correctly voided, B&R feels that NCR's are being processed in compliance with QA program requirements, but to alleviate any further concerns, the B&R Site QA Manager has by IM dated November 17, 1983, restricted the voiding of NCR's to the QC/QE supervisors and the Site Level III's.

ANI Finding #6.

"NCR's being revised by organizations other than the organization that orginally prepared them". Example: NCR 5803S, Rev. 1 - Rev. 0 was written by Welding Engineering and revised by the action/addressee (Engineering).

Requirements: QAM 16.4.7 - "NCR revisions shall be initiated by the same organization that performed the original preparation providing they have signature authority. NCR revisions shall receive the same review and approval cycle as the original NCR".

CP-QAP-16.1, Rev. 19, Para. 3.1.5.1 - "....NCR revisions can be initiated by QE/QC, ANI or Engineering providing they have signature authority. NCR revision shall receive the same review and approval cycle as the original NCR".

B&R Response Finding #6.

"NCR 5803S revision was prepared to correct the disposition of NCR 5803S, Rev. 0. This revision was prepared by the engineer that made an error on his description of the disposition. We find no evidence of a nonconforming condition being revised by other than the action/addressee.

ANI Response Finding #6.

The nonconforming condition of Rev. 0 of NCR 5803S was also changed by Rev. 1, not just the disposition.

The NCR #M5803S, Rev. 1 was submitted to the individual who reported the nonconformance for concurrence with the correction made to the condition description. That individual signed the revision indicating his concurrence.

ANI Finding #13.

"Inspection Reports issued after ANI acceptance of hanger packages.
Example: CC-1-SB-035B-006-3
CC-1-SB-035B-007-3
CH-1-AB-040-009-3
CH-1-AB-042-006-3
These were found during ANI re-review".

Requirements: QAM Section 16.3.1: "The final acceptance of supports shall be performed by QC per a Vendor Certified Drawing/Design Review Drawing (VCD/DRD) walkdown, including document review, in accordance with site procedures. The final acceptance of the piping system shall be performed on an N-5 walkdown, including document review, in the same manner.

CP-QAP-16.1, Rev. 19, Para. 3.2.2.2, Nonconformances - When a deficiency which can not be resolved by an unsat IR or any deficiency related to an N-Stamped component or any deficiency which is identified after final acceptance of piping system or support in accordance with Reference 1-E (CP-QAP-12.1) (i.e., Hydro Release or VCD/DRD walkdown including document review), shall be reported on an NCR in accordance with this procedure....

CP-QAP-11.1, Rev. 3, Para. 2.3.2 of Attachment 1 - Same as above.

Brown & Root Response.

The inspection reports addressed in this SIS report were written during August and September. During this time frame, there was no QAM requirement that adequately addressed final acceptance and the initiation of an NCR for this condition. In October (10/10/83) the B&R QAM Section 16, Para. 16.3.1 was revised to clarify this item. Therefore it is felt that the IR's were correctly implemented and that NCR's were not required. QCI's have received documented classroom training on this subject and are fully aware of this B&R QAM requirement.

ANI Finding #14.

CP-QAP-11.1 gives direction to QC inspector to write an Inspection Report (unsat) on everything except "N" stamped and final accepted items. This is in conflict with B&R QA Manual, 16.4.1 which states (among other things) "A procedual violation shall be identified and documented on an NCR".

B&R Response.

Attachment 1 of CP-QAP-11.1, Para. 1.0, NOTE: was written to clarify IR's and direct reference to Para. 2.3.2 which identifys NCR's. In CP-QAP-16.1, Para. 2.2.1 and 2.2.3 will clarify this inspectors concern.

ANI Finding #17.

CP-QAP-11.1, Para. 2.2 states "QC Leads will review Inspection Reports", without their initials or some other device, there is no objective evidence of their review.

B&R Response.

1. CP-QAP-11.1, Attachment 1, Para. 2.2 requires in part, that: The QCI shall obtain the serial number for an IR from the QC Lead. Prior to assigning the IR number, the QC Lead shall review the IR.....
2. G.R. Purdy's IM#26,019 additionally requires that, "at the time of assigning the serial number...., the responsible QC Lead shall also assign the applicable deficiency trend code... and document the trend code in the comments section of the IR log".

Therefore the objective evidence of the QCL's review was the IR number itself on the IR and the trend code indicated in the log and on the IR itself. But to help porvide the "objective evidence" requested by the inspector, the QC Leads have received additional instruction to initial the trend code in the IR comments section.

It is felt by B&R QA Management that with better communications between ANI and B&R QA personnel, the type of concerns addressed in this SIS Report would have been corrected or resolved prior to the initiation of many reports.

Should you have any questions in regards to this response, please contact me at extension 459.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

— CASE EXHIBIT NO. 1,051

#369

CUST IDENTIFICATION

Mr. Gordon Purdy, Site Q. A. Manager
(NAME — COMPANY NAME)

Brown & Root, Inc.
(INSPECTION LOCATION)

CPSES Glen Rose, Texas

INSP BRANCH: Houston

DATE: Nov. 9, 1983

INSP REGION OR FOREIGN COUNTRY: Houston

SHEET 1 OF 2

(REGIONAL USE ONLY) Follow-Up Required — Closed

Shop — X Field Assembly — Repair/Alteration — Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 11-9-83 (Date) and find the following sections:
(Give Numbers and Titles)

Satisfactory

X Unsatisfactory: (Identify QA QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

Section 17

OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: 11-16-83 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
X Reg. Mgr / SIS Foreign Representative — X Insp. File	11-9-83	Joe C. Hall

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

CUSTOMER'S RESOLUTION

OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)

I, the undersigned, have remonitored the above unsatisfactory conditions on: (Date)

and found them: Satisfactory — Unsatisfactory (Explain below)

MONITORING RESULTS

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
Reg. Mgr / SIS Foreign Representative — Insp. File		

REV 11 '84 (NS)

On 11-9-83 this inspector was requested to witness visual examinations on Class I hanger CS-1-112-720-C41R. Upon verifying material, it was noted that the attachments do not meet the requirements for Class I attachments. Heat # 28550.

Due to repeated identification by site Authorized Nuclear Inspectors as evidenced by referenced SIS Reports, the corrective action taken by Brown & Root has not resulted in the correction of this generic problem.

HSB 939 - 360
932 - 9-002
932 - 9-002A
932 - 9-002-1
932 - 9-002-2
932 - 9-002B

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

369/B Response

CUSTOMER IDENTIFICATION

TO (Name and Title): Gordon Purdy, Site Q. A. Manager		DATE: Feb. 1, 1984	SHEET 1 OF 1
CUSTOMER'S COMPANY NAME: Brown & Root, Inc.	INSP. BRANCH: Houston	INSP. REGION OR FOREIGN COUNTRY: Houston	(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed
INSPECTION LOCATION: CPSES Glen Rose, Texas		☐ Shop ☒ Field Assembly	☐ Repair/Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 2-1-84 (Date) and find the following sections:

(Give Numbers and Titles)

☒ Satisfactory: Section 17 Corrective Action taken in I.M. 26,729 is acceptable and closes this 939

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☐ Unsatisfactory:

[illegible]	B[illegible]
[illegible]	BP
WW	[illegible]
DW	95N

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: ____________ (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr./SIS Foreign Representative ☒ Insp. File	2-1-84	Joe C. Hair

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: ____________ (Date)

and found them: ☐ Satisfactory ☐ Unsatisfactory (Explain below)

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☐ Reg. Mgr./SIS Foreign Representative ☐ Insp. File		

Brown & Root Inc.

INTEROFFICE MEMO

IM# 26,729

January 26, 1984

TO: M. Coats

FROM: J.T. Blixt

SUBJECT: 35-1195, CPSES
SIS #369B.

NCR 12,542 was written to identify that Heat #28550 was used on hanger CS-1-112-720-C41R without meeting the requirements of NB-2121 for Class 1 material. In addition, Mechanical QE will perform an indepth search, both manual and computer, for possible usage on large bore and small bore hangers. If any discrepancies are found, they will be addressed on individual NCRs.

Further, B&R, QE and Receiving QC will review/annotate the "Heat Number Log" and the heat number card file (originated in accordance with CP-QAP-8.1), to include both the ASME Subsection (i.e., NB vs. NF) and the ASME class for plates only. This will include revising Para. 3.12 of CP-QAP-8.1 to require including applicable ASME Code Class (i.e., NB-Class 1 or NF Class 1).

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.
QA File

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

CASE EXHIBIT 1,052

367-A

CUSTOMER IDENTIFICATION

To (Name and Title)	DATE	SHEET
Mr. Gordon Purdy, Site Q. A. Manager	October 31, 1983	1

CUSTOMER'S COMPANY NAME	INSP. BRANCH	INSP. REGION OR FOREIGN COUNTRY	(REGIONAL USE ONLY)
Brown & Root, Inc.	Houston	Houston	☐ Follow-Up ☐ Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas 76043

☐ Shop ☒ Field Assembly ☐ Repair ☐ Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 10/25/83 (Date) and find the following sections:

☐ Satisfactory: (Give Numbers and Titles)

☒ Unsatisfactory: (Identify QA QC manual section [no. and Title] OR identify the specific nonconformance as applicable)

Section 17 Corrective Action

See Attached

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: 11/8/83 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (MSB Inspector)
☒ Reg. Mgr. / ☐ SIS Foreign Representative ☒ Insp. ☒ File	10/31/83	J. C. Hair

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY: (Continue on Reverse Side if Necessary)

As verbally discussed with the inspector on November 2, 1983, no response necessary.

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)
N/A	November 8, 1983	

REMONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: _____ (Date)

and found them: ☐ Satisfactory ☐ Unsatisfactory (Explain below)

DISTRIBUTION	DATE SIGNED	SIGNED (MSB Inspector)
☐ Reg. Mgr. / ☐ SIS Foreign Representative ☐ Insp. ☐ File		

39 REV 11/78 (SIS)

Since SIS Report 939 # 367 was written, the following NCR's have been presented for ANI disposition concurrence. They all have Class 2 material, or material that is not certified to any Code Class installed, on the following Class I hangers.

(1) 11,294-S Hgr. RC-1-072-703-C41K HT 41688 RIR 16312 RIR is unable to be located by PPRV personnel.

(2) 11,299-S Hgr. RC-1-161-001-C81K HT 17300 PPRV personnel is unable to locate a RIR for this #.

(3) 11,337-S Hgr. RC-1-035-704-C41R HT 41688 Same as (1).

(4) 11,296-S Hgr. RC-1-018-016-C81K 801P05170 RIR 17061 Class 2 with CMTR.

(5) 11,297-S Hgr. RC-1-052-019-C41R 801P05170 Same as (4).

(6) 11,293-S Hgr. SI-1-026-710-C41R 054302 RIR 14508 Material not certified to any Class; contains CMTR only.

(7) 11,301-S Hgr. RC-1-146-001-C81S 054302 Same as (6).

(8) 11,338 Hgr. RC-1-163-009-C81S D27580 RIR 18530 Material not certified to any Code Class. C of C does not list type & grade of material.

(9) 11,295-S Hgr. SI-1-090-08-C41K 801P05170 Same as (4).

(10) 11,343 Hgr. RH-1-001-010-C41K 66190 RIR 17036 Class 2 with CMTR.

(11) 11,344 Hgr. RC 1-161-005-C81K 66190 Same as (10).

(12) 11,345 Hgr. SI-1-182-007-C41R 69E706 17036 Same as (10).

RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

THE HARTFORD STEAM BOILER INSPECTION and INSURANCE COMPANY

HARTFORD, CONNECTICUT 06102

#357

Name: Purdy, Site Q. A. Manager		Date: October 25, 1983	Page 1 of 3
& Root, Inc.	HSB Branch: Houston	Region: Houston	Regional Use Only: Follow-Up Required / Closed
Glen Rose, Texas		Shop / X Field Assembly	Repair / Alteration / Inservice

I, the undersigned, have monitored your QA/QC manual on: 10/25/83 (Date) and find the following sections:

(Give Numbers and Titles)

(Identify QA/QC manual section (No. and Title) OR identify the specific nonconformance as applicable)

Section 17 Corrective Action

See Attached:

Scheduled monthly monitoring

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: 11/8/83 (Date)

Please keep the Original of this form for your records and return a copy to inspector named below.

Distribution: Reg. Mgr. / SIS Foreign Representative / X Insp. File — Date Signed: 10/25/83 — Signed (HSB Inspector): [signature]

CUSTOMER'S RESOLUTION

Resolution of those items described above as being unsatisfactory (Continue on Reverse Side if necessary)

See attached IM # 26,407.

☐ OVER

Date corrective action will be completed: 11/10/83 — Date Signed: 11/10/83 — Signed (Customer's Representative): [signature]

I, the undersigned, have remonitored the above unsatisfactory conditions on: ____________ (Date)

and found them: ☐ Satisfactory ☐ Unsatisfactory (Explain below)

Distribution: Reg. Mgr. / SIS Foreign Representative / Insp. File — Date Signed: — Signed (HSB Inspector):

(D) Voided CAR's

(1) S-55, S-56-R.1
These CAR's were not voided in accordance with this Section of the Q. A. Manual.

(E) Material Discrepancies

(1) NCR M11,284-S Class 2 bolting material installed on Class 1 hanger RC-1-075-054 C61P.
(2) NCR M11,286-S Same as above CS-1-080-002-C41S.
(3) NCR M11,287-S Same as above RC-1 087-004 C81K.

There have been several NCR's issued identifying Class 2 and 3 material installed on a Class 1 item or system. In these cases the material was issued from the warehouse and a Level II inspector signed saying the correct material was issued from the warehouse and installed. To this date, no Corrective Action has been taken.

(F) Section 17 states the ANI will receive copies of Corrective Action Requests. This has not been complied with.

Brown & Root Inc.

INTEROFFICE MEMO

TO: [illegible]

DATE: November 9, 1983

FROM: M. Coats

THRU: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS Report #367.

In response to the inspector's opinion that "...there is no objective evidence that any corrective action has been taken as prescribed in this Section (17.2) of the QA Manual", Brown & Root feels that this inspector has not comprehended the intent of the first paragraph in Section 17.2. The Brown & Root Site QA Manager, has documented his "review of identified nonconforming conditions" in the Quarterly Report "to determine if significant conditions adverse to quality" exist. Further, as stated in Section 17.1 Scope: "This section establishes the methods(plural) for ensuring that conditions adverse to quality are promptly evaluated and reported". Only those "significantly" adverse conditions which are identified as such by the Site QA Manager's reviews will have a CAR prepared. All others are reported to the appropriate levels of management "via IR's, NCR's, CMC's, DCA's and the causes of the conditions are corrected".

Item A

These figures are correctly copied off of the last Brown & Root QA Quarterly Report furnished to you as information only and since the inspector has not identified a specific unsatisfactory item, B&R must assume that no response is required.

Item B Inspection Reports

QAM Section 17.2 - A documented review of identified nonconforming conditions (i.e., IR's, NCR's, CMC's, DCA's as delineated in Section 16.0) shall be accomplished by the Site QAM at least quarterly to determine if significant conditions adverse to quality are developing and to further assess the adequacy of the QA Program.

16.3.2...."These deficiences are identified and documented by the QC Group on an Inspection Report (IR: EX 16.2). These Inspection Reports are logged, issued to applicable construction discipline, and tracked by the QC department. At the end of each quarter, the QC department will forward a copy of the IR log to the QE Group for Trend Analysis". If the inspector had informed the QE Group that he required the trending results, the trended copy of the IR log would have been made available for his review. It is therefore requested that as a courtesy, B&R QA/QC be offered the opportunity to at least produce the back up material being monitored prior to receiving an Unsat SIS 939.

1. Auxiliary Building Task Force shows no trending to determine the cause of discrepancies. Examples:

   a) SW-3-173-702-A33R Unsat IR #1021 - C-16
   b) CC-1-EC-007-011-3 Unsat IR # [illegible] - C-16
   c) CS-2-038-007-A53R Unsat IR #[illegible] - C-16 & C-12
   d) CH-2-AB-024-005-3 Unsat IR #3376 - (this quarter)

2. Safeguard Task Force

a) AF-1-004-003-5[illegible]R Unsat IR # 211[illegible] - C-16
b) [illegible]-1-017-019-5[illegible]R Unsat IR # [illegible]72 - C-16
c) CS-1-SI-043-00[illegible]-2 Unsat IR #1116 - C-16
d) AF-1-103-011-533R Unsat IR #1360 - C-5

3. RCB

a) MS-1-150-049-C[illegible]2K Unsat IR # 19 - C-11
b) CS-1-RB-006-003-2 Unsat IR # 148 - C-16
c) RC-1-075-053-C61R Unsat IR # 1479 - C-16
RC-1-075-053-C61R Unsat IR # 104 - C-16
d) SI-1-089-009-C41S Unsat IR # 2195 - C-16, C-11, C-20

All of the examples above were trended (as shown) in the Quarterly Trend IR Log maintained by the QE Group, except for #3076 which was initiated during the present quarter.

The inspector's statement that "the unsatisfactory inspection reports are not trended to determine whether original faulty inspection or a design change triggered the follow-up unsatisfactory IR", is not totally correct since 319 IR's were logged against category C-5; that is "Dwg/CMC (incomplete/ incorrect)". The inspector is partly correct, in that some of these "unsat" IR's were written after the items had been acceptably signed off by the ANI's and as such should have been trended as C-28, that is "Inspection/ Surveillance". The inspectors opinion that "There is no objective evidence that QC inspectors are monitored to assure adequate inspections are being performed to reduce the number of NCR's generated for welding discrepancies", is without merit.

Contrary to the inspector's misconception, the performance of QC inspection personnel is evaluated semi-annually by the Site Level III's. Further, the Site Level III's have the authority and responsibility to revoke or suspend certifications when sufficient reason exist to question the individual's performance or capability. To date the ANI's have not identified specific personnel who they feel are increasing "the number of NCR's generated for welding discrepancies", and since per QAM Section 20.4 "The ANI shall be given the opportunity to reinspect and verify satisfactory completion of the disposition prior to closure on the Nonconformance Report", it would be assumed that "the ANI's dated signature on the NCR" would substantiate this. The Level III's validate NCR's initiated by a Level II after another Level II had previously accepted the item.

NOTE: There is not nor has there ever been a requirement in the QAM Section 16 or 17 requiring "monitoring" QCI's to assure adequate inspections are being performed.

Item C

1. This is a correct statement and is closed based on ANI remonitoring.

2. PPRV Log is not showing any CAR's after S42. S-43 thru S-56 are filled in the book". QAM Section 17.0 does not address PPRV and would be outside the scope of this section of the QAM. At present B&R has no requirements for monitoring a PPRV Log for information or any other reason.

1. The inspectors statement that "There is no NCR Coordinator to maintain the CAR Log", is correct but since QAM Section 17.2 (10/10/83) states "The Quality Engineering (QE) Group shall maintain a CAR Log (Exhibit 17.2)..." Brown & Root is again unable to identify a specific unsat item to make a response to.

Item D

1. Voided CAR's S-55 & S-56 R.1

Brown & Root disagrees with the inspectors opinion that "These CAR's were not voided in accordance with this section of the QAM". As previously stated in response to Mr. W.D. Tillman's letter dated August 8, 1983, "CAR S-56 R.1 was never issued as the lack of the SQAM's signature would indicate", and CAR S-55 was correctly voided per the requirements of the revision in effect at the time.

Item E

The opening statement is the only part of the ANI's personal assumption that is true. It would appear that he has not researched comprehended the NCR's (even though he signed them), because these NCR's identify "color coded" materials incorrectly applied, not incorrectly issued material. The original nuts were correctly issued on MR's No. 202984, 181705 and 203293 for installation on their respective hangers and were replaced by the craft with the incorrect color coded ones. The inspectors closing statement that, "...no corrective action has been taken"; is very misleading since NCR's have been written in each case. But if the inspector is requesting a CAR rather than just corrective action, B&R feels that this is not a "significantly adverse condition".

Item F

This inspection statement that "Section 17 states the ANI will receive copies of CAR's" is correct. But the statement that this has not been complied with is incorrect. B&R has and will continue to distribute copies of CAR's as required by Section 17.2. Further, since no problem of this nature was identified by Hartford CPSES Audit of July 13, & 14, 1983, B&R must assume that again only this inspector "feels" this is not being complied with.

In closing, B&R must re-iterate that as demonstrated in the above responses, if the inspector had, as a courtesy (if nothing else), offered B&R QA/QC the opportunity to at least produce the documentation being monitored, prior to being "blind-sided" by and "Unsat" SIS 939, alot of time and expense could be saved.

Should you have any question or if we can be of further assistance, please do not hesitate to call G.L. Morris, Jr. at extension 743.

J.T. Blixt
QE Group Supervisor

JTB:bm
cc: W.D. Tillman
G.R. Purdy
R. Siever
G.L. Morris, Jr.

SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

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

– CASE EXHIBIT NO. 1,053

367-B

CUSTOMER IDENTIFICATION

TO (Name and Title)		DATE	SHEET	OF
Gordon Purdy, Site Q. A. Manager		November 18, 1983	1	5
CUSTOMER'S COMPANY NAME	INSP. BRANCH	INSP. REGION OR FOREIGN COUNTRY	(REGIONAL USE ONLY)	
Brown & Root, Inc.	Houston	Houston	☐ Follow-Up Required ☐ Closed	
INSPECTION LOCATION		☐ Shop ☒ Field Assembly ☐ Repair/ Alteration ☐ Inservice		
CPSES Glen Rose, Texas 76043				

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 11/18/83 (Date) and find the following sections:

(Give Numbers and Titles)

☐ Satisfactory:

(Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

☒ Unsatisfactory: Section 17 Corrective Action

See Attached

☐ OVER

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: December 7, 1983 (Date).

Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☒ Reg. Mgr. / SIS Foreign Representative ☒ Insp. File	11/18/83	

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

See attached IM#26,589

☐ OVER

DATE CORRECTIVE ACTION WILL BE COMPLETED	DATE SIGNED	SIGNED (Customer's Representative)
1/15/84	12/20/83	

RE-MONITORING RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 1/4/84 (Date)

and found them: ☒ Satisfactory ☐ Unsatisfactory (Explain below)

Attached Response Was Been Found Acceptable.

DISTRIBUTION	DATE SIGNED	SIGNED (HSB Inspector)
☐ Reg. Mgr. / SIS Foreign Representative ☐ Insp. File	1/4/84	

939 REV. 11/78 (SIS)

Brown & Root's response to 939 nos. 367 & 367A is not acceptable. It should be understood that the Authorized Nuclear Inspector has a statutory duty to monitor the Certificate Holder's program for compliance. The above reports were initiated by virtue of the Inspector complying with this mandate. I cannot comprehend the animosity and facetious of a response that makes reference to the Inspector's "personal assumptions", "misconceptions" and "blind-siding".

It should be understood that a 939 monitoring report is not an "indictment" of Brown & Root's program but is a required mechanism for the ANI to assure full compliance with ASME quality requirements.

While the above reports were not written in the context of "findings" of noncompliance, when one examines the impact of the items identified on Brown & Root's programmatic compliance with ASME Section III, there is cause for Inspector concern in the area of corrective action.

In the future, Authorized Nuclear Inspectors will initiate monitoring reports in a format of "Findings" and "Areas of Concern". This should provide clarity for necessary responses.

The above reports contained both areas of concern and findings. These are reiterated as follows:

FINDING: ASME III NA-4800 requires that "conditions adverse to quality be promptly identified and reported". Additionally "measures shall assure that the cause of the conditions adverse to quality be determined and corrected to preclude repetition". The identification, cause, and corrective action shall be documented". In Brown & Root's response to 939 # 367, it is stated that "The Inspector has not comprehended the intent of the first paragraph in Section 17.2". It shall be noted that the use of the term "significant" is Brown & Root's own. The above Code paragraph makes no mention of this term. An identified condition that renders hardware or supporting documentation unacceptable for ASME certification is in every case significant. The aforementioned response also states that "All others (conditions adverse to quality) are reported to the appropriate levels of management via IR's, NCR's, CMC's, DCA's and the causes of the conditions are corrected". This is erroneous in that the nonconformance is corrected by the above documents but the cause is not addressed.

FINDING: In items A & B of 939 #367-B the Inspector noted the volume of NCRs by condition as listed in Brown and Root's Quarterly Report. Additionally, he listed examples of IR's that, in the manner trended, did not identify the cause of the adverse condition. Virtually all the NCR's and IR's were initiated on reverification inspections. The cause can logically be attributed to one of three (3) circumstances.

(a) Inadequate design drawing and/or interim design change (CMC).

(b) Inadequate inspections on initial process packages.

(c) Further work or damage incurred between initial and reverification inspections.

It is difficult to understand how 1727 identified welding discrepancies are not deemed significant enough to warrant corrective action to preclude repetition.

E

FINDING: The Inspector identified three Class 1 supports that were installed with some items not acceptable for Class 1 installation. He subsequently identified twelve additional supports with like nonconformances. In addition to the NCRs identified, the Site ANI's have repeatedly identified nonconformaning Class 1 piping attachment material installed in the field. In addition to the above, it has been necessary for Engineering to reconcile Class 2 pressure retaining material in accordance with NB-3673 after installation in Class 1 fabrication. In addition to the above, the Inspector who initiated 939 #367 has previously identified non conforming Orifice Flange Plugs installed in the field via a previously issued 939. To date, there has been no documented determination of cause nor corrective action to address issuance of nonconformaning material to the field for installation.

B AREA OF CONCERN:

The Inspector stated that "No objective evidence exists that Quality Control Inspectors are monitored to assure adequate inspections are being performed to reduce the number of NCRs generated for welding discrepancies". This statement was keyed by the fact that hundreds of welds previously accepted have been rejected by NCRs and IRs and subsequently trended in category C-16. Brown and Root's response states "Contrary to the Inspector's misconception, the performance of QC inspection personnel is evaluated semi-annually by 'Site Level III's". There is no misconception on the part of the Inspector. The Site ANIs have no knowledge of documented evaluation of MIFI/VT certified QCI's. Brown and Root's response that "ANIs have not identified specific personnel.....Note: There is not nor has there ever been a requirement in the QA Manual requiring monitoring QCIs to assure adequate inspections are being preformed". The Inspector felt that considering the documented rejection of hundreds of previously accepted welds, Brown and Root QA would be sufficiently concerned to evaluate those previous inspections.

AREA OF CONCERN: C

Brown and Root has chosen to utilize a program of Trend Analysis to implement the requirements of ASME Section III, paragraph NA-4800. A review of all CARs initiated this calendar year (S-53, S-54, S-55, S-57) reveals that S-54 was initiated by an ANI monitoring report, S-55 by a TUGCO audit finding, S-57 by ANI monitoring report/932 SIS Reports. It is not considered by this Inspector that the only mechanism available to comply with NA-4800 is a Corrective Action Request. However, I can find no viable alternative in Section 17 of the QA Manual. It is also recognized that at times Brown and Root Q.A. has utilized Procedural revision to effect Corrective Action. Again however, full compliance with NA-4800 is not evident in that cause and resultant corrective action is not documented.

Brown & Root Inc.

INTEROFFICE MEMO

IM# 26,589

TO: M. Coats

December 27, 1983

FROM: G.R. Purdy

SUBJECT: CPSES, 35-1195
Response To SIS
Reports 367 And 367-B.

Although the subject reports specifically identify three(3) findings and two(2) concerns, I interprete all items to be generically addressing the philosophy and implementation of the B&R Corrective Action Program. After reviewing the data collected to substantiate the findings and concerns, I can understand the resulting conclusions. To establish a permanent record for ANI-ASME reference, the following is submitted for your review and acceptance:

1. Implementation of an effective "Corrective Action Program" in accordance with NA-4800 requires the effective implementation of an acceptable "Examination, Tests, and Inspection Program" in accordance with NA-4500.

2. Due to problems encountered by B&R QA, the NRC and the ANIA, the "Examination, Tests and Inspection Program" began an evolution of upgrading in early 1982, to establish conformance with "todays" environment and criteria; the current procedures are the result of approximately 15 months of evolution.

3. The large number of NCR's and/or Unsat IR's is the direct result of the corrective action taken to upgrade the "Examination, Tests, and Inspection Program":

   a.) The cause of nonconformances is indicated by the numeric designator in the trend code, as defined on Attachment 4 to CP-QAP-16.1. Should further investigation of an apparent trend warrant additional action by QE/Management, the "root" cause and corrective action are documented in accordance with Section 17 of the QA Manual;

   b.) The QE organization determined during Trend Analysis that the cause of the nonconforming conditions were the same causes which precipitated the program upgrading thereby not warranting additional corrective action;

   c.) The items rejected during final acceptance inspection were predominantely pre-1982 fabrication and installation activities, and not subjected to the current acceptance criteria; and

   d.) The greater that 50% QC rejection rate for pre-1982 work as compared to less that 10% rejection for post-1982 work indicates that not only is inspection being properly conducted but that the action taken to upgrade the program has precluded recurrence.

4. Following implementation of the "UnSat IR" program, the trend analysis for these documents was inadvertently omitted from the following Quarterly Report, although the evaluation had been conducted by QE, and had to be issued as a supplement.

5. A proposed revision to the B&R QA Manual will be submitted to the ANIS for review by 1/15/84, which will identify alternative methods for documenting corrective action.

Should you have any further questions, or if I may be of further assistance, please do not hesitate to contact me.

G.R. Purdy
Site QA Manager

GRP/bm

cc: W.D. Tillman
J.T. Blixt
R. Siever
G.L. Morris, Jr.
SQAM File

CASE EXHIBIT NO. 1,054

SIS REPORT

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

10-030

TO: Gordon Purdy, Site Q. A. Manager

DATE: Jan. 5, 1984 | SHEET: 1 | OF: 1

FROM: Marvin Coats, Lead ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc.

LOCATION	STREET	CITY	COUNTY	STATE	ZIP CODE
CPSES	Box 1001	Glen Rose	Somervell	Texas	76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE):

CONTRACT/P.O. NO.: 35-1195-0561

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

Subject: Use of Applied Force During Fabrication of Component Supports

Re: NCR M 11,809 (Support No. CC-1-048-001-A33R)

This report is written in response to Brown & Root's request that I accept the disposition of the referenced NCR.

I had requested that the disposition address Corrective Action to preclude repetition of the unauthorized use of a porta-power to spread the horizontal members of a box support in order to achieve required clearance. I have been informed that Pipe Support Engineering takes exception to any corrective action.

Apparently, Engineering claims to "Factor" in stresses imposed on weldments and pipe support members by forcibly "Springing" those members.

This rationale is not acceptable to the ANIA. It is our opinion that use of power equipment, wedges, etc. to correct misfabrication is a construction process as defined in Section 10 of Brown & Root's Q.A.M.

Failure to address this problem will result in perpetuation of craft personnel using applied force and issuance of Non Conformance Reports by Q. C.

☐ OVER

SIGNED M Coats

932 REV. 10-78 (SIS)

To: Gordon Purdy 5-7-84
From: JPC III
Subject: SIS 10-030

The subject SIS references NCR M-11,809 which is concerned with "use of applied force during fabrication of component supports". The subject NCR was dispositioned "use as is" which indicates that this practice is not a problem. To the contrary, it is very similar to using fitup clamps or piping to align the internal diameters, or the use of hydraulic jacks to align large diameter piping for fitup. This latter item was also documented on a SIS years ago when we were having problems fitting up a 30" SW pipe weld, and was satisfactorily closed with no corrective action since it was industry practice. As in this case, we plan to take no corrective action as what we're doing is acceptable to Engineering as documented in NCR M ~~10,030~~ 11,809.

JPC III

Jay Ryan

cc: Jay Ryan
Bob Siever

Brown & Root Inc.

INTEROFFICE MEMO

IM# 27,150 May 8, 1984

TO: M. Coats

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS #10-030.

In regards to the inspector's concern expressed in this SIS Report, please find attached the response from Construction and Engineering.

If you have any questions regarding this, please contact me at extension 459.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.
QA File

THIS SIR CLOSED BASED ON PSE CHIEF ENGINEER JAY RYAN ASSUMING RESPONSIBILITY.

M Coats 5/16/84

CASE EXHIBIT NO. 1,055

12-031

SIS REPORT

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

W.E. Baker, Senior Project Welding Engineer

DATE 1/24/84 | SHEET 1 | OF 2

FROM: B. Walker, ANI

H.O./BRANCH OFFICE Houston

ORGANIZATION Brown & Root

LOCATION STREET CPSES CITY Glen Rose COUNTY STATE Tx ZIP CODE

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE) B. Sievers, QC Group Supervisor

CONTRACT/P.O. NO.

REASON FOR VISIT Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): G. Purdy, QA Mgr.

Re: IM # 26701 (attached)

It is the opinion of this Inspector that revising your Multiple Weld Data Cards to reference QI-QAP-11.2-28 instead of QI-QAP-11.1-28 does not require re-submittal to ANI for preliminary review.

☐ OVER

SIGNED Billy Walker

Brown & Root, Inc.

INTEROFFICE MEMO

TM - 26701

January 23, 1984

TO: Gordon Purdy

FROM: W.E. Baker

SUBJECT: Q.C. Procedure Reference on Pipe Hanger Documentation

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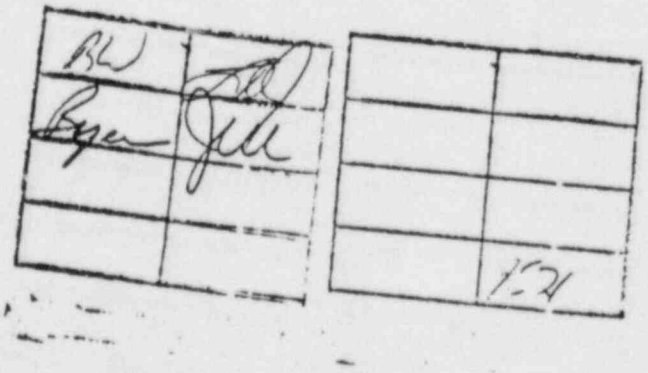
Due to the issuance of Q.C. Procedure QI-QAP 11.2-28, Rev. 0, the current Q.C. Procedure referenced on Hanger Weld Data Cards is obsolete. In order to use the existing cards in stock, hold down construction costs, and avoid recall of WDC's in use; Q.C. inspectors are being authorized by this memo to line thru the Q.C. procedure listed on the Weld Data Card, initial and date the line-thru, and add the current procedure reference for those WDC's already issued to the field. Welding Engineering personnel will correct those cards left in inventory prior to issuance. As needed, new card stock will be printed with the correct reference. This action will facilitate construction and preclude the unnecessary printing of new card stock for minor changes.

W.E. Baker
Sr. Project Welding Engineer

WEB/tln
cc: ANI



SIS RECORD FOR MONITORING Q.A./Q.C. PROGRAMS

CASE EXHIBIT NO. 1,056

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

371

CUSTOMER IDENTIFICATION

TO (Name and Title): Mr. Gordon Purdy, Site Q. A. Manager
DATE: Feb. 6, 1984
SHEET: 1 OF 3

CUSTOMER'S COMPANY NAME: Brown & Root, Inc.
INSP. BRANCH: Houston
INSP. REGION OR FOREIGN COUNTRY: Houston
(REGIONAL USE ONLY) ☐ Follow-Up Required ☐ Closed

INSPECTION LOCATION: CPSES Glen Rose, Texas 76043
☐ Shop ☒ Field Assembly ☐ Repair/Alteration ☐ Inservice

MONITORING RESULTS

I, the undersigned, have monitored your QA/QC manual on: 2-6-84 (Date) and find the following sections:

___ Satisfactory: (Give Numbers and Titles)

X Unsatisfactory: (Identify QA/QC manual section [No. and Title] OR identify the specific nonconformance as applicable)

Section 16 - Non conforming Items

Brown & Root Q.A. Manual and Q.A. Procedure #CP-QAP-16.1 desigrats the Q.E. Group with the responsibility to review NCRs clarity, adequacy, and conformance to Code requirements. The Q.C. Superintendent/Lead is given the responsibility of ensuring activities required by the NCR

See Attached

CUSTOMER: Please describe the resolution of these items in the "CUSTOMER'S RESOLUTION" section below, and give date for completion of corrective action, so that items may be remonitored by: Mar 1, 1984 (Date)
Please keep the Original of this form for your records and return a copy to inspector named below.

DISTRIBUTION: ☒ Reg. Mgr / SIS Foreign Representative ☒ Insp. File
DATE SIGNED: Feb. 6, 1984
SIGNED (HSB Inspector): [signature]

CUSTOMER'S RESOLUTION

RESOLUTION OF THOSE ITEMS DESCRIBED ABOVE AS BEING UNSATISFACTORY (Continue on Reverse Side if Necessary)

Response per attach IM# 26916 BW 3/30/87

BP	[initials]
Cem	[initials]
Byer	[initials]
[initials]	9511

DATE CORRECTIVE ACTION WILL BE COMPLETED:
DATE SIGNED:
SIGNED (Customer's Representative):

REMONITOR RESULTS

I, the undersigned, have remonitored the above unsatisfactory conditions on: 3/30/87 (Date)

and found them: ☑ Satisfactory ☐ Unsatisfactory (Explain below)

Per the attached response (IM# 26916), attached training records, and absense of reoccurrences, this condition is found satisfactory

DISTRIBUTION / SIS Foreign ... Insp. ... DATE SIGNED ... SIGNED (HSB Inspector)

disposition are verified and/or witnessed, and to close the NCR after ensuring that sufficient documentation exists to verify completion of the disposition, and that the supporting documentation is attached to or referenced on the NCR. Q.A. Procedure CP-QAP-16.1 further stipulates that questionable NCR conditions are to be resolved in accordance with the Q.C. and/or Q.E. Supervisors.

NCRs M-9946, M-9955, M-9956, M-9957, M-9958, M-9959, M-9964, M-9965, M-9969, M-9972, M-9980, M-9981, M-9985, and M-9987 were submitted to me by the site Mechanical NDE Level III for ANI concurrence to closure. He stated that the voided documents (as required by the NCR) were located in the vault. All of these NCR's were verified by Q.C. as being complete. None of these NCRs made reference to the voided COT's. I could not locate the previous COT's for NCR #'s M-9985 (one only), M-9980 (one only), M-9972, and M-9987. I did locate the previous COTs for NCR #'s M-9985 (one only), M-9981, and M-9980 and none of these travelers were voided.

NCR # M-9743 was written to upgrade support GHH-RTS-1-7 from Class 2 to Class 1. There is nothing indicating that the list of welders was made from the welders symbols stamped on each joint. IR #AM04431 identified a Code nameplate on a strut which was stamped Class 2. In order to upgrade this strut to Class 1, the name plate was removed. The IR was closed as satisfactory on 1/17/84. There is no indication on the NCR that a corrected data report was submitted. This NCR was verified as being complete by Q.C. on 1/23/84.

NCR #M-9740 was written to upgrade support GHH-RTS-1-3 from Class 2 to Class 1. There is nothing indicating that the list of welders was made from the welders symbols stamped on each joint. For welds 49, 50, 51, and 52, this would not have been feasible because these are hidden welds. (See IR #AM03612). This NCR was verified as being complete by Q.C. on 1/21/84.

NCR #M-9744 was written to upgrade support GHH-RTS-1-8 from Class 2 to Class 1. There is no indication that the list of welders was made from the welders symbols stamped on each joint. This NCR was verified as being complete by Q.C. on 1/25/84.

NCR #M-9739 was written to upgrade support GHH-RTS-1-2 from Class 2 to Class 1. There is no indication that the list of welders was made from the welders symbols stamped on each joint. This NCR was verified as being complete by Q.C. on 1/27/84.

NCR #M-9742 was written to upgrade support GHH-RTS-1-6 from Class 2 to Class 1. Q.C. inspector J. Massey prepared an inspection report on 12/19/83 indicating that welds 1,2, 5,6,7,13,15,17,18,19,20,21,22, 33,34,35,36, & 37 were not stamped with a welders symbol. W. Sims (QC/E) issued an inspection report on 1/6/84 disclaiming the welder symbol stamping as not being required. This is in direct contrast with the disposition of the NCR. This NCR was verified as complete by Q.C. on 1/30/84. Since these welds were not stamped with a welders symbol, the welders list could not have been made in accordance with the NCR disposition.

NCR #9741 was written to upgrade support GHH-RTS-1-5 from Class 2 to Class 1. IR #AM03611 was prepared by C. Saengerhausen on 12/19/83. Item 3 of the IR stated that only welds ? 4,7, & 8 were identified with welder symbol stamps. This item was deleted by W. Sims with a reference made to NCR M-9741 rev.1. C. Saengerhausen issued an IR on 12/19/83 to revise NCR M-9741, for which W. Sims issued an IR on 1/6/84 disclaiming the need for an NCR revision because Welding Engineering had established welder to weld joint traceability. This is not in accordance with the disposition of the NCR. As stated in Saengerhausen's IR, welder to weld joint traceability could not be established per the NCR disposition. There is nothing referenced on the NCR, included in the NCR, nor included in the hanger package which indicates that the material was verified by Q.A. as being acceptable for Class 1 application. On 1/9/84, I informed the Q.C. Group Supervisor that the disposition of this NCR could not be complied with. He stated that the only Code requirements are either welders symbols stamped on the welds or a tabulation of welders to each joint. He also stated that craft produced a tabulation and that the acceptability of the tabulation was not up to him. This is in conflict with NA-4210.

It is the opinion of this Inspector that the number of examples listed is indicative of a need to reinstruct personnel involved in preparing, reviewing, and closing NCR's to ensure that NCR's are clear and that the disposition is complete and completion is intelligible prior to Q.C. verification.

Brown & Root Inc.

INTEROFFI[illegible]MEMO

IM# 26,916 March 13, 1984

TO: W. Walker

FROM: R. Siever

SUBJECT: CPSES, 35-1195
SIS Report #371
Amended Response.

All NCRs referenced in paragraph 2 have been verified by QC and have the superseded Travelers and current Travelers referenced in the disposition.

The Quality Assurance Department has evaluated the method used by Welding Engineering, to map the welds on the RTS (incore instrument) supports. We have remapped all welds and identified welds that do not have welder traceability on an Inspection Report.

Process documentation has been generated to remove all welds and have them rewelded if traceability has not been established.

The NCRs referenced on the above SIS have been revised to reflect the above action.

NCR coordinators and QC Leads will be reinstructed in the requirements for reviewing, closing and revising NCRs.

If you have any questions, please contact me at extension 204.

R. Siever
QC Group Supervisor

RS/bm

cc: G.R. Purdy
J.T. Blixt
G.L. Morris, Jr.

Brown & Root Inc.

CASE EXHIBIT 1,057

INTEROFFICE MEMO

IM# 26,702 January 23, 1984

TO: B. Walker

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS Report 5-002.

---

1. Reference CPP 12,978

   The following situation is a isolated case. CPP 12,978 addresses a list of all intergal attachments that require impact testing. In the letter which was generated by Large Bore Engineering, it stated that material requiring impact testing will be noted on the hanger detail sketch. This particular support is one support on this letter that the detail sketch has not been revised as of this date. The following detail sketch will be revised by Large Bore Engineering.

2. The following support MS-1-001-00S-C77K was received pre-fabricated on the job site in the year of 1979 with manufacturer's data report NF-2. At that time MS-46A, Revision Z was applicable and impact testing wasn't required. Ref. 2323-MS-46A, page 358, para. 3.11.B.

If there are any questions regarding this response, please contact me at extension 459.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.

SIS REPORT

THE HARTFORD STEAM BOILER INSPECTION a... SURANCE COMPANY
HARTFORD, CONNECTICUT 06102

5-002A

TO: Gordon Purdy, Site Q. A. Manager	DATE 2-10-84 / SHEET 1 OF 1
FROM: Robert Byers, ANI	H.O./BRANCH OFFICE Houston
ORGANIZATION Brown & Root, Inc.	

LOCATION	STREET	CITY	COUNTY	STATE	ZIP CODE
CPSES	Box 1001	Glen Rose	Somervell	Texas	7604[illegible]

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. NO. 35-1195-03[illegible]

REASON FOR VISIT
Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

REF: IM #26,702

(1) I disagree with the statement "The following situation is a isolated case". In that two additional supports were found with the same deficiencies.
Hanger supports MS-1-03-007-C72K and MS-1-002-013-C72K both have welded attachments which require impact testing but the detail sketch does not specify this as a requirement.

(2) Although this support did not originally require impacted material. Subsequent revision of the Design Specifications mandates this material meet impact requirements.

In summation this Inspectors concerns are as follows:

A. The number of additional supports that exists in the field in which impact requirements have been overlooked.
B. These deficiencies were not identified until completion or near completion of fabrication.

SIGNED ...

☐ OVER

Speed Letter

To MIKE SIEVER
QC

From D. M. RENCHER

Subject W/A QUALIFICATION

MESSAGE

Date 2/17 19 84

Please note the following supports are currently being re-certified to add note concerning Welded Attachment qualification.

FW-1-017-008-C72S ✓
FW-1-018-003-C62S ✓
MS-1-002-014-C72K ✓
MS-1-003-007-C72K ✓
MS-1-003-009-C72K ✓
MS-1-004-005-C72K

Add other NPSI supports show the appropriate note. (where applicable).

Signed D M Rencher (X241)

REPLY

Date 19

Signed

Wilson Jones Company

RECIPIENT—RETAIN WHITE COPY, RETURN PINK COPY.

Brown & Root Inc.

INTEROFFIC EMO

IM# 26,856

March 13, 1984

TO: M. Coats

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS Report 5-002A.

A. Hanger Engineering has been notified of our concern with the subject addressed on SIS Report 5-002 and 5-002A. The attached list reflects the only hanger detail sketches left that have not been revised as of this date, to indicate impact requirements on the sketch as stated per CPP-12,978.

B. Engineering has notified me that these deficiencies were being identified on a case by case basis. Engineering has been notified that in order to certify these hangers, we need the detail sketches revised to indicate impact requirements. Engineering is now in the process of recertifying the hanger detail sketches that need impact testing on the sketches (Ref. attached letter).

If there are any questions regarding this response, please contact me at extension 459.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.

Acceptable response R. Boyce 3/14/84

SIS REPORT

CASE EXHIBIT NO. 1,058

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

10-032

TO: Bob Siever, Q. C. Group Supervisor

DATE: 2-17-84 | SHEET 1 OF 1

FROM: Robert Byers, ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc

LOCATION	STREET	CITY	COUNTY	STATE	ZIP CODE
CPSES	Box 1001	Glen Rose	Somervell	Texas	76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE):

CONTRACT/P.O. NO.: 35-1195-056

REASON FOR VISIT: Full time contract

COPIES SENT TO: ☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

An inspection of hidden welds on support number CC-2-008-403-S33R disclosed the following discrepancy:

Welder A. Lopez, (welder's symbol "BGL") was questioned by myself in regards to interpass temperature while welding to embed plates. Mr. Lopez admitted he did not know the thickness of the embed plate he was welding to, nor did he check the interpass temperature during welding.

Reference documents: 10.2 QAM

WPS 11032

JCC	BP
CEM	AJ
DJR	[illegible]
JLH	JSH

☐ OVER

SIGNED: Bob B

Brown & Root, Inc.

INTEROFFICE MEMO

TO: R. Byers

March 9, 1984

FROM: R. Siever

SUBJECT: CPSES, 35-1195
SIS #10-032.

The welder identified on the above SIS, has been retrained to the requirement of the WPS (see attachment).

The Quality Control department has been instructed to monitor preheat and interpass temperatures two days per week (see attachment).

If you have any questions, please contact me at extension 204.

R. Siever
QC Group Supervisor

RS/bm

w/attachment
cc: G.R. Purdy
J.T. Blixt
G.L. Morris, Jr.

Acceptable Response R. Byers 3/14/84

Brown & Root, Inc.

STRUCTURAL WELDER ORIENTATION

I have read the Structural Welder Orientation and I agree to follow the requirements listed in it and the requirements listed below;

(1) The requirements of the procedures used on the job site.

(2) The requirements of the Welding Procedure Specification (WPS). This includes the preheat, interpass temperature, root gap, amperage, voltage, travel speed, maximum bead width, polarity, rod type and size.

I understand that if I have any problem with the above I am to report it to my Foreman or the Weld Tech. in the area.

Name [illegible]

Date 3-7-84

Badge R154

Symbol BCL

This copy is to be placed in each welders certification file.

JEH/pam

Brown & Root, Inc.

INTEROFFICE MO

TO: Distribution March 9, 1984

FROM: R. Siever

SUBJECT: CPSES, 35-1195
Preheat And Interpass Temperature.

Quality Control shall monitor preheat and interpass temperatures at a minimum of two days per week. The QA/QC Building Supervisors shall prepare an assignment schedule for each unit and assign one QCI for this activity to each unit. Result of this activity shall be recorded on the inprocess documentation for the item verified. This activity shall be implemented by March 12, 1984.

R. Siever
QC Group Supervisor

RS/bm

cc: G.R. Purdy
J.T. Blixt
D. Woodyard
G. Bennetzen
D. Snow
W. Mansfield
L. Wilkerson

CASE EXHIBIT NO. 1,059

SIS REPORT

THE HARTFORD STEAM BOILER INSPECTION INSURANCE COMPANY
HARTFORD, CONNECTICUT 06102

10-033

TO: Gordon Purdy, Site Q. A. Manager

DATE: 4-13-84 | SHEET: 1 | OF: 1

FROM: Jerry Lytle, ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc.

LOCATION	STREET	CITY	COUNTY	STATE	ZIP CODE
C.P.S.E.S.	Box 1001	Glen Rose	Somervell	Texas	76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. NO.: 35-1195-0561

REASON FOR VISIT: Full time contract

COPIES SENT TO:
☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI file

Subject: Inspection Reports.

References: CP-QAP-11.1

SIS Report G-037

Contrary to the above references, there are numerous Inspection Reports, including Threading Inspection Reports, that are not being numbered.

Example: Threaded Inspection Reports written 4-11-84 and 4-12-84 for ISO. CC-1-SB-015 (found during N-5 review by ANI).

Closed 5/7/84 by SIS #378 JLL 5/7/84

SIGNED Jerry W. Lytle ☐ OVER

Brown & Root, Inc.

INTEROFFICE MEMO

IM# 27,131 DATE: May 3, 1984

TO: M. Coats, ANI

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS Report 932 #10-033 and #11-011

In response to the above referenced reports the QA/QC Department has been instructed to the following:

Satisfactory Inspection Reports do not require an identification serial number. When a satisfactory inspection is performed on an item and the results of that inspection are recorded on an Inspection Report (IR), the IR shall contain sufficient identification to maintain traceability to the item and shall become part of the item's documentation package along with the process documents.

Unsatisfactory inspections which are reported on an "Unsat IR" require the assignment of serial numbers, traceable to a log, for tracking purposes to assure further processing and closure.

If you have any questions regarding this response, please contact me at extension 459.

JTBlixt

J.T. Blixt,
QE Group Supervisor

JTB/kdm

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.

SIS REPORT

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

CASE EXHIBIT NO. 1,060

10-034

TO: Gordon Purdy, Site Q.A. Manager

DATE: 4-18-84 | SHEET: 1 | OF: 1

FROM: Marvin Coats, L. ANI

H.O./BRANCH OFFICE: Houston

ORGANIZATION: Brown & Root, Inc.

LOCATION	STREET	CITY	COUNTY	STATE	ZIP CODE
C.P.S.E.S.	Box 1001	Glen Rose	Somervell	Texas	76043

PERSON CONTACTED (GIVE NAME AND OFFICIAL TITLE)

CONTRACT/P.O. NO.: 35-1195-0561

REASON FOR VISIT: Full time contract

COPIES SENT TO:

☐ H.O. Eng Claim, SIS ☐ Chief Inspector ☒ Regional Manager, SIS ☒ Other (Specify): ANI

Subject: Welded Attachments to Large Bore Main Steam and Feed Water Piping

Due to repeated identification of non-compliance with Design Specification requirements for notch toughness material to be used in above applications request that all packages on these systems be re-presented to the ANI for establishment of hold points.

SIGNED

☐ OVER

932 REV. 10-78 (SIS)

Brown & Root, Inc.

P.O. BOX 1001 GLEN ROSE TEXAS 76043

MESSAGE	REPLY

To: BILL BAKER
PWL

DATE 4-19-1984

PER ATTACHED SIS REPORT 932 #10-034, ANI REQUEST ALL PACKAGES ON WELDED ATTACHMENTS TO LARGE BORE MAIN STEAM AND FEED WATER PIPING BE PRESENTED TO ANI FOR ESTABLISHMENT OF HOLD POINTS. THE PACKAGES SHALL INCLUDE COMPLETED PACKAGES (~~NOT~~ WHICH ARE NOT TRANSFERED TO PPRV), ~~IN PROCESS PACKAGES~~ AND ~~FUTURE~~ PACKAGES. C.C. TO JOHN FINNERAN

BY Salah Y. Roadline DIC 4/19/84

REPLY:

DATE

OK

SIGNED W.E. Baker

DETACH AND FILE FOR FOLLOW-UP

Brown & Root Inc.

INTEROFFI EMO

IM# 27,151 May 8, 1984

TO: M. Coats

FROM: J.T. Blixt

SUBJECT: CPSES, 35-1195
SIS #10-034.

Mr. W.E. Baker, Pipe Welding Engineer, has instructed his personnel to route the subject packages to ANI.

J.T. Blixt
QE Group Supervisor

JTB/bm

cc: G.R. Purdy
R. Siever
G.L. Morris, Jr.

ACCEPTABLE FOR CLOSURE. PSE IS IN PROCESS OF REVIEWING ALL AFFECTED SUPPORTS.

M Coats 5/14/84

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	}{	
	}{	
TEXAS UTILITIES ELECTRIC	}{	Docket Nos. 50-445-1
COMPANY, et al.	}{	and 50-446-1
(Comanche Peak Steam Electric	}{	
Station, Units 1 and 2)	}{	

CERTIFICATE OF SERVICE

By my signature below, I hereby certify that true and correct copies of

CASE's Motions Regarding ANI Documents

have been sent to the names listed below this 14th day of August, 1984, by: Express Mail where indicated by * and First Class Mail elsewhere.

* Administrative Judge Peter B. Bloch
U. S. Nuclear Regulatory Commission
4350 East/West Highway, 4th Floor
Bethesda, Maryland 20814

* Ms. Ellen Ginsberg, Law Clerk
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Bethesda, Maryland 20814

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