nps industries, inc.

Maintenance & Inspection

NCR M 25 ??? Pg. 9 of 28

MI No. 3	Dated 9/26/80	Revision No. 0	

TITLE: PROCEDURE FOR CONFIRMING FULL THREAD ENGAGEMENT VIA EYE ROD MEASUREMENT FOR RIGID SWAY STRUTS

SCOPE OF:

INFORMATION COPY

	APPROVAL SIGNATURES			
	Original Issue	Rev.1	Rev.2	Rev.3
Prepared By:	R.P. Dembler 9/26/80			
Checked By:	Csaba Kertész 9/30/80			
Approved By:	Leo Horn 9/30/80			

nps

nps industries

Revision No. 0	Title: PROCEDURE FOR CONFIRMING FULL THREAD ENGAGEMENT VIA EYE ROD MEASUREMENT FOR RIGID SWAY STRUTS	Maintenance & Inspection No. MI 03
Date: 9/26/80		Page 1 of 2

A. Forged Eye Rods:

1. Determine sway strut size by measurement of rod diameter or checking size code forged into the eye rod.

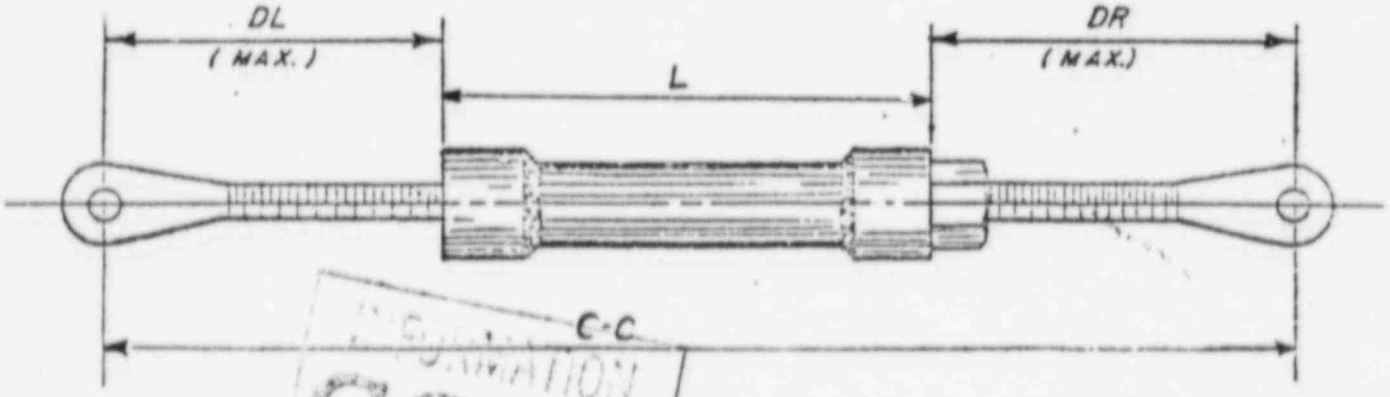
2. Verify design C-C equals or exceeds the minimum value listed in Table 1 or Measure L and determine if it equals or exceeds the minimum value listed in Table 1.

3A. If C-C or L equals or exceeds minimum value, verify DL and DR do not exceed maximum values listed.

3B. If C-C or L is less than the minimum value, unpin one end of strut and verify by unscrewing rod ends that the ends are upset and/or are fully engaged.

TABLE 1

ROD SIZE	STRUT SIZE	C-C MIN.	L MIN.	DL MAX.	DR MAX.
3/4	06	19-3/8	9-1/2	5-13/16	6-9/16
1	08	21-1/2	10	6 -1/2	7-1/2
1-1/4	10	24-3/4	10-1/2	7-3/4	9
1-1/2	12	23-1/4	11	6-5/8	8-1/8
1-3/4	14	28-1/4	11-1/2	8-3/4	10-1/2



Revision No. 0	Title: PROCEDURE FOR CONFIRMING FULL THREAD ENGAGEMENT VIA EYE ROD MEASUREMENT FOR RIGID SWAY STRUTS	Maintenance & Inspection No. MI #3
Date: 9/26/80		Page 2 of 2

B. Fabricated Eye Rods:

1. Determine sway strut size by measurement of rod diameter.

2. If strut is Size 20, determine if it is long pattern or short pattern by measuring E.

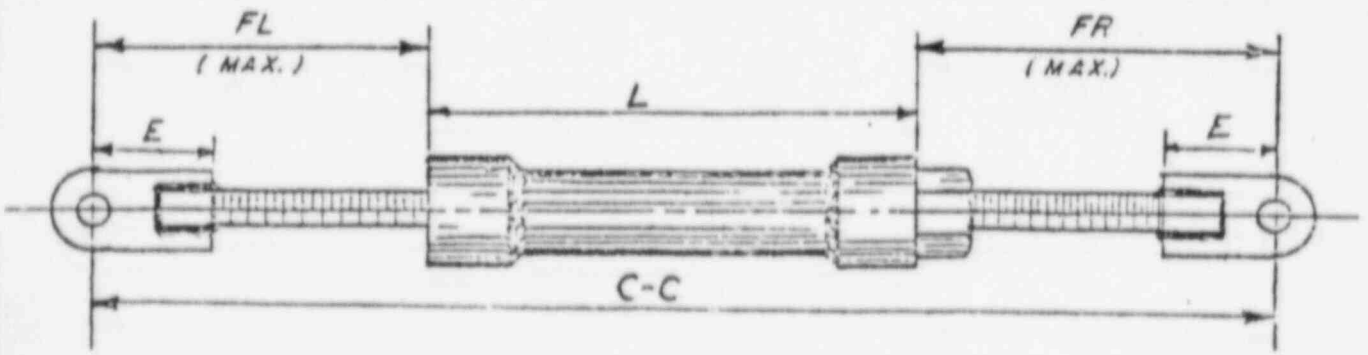
3. Verify design C-C equals or exceeds the minimum value listed in Table 2 or measure L and determine if it equals or exceeds the minimum value listed in Table 2.

4A. If C-C or L equals or exceeds minimum value, verify FL and FR do not exceed maximum values listed.

4B. If C-C or L is less than the minimum value, unpin one end of strut and verify by unscrewing rod ends that the ends are upset and/or are fully engaged.

TABLE 2

ROD SIZE	E	STRUT SIZE	C-C MIN.	L MIN.	FL MAX.	FR MAX.
3/4	-	06	19-5/8	9-1/2	5-7/16	6-3/16
1	-	08	21-1/8	10	5-13/16	6-13/16
1-1/4	-	10	24-1/8	10-1/2	6-15/16	8-3/16
1-3/4	-	14	31	11-1/2	9-5/8	11-3/8
2-1/2	5-3/8	20 (short)	31-1/2	13	8-3/4	11-1/4
2-1/2	8-5/8	20 (long)	38	13	12	14-1/2
3	-	24	41-1/4	14	12-7/8	15-7/8
4-1/2	-	36	54-1/2	17	17-1/4	21-3/4



nps industries, inc.
one harmon plaza
secaucus, new jersey 07094
201-865-6550 telex 14-1435

NCR ... Pg. 12 of 28

October 23, 1980
NPSI-12-1052

RECEIVED
NOV 3 1980
P & H STATUS

Texas Utilities Services, Inc.
P.O. Box 1002
Glen Rose, Texas 76043

Attention: J.T. Merritt, Jr./R.T. Wolantejus

Subject: Texas Utilities Gen. Co.
Comanche Peak Stm. Elec. Sta.
Units 1 and 2
Purchase Order No. CP0046 A.1

Subject: (PMI No. 3.1.2) Thread Upsetting on Welded Sway Struts

Ref.: NPSI-12-1016, TWX-12,489

Gentlemen:

NPS Industries is transmitting to TUSI (PMI No. 3.1.2, Rev. 0) Thread Upsetting on Welded Sway Struts procedure for your use.

If I can be of any further assistance, please do not hesitate to contact me.

Very truly yours,

NPS INDUSTRIES, INC.

Herman W. D'Errico

Herman W. D'Errico
Project Manager

HWD:rmg
Attachments: (1) 2 pages

INFORMATION COPY
PPRV

cc: H.R. Rock, G&H 2L
D.C. Frankum, B&R 1L
J.T. Merritt, TUSI OL, 1L, 1A
R.E. Holloway, G&H 1L
J. Oliver, NPSI @ TUSI 1L

ARMS INDEXED

Brown & Root, Inc.

QA RECORD

QUALITY ASSURANCE DEPARTMENT
NONCONFORMANCE REPORT (NCR)

NCR No. M-1889

PROJECT CPSES | JOB NO. 35-1195 | PAGE 1 OF 2

(2) UNIT	STRUCTURE SYSTEM	COMPONENT	TAG/ID NUMBER	LOCATION OR ELEVATION	RIR NO.
1	CT-1-013-004-032S	Pipe Support	N/A	elev. 921' Quadrant 0°-270°	N/A

(3) NONCONFORMING CONDITION

(3) DOCUMENT VIOLATED: CPM 6.9 REV 0 PARA 3.5.28.3

(4) TREND CATEGORY: M-5

FW#9 has grinding under-cut in base metal approx. 4" long, width 1-½", depth 1/16" to 3/32".

NOTE: 1. This hanger is N.P.S. furnished
2. Hold Tag Applied

FOIA-85-59

S/1

INFORMATION COPY PPRV

BROWN & ROOT, INC. RECEIVED FEB 4 1980 QUALITY ASSURANCE

(5) REPORTED BY	(6) DATE	(9) REVIEW/APPROVAL	(10) DATE
B. Snellgrove	12/17/79	J. Clarke	12/17/79
(7) PREPARED BY	**(8) DATE**	**(11) ISSUED BY**	**(12) DATE**
B. Snellgrove	12/17/79	Clara Holliday	12/17/79

(13) DISPOSITION ASSIGNED TO	(14) DUE DATE	(15) CORRECTIVE ACTION REQUEST: CAR NO.	(16) ASME CODE CLASS
D. C. Frankum	12/31/79	☐ Required ☒ Not Required	☒ Yes ☐ No

(17) DISPOSITION:

REWORK ____ REPAIR ____ USE AS IS X SCRAP ____

The extent of the grinding has not adversely affected the integrity of the fillet weld or the plate thickness. The hanger is acceptable as is.

SEE CPPA-3822 (attached)

(18) CONSTRUCTION REVIEW/APPROVAL	(19) DATE	(20) QA-QC REVIEW APPROVAL	(21) DATE
Jay Ry—	1/9/80	R. Michels	1/9/80
(22) ENG. REVIEW/APPROVAL	**(23) DATE**	**(24) ANI REVIEW/APPROVAL**	**(25) DATE**
Jeffrey W. Olivier	1/9/80	Stanley O. Tockett	1/11/80

(26) VERIFICATION: ☒ Satisfactory ☐ Unsatisfactory ☐ Not Req'd

(27) QA/QC ENGR/INSPR. VERIFICATION	(28) DATE
Greg M. Bennett	1/11/80
(29) ANI CONCURRENCE	**(30) DATE**
Stanley O. Tockett	1/11/80
(31) QA REVIEW/CLOSURE	**(32) DATE**
J. Clarke	1/11/80

(33) REMARKS:

QA RECORD

RTN.	QA REVIEW
L	CH 1-17-80

FILE NO. 15.1

SUBFILE NO. M-1889

Bennett Form BR 1-4

NCR M-1889
Pg 2 of 2

Gibbs & Hill, Inc.

Interoffice Memorandum

CPPA-3822

TO: J. T. Merritt, Jr. DATE: January 10, 1980

FROM: R. E. Heim JOB NO:

SUBJECT: NCR- M-1889 REF. NO:

COMANCHE PEAK STEAM ELECTRIC STATION
1981-83 2300 MW INSTALLATION
NCR- M-1889

By copy of this letter we are advising Brown & Root that the "Use As Is" disposition on NCR No.M-1889 is acceptable.

R. E. Heim
Resident Engineer

DRH
REH/DRH/ JJR/jg
cc: ARMS

INDEXED

QA RECORD

Brown & Root, Inc.

QUALITY ASSURANCE DEPARTMENT
NONCONFORMANCE REPORT (NCR)

(1) NCR No. M-2002

PROJECT CPSES JOB NO. 33-1195 PAGE 1 OF 8

(2) UNIT	STRUCTURE/SYSTEM	COMPONENT	TAG/ID NUMBER	LOCATION OR ELEVATION	RIR NO.
1	N/A	Pipe Hanger	CC-X-039-006-F43R	Elev. 823'9"	N/A

(3) NONCONFORMING CONDITION
(3) DOCUMENT VIOLATED: CPM 6.9G REV 0 PARA 3.1
(4) TREND CATEGORY G-2

Problem: CMC#16173 requires F.W. 4 & 5 to be added. These welds were made without a weld data card.

Cause: Subject CMC was marked void on 2-13-80 per CMC #16321. CMC #16173 was then reinstated on 2-14-80 by drawing a line thru the red "void" stamp. Simultaneously on 2-14-80 CMC #16321, rev. 5 to traveler, was marked "error", initialed and dated.

Note: The person (weld symbol BGN) that made welds 4 & 5 was not qualified to to make a single groove weld without a backing strip.

(5) REPORTED BY	(6) DATE	(9) REVIEW/APPROVAL	(10) DATE
Billy Snellgrove	2/19/80	K.M. Hunsicker	2/20/80
(7) PREPARED BY	(8) DATE	(11) ISSUED BY	(12) DATE
Donald R. Vogt	2/19/80	Clara Halliday	2/22/80

(13) DISPOSITION ASSIGNED TO	(14) DUE DATE	(15) CORRECTIVE ACTION REQUEST: CAR NO.	(16) ASME CODE	CLASS
D.C. Frankum	3/4/80	☐ Required ☒ Not Required	☒ Yes _No	

(17) DISPOSITION:
REWORK X REPAIR ___ USE AS IS ___ SCRAP ___

Issue a CMC to remove these welds.

(18) CONSTRUCTION REVIEW/APPROVAL	(19) DATE	(20) QA/QC REVIEW/APPROVAL	(21) DATE
	2/29/80	K.M. Hunsicker	2/28/80
(22) ENG. REVIEW/APPROVAL	(23) DATE	(24) PE REVIEW/APPROVAL	(25) DATE
N/A CH	2/27/80	Stephen R. Tinkler	3/5/80

(26) VERIFICATION
☒ Satisfactory ☐ Unsatisfactory ☐ Not Req'd

(27) QA/QC ENGR/INSPR VERIFICATION: Greg M Bryant (28) DATE 4/9/80

(29) AE CONCURRENCE: Stephen R. Tinkler (30) DATE 4/9/80

(31) QA REVIEW/CLOSURE: K.M. Hunsicker (32) DATE 4/9/80

(33) REMARKS: QA RECORD

RTN.	QA REVIEW
L	CH 4-14-80
FILE NO.	15.1
SUBFILE NO.	M-2002

Bennett Form 88114

NCR-M-... Pg. 2 of 8

CONSTRUCTION OPERATION TRAVELER 35-1195

(1) TRAVELER NO. CC-X-039-006-F43R	(2) EQUIPMENT NO. SEE 1	(3) UNIT NO. 1	(4) QUANTITY 1	(5) PAGE 1 OF 1
(6) ACTIVITY DESCRIPTION PIPE-SUPPORT FABRICATION AND INSTALLATION		(7) REFERENCE DRAWINGS SEE 1 REV. 0		
(8) SPEC./PROC./ENG. INSTR.	(9) LOCATION 3F, 4F, 8F, CF		(10) SYSTEM CC	

PREPARED BY [signature] DATE 8-24-79 DEPT. Mech. Engr.

REVIEWED BY [signature] DATE 8-30-79 QA/QC ENG ANI

ANI REVIEW HDR DATE AUG 31 1979

OP. NO.	DEPT.	OPERATION	QA/QC ENG	ANI
1	IW	Verify material		
2	IW	Fabricate and/or install the pipe support assembly in accordance with the latest pipe support drawing, applicable CMC's, attached WDC's, and I.A.W. CPM6.9		
3	PD	Prepare surface, prime, and coat support assembly in accordance with CCP-30 in Containment Building and AS-30 for B.O.P.		
4	IW	Install Hilti-Kwik Bolts in accordance with CEI-20.		
5	BO	Install grout in accordance with CCP-16 and CCP-12.		
		OBSERVE ALL QC/ANI HOLD POINTS ON REVERSE SIDE		
		REVISION RECORD		
1	BM 11-...	~~Incorporate ABRP# 50470~~ VOID PER CMC 16139 BM 12-11-79		
2	BM 12/11/79	Incorporate CMC 16139		
3	PLH 12/17/79	Incorporate CMC 16157		
4	PLH 12/18/79	Incorporate ~~CMC 16173~~ CMC 163.. BM 2-13-80		
5	BM 2-13-80	~~Incorporate CMC 16321~~ ERROR BM 2-14-80		

INFORMATION COPY

APRV 2-13-80

NCR [illegible] Pg. 3 of 8

Drawing # [illegible]-037-[illegible]

MULTIPLE WELD DATA CARD

Line # NA

[illegible] 9875 SA-3C [illegible] 11-27-79

ITEM NO.	WPS NO.	REV.	ICN	WELD FILLER MATERIAL	WELD NOS.	P.NO.	FABRICATION CODE & CLASS/ACC STD.
NA	11032	6	0	E7018	1-3	1-1	3 ASME III -

NOTES: 1) Applicable QC/ANI hold points shall be indicated by checkmark ✓.
2) ANI inspection points indicated by (X).
3) Denote Satisfactory inspections by an "S"; Unsatisfactory inspections by a "U".

OPERATION #	OPERATIONS		
1	CLEANED	7	
2	ALIGNMENT	8	
3	FINAL VT	9	
4		10	
5		11	
6		12	

PRODUCTION RELEASE

WELD NO.	OPERATION	HOLDPOINTS WT	HOLDPOINTS QC	HOLDPOINTS ANI	CONST.	SAT. or UNSAT.	INSPECTION RESULTS (SIGN & DATE) QC or WT	NDE CERT. LEVEL	ANI	NDEP/REV.	MTSE #/CALIB. DUE DATE
1	1	NA	✓	NC		SAT	[illegible] 12/17/79	II		[illegible] 10/5/79	
	2		✓			SAT	[illegible] 3/14/80	II			
	3		✓		*	~~SAT~~	~~[illegible]~~				
2	1		✓			SAT	[illegible] 12/17/79	II			
	2		✓			SAT	[illegible] 3/18/80	II			
	3		✓								
3	1		✓			SAT.	[illegible] 12/17/79	II			
	2		✓			SAT	[illegible] 3/18/80	II			
	3	NA	✓								
Reviewed: [illegible] 8-20-79							[illegible] 8-30-79	[illegible]	AUG 31 1979		

* Signed in error. DRV 3-19-80

WE QC ANI

Approval signatures shall be affixed on the line immediately below the last step in each sequence.

OMANCHE PEAK STEAM ELECTRIC STATION (CPSES) DEC 26 1979

COMPONENT MODIFICATION CARD (CMC)

SERIAL NO. 16157

(1) APPLICATION: PIPE SUPPORT — WELD MOD. ☐ Q ☑ NON-Q ☐ DESIGN CHANGE/~~DEVIATION~~ ☑

(2) DWG. NO. ORH, REV 0, ITT, REV 0
CC-X-039-006-F43R

(3) LINE NO./COMPONENT NO.
CC-X-039-006-F43R

(4) REASON FOR CHANGE:
DRAFTING ERROR - ADD ALL-AROUND SYMBOL TO EXIST FIELD WELD SYMBOL #3

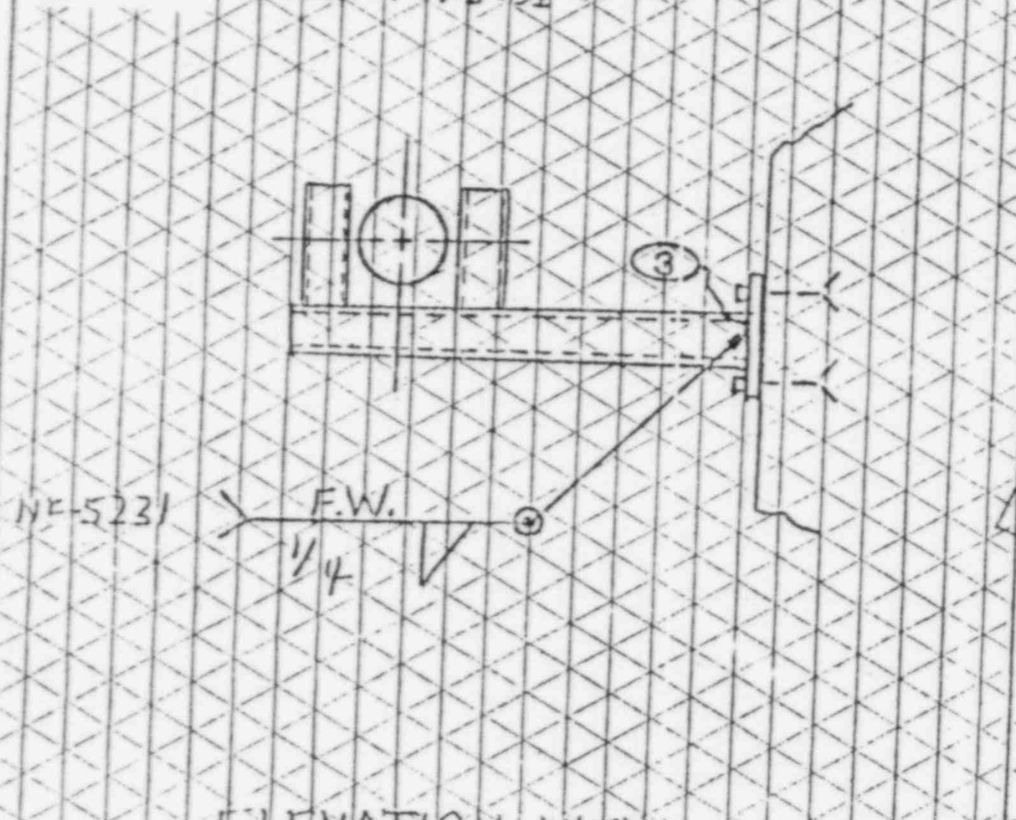
(7) REQUESTED/PREPARED BY:
PAUL HIGGINS
NAME
PIPE SUPPORT
DEPT.

(5) INSTRUCTIONS: (NCR M-2002 Pg. 4 of 8)

REMOVE ☑
REVISE F.W. #3 "AS-NOTED" IN SKETCH.

ADD ☑
ADD ALL-AROUND SYMBOL TO EXISTING FIELD WELD SYMBOL #3

(6) SKETCH ISO: CC-1-FB-02



ELEVATION VIEW
(LOOKING NORTH)

WORK THIS CMC WITH CMC-16139

(8) APPROVED BY:
[signature] 12-16-79 DATE

DATE

DATE

DATE

DATE

DATE

(9) DISTRIBUTION | DCC CNTL NO. | QTY

INFORMATION COPY PPRV

ISSUED BY DCC

COMANCHE PEAK STEAM
ELECTRIC STATION (CPSES)

COMPONENT MODIFICATION CARD (CMC)

SERIAL NO. 16173

(1) APPLICATION: PIPE HANGERS WELD MAP [✓] Q [✓] NON-Q [ ] DESIGN CHANGE/DEVIATION [ ]

(2) DWG. NO. [illegible]

(3) LINE NO./COMPONENT NO. [illegible]

(4) REASON FOR CHANGE: CHANGE & DELETE WELD [illegible]

(5) INSTRUCTIONS

NCRM-0000 Pg. 5 of 8

REMOVE [illegible]

ADD [illegible]

(6) SKETCH [illegible]

VOID

Not Valid
Bm
2-14-80

(7) REQUESTED/PREPARED BY:

Paul [illegible]

NAME

PIPE HAN[illegible]

DEPT.

(8) APPROVED BY:

DATE

DATE

DATE

DATE

DATE

DATE

INFORMATION COPY PRRV

(9) DISTRIBUTION

DCC CNTL NO.

Hanger II

WDC Serial # 03083

MULTIPLE WELD DATA CARD

Drawing # CC-X-039-006-F431

NCR M 2052 Pg. 7 of 8

Line # NA

ITEM NO.	WPS NO	REV.	ICN	WELD FILLER MATERIAL	WELD NOS.	P.NO.	FABRICATION CODE & CLASS/ACC STD.
NA							3 ASME III -
	11032	6	0	ER308	6-7	1-1	

NOTES: 1) Applicable QC/ANI hold points shall be indicated by checkmark ✓.
2) ANI inspection points indicated by (X).
3) Denote Satisfactory inspections by an "S"; Unsatisfactory inspection by a "U".

OPERATION #	OPERATIONS		
1	VERIFY WELD CUT	7	
2	CLEANED	8	
3	FIT-UP	9	
4	FINAL VT	10	
5		11	
6		12	

PRODUCTION RELEASE

WELD NO.	OPERATION	HOLDPOINTS WT	HOLDPOINTS QC	HOLDPOINTS ANI	CONST	SAT. or UNSAT.	INSPECTION RESULTS (SIGN & DATE) QC or WT	NDE CERT. LEVEL	ANI	NDEP/ REV.	MT&# #/ CALIB. DUE DATE
6	1	✓	NA		*	~~U~~ S	~~DRV JWH 3-20-80~~ 3-20-80	~~II~~		000 10-8-79	
	2	NA	✓			S	R-3/20/80	II			
	3	NA	✓			S	R 3/20/80	II			
	4	NA	✓			S	DRV 3-20-80	II			
7	1	✓	NA		*	~~U~~ S	~~DRV JWH 3-20-80~~ 3-20-80	~~II~~			
	2	NA	✓			S	R 3/20/80	II			
	3	NA	✓			S	R 3/20/80	II			
	4	NA	✓			S	DRV 3-20-80	II			
Removed: BP 3-19-80							JK 3-19-80				

* Signed in error DRV 3-20-80

INFORMATION COPY PPRV

WE QC ANI

Approval signatures shall be affixed on the line immediately below the last

NCR M-2002 Pg. 8 of 8

WDC Serial No. 18212, 03083

Drawing No. CC-X-039-006-F43R

WELD FILLER ~~MATERIAL~~ LOG Weld No. 1-3, 6-7

03-19-80

WELD NO.	DATE	SIZE/CLASS	WELDER SYMBOL	WPS/ICN #	HEAT/LOT # or CODE #	AMT. ISS.	AMT. RT'D.	ISSUANCE APPROVAL
* CM 4-9-80 CMC 10173 1	12/11/74	E-7018 1/8	BGN	11032 6/0	A80964 026B203	50	25	Paul Z Higgins QC DR 2-19
CMC 10173 2								~~Paul Z Higgins~~ QC DR 2-19
3								Paul Z Higgins S-135
3	2-18-80	E-7018 1/8	B.G.N	11032 6/0	A80964 026B203	7	0	Paul Z Higgins QC DR 2-19
CM 4-9-80 PER CMC 30074 Δ 4	2-18-80	E-7018 1/8	B.G.N.	11032 6/0	A80964 026B203	12	0	P171 Paul Z Higgins
SP K4-80 PER CMC 30074 Δ 5	2-18-80	E-7018 1/8	B.G.N.	11032 6/0	A80964 026B203	12	0	Paul Z Higgins
W 4-7-80 PER CMC 30074 Δ 5	2-18-80	E-7018 1/8	B.G.N.	11032 6/0	A80964 026B203	10	0	217 Danny Pendleton
* ~~DP 3-20-80~~ 3	3-20-1980	E-7018 1/8						
DRV 3-20-80 6	3-20-1980	E-7018 1/8	A.F.J	11032 6/0	A82394 026B204	15	3	P187 Danny Pendleton
DRV 3-20-80 7	3-20-1980	E-7018 1/8	AFJ	11032 6/0	A82394 026B204	15	2	Danny Pendleton QA

~~* Removed in error CM 4-9-80~~ CM 4-9-80

* Replaced by welds 4 & 5 cm 4-9-80

M-2002

Brown & Root, Inc.

INSPECTION REPORT

PAGE ____ OF ____

PLANT CODE (1-4)	SYSTEM CODE (5-10)	COMPONENT CODE (11-16)
N/A	CC	N/A

TAG/SPIN/IDENT NO (A B C D E F)	DRAWING/SPECIFICATION NO. G (Units) (17-55)	H (Units)	SERIAL NO J (Units)
	CC X 039 006 F43R		

PURCHASE ORDER NUMBER (56-69)	VEND CODE (70-73)
N/A	N/A

MRR NUMBER (74-79)	RIR NUMBER (80-85)	VENDOR'S HEAT/LOT/BATCH NO. (86-95)	COUNT / UNITS QUANTITY (96-105)	PURCH'S OR NO. (106-111)	RLS/HOLD NO. / CODE STATUS (112-121)	INPUT DATE (122-127)
N/A	N/A	N/A	N/A	N/A	N/A	N/A

PURPOSE AND TYPE OF INSPECTION/SURVEILLANCE: The purpose of this inspection is to close out NCR M-2002.

RESULTS OF INSPECTION/SURVEILLANCE: All welds were cut satisfactorily per the WT and pieces were rewelded and found satisfactory visually to NDEP 200. All requirements of the disposition have been completed and Red tag has been removed on hanger # CC-X-039-006-F43R.

NCR NO. M-2002

Don R. Voght
QC ENGINEER/INSPECTOR

4/3/80
DATE

COMANCHE PEAK STEAM ELECTRIC STATION

INSPECTION REPORT

NCR M-2002 pg. 6 of 8

SHEET 1 OF 2

NO.

ITEM DESCRIPTION	IDENTIFICATION NO.	SYSTEM/STRUCTURE DESIGNATION
NCR M-2002 Closure 2	CC-X-039-006-F43R	CC/ SUPPORT

SPEC. NO.	REV.	REF. Q.C. DOC. & REV. & CHANGE NO.	MEASURE OR TEST EQUIP. IDENT. NO.
N/A 5	N/A 6	6.9 / 0 7	N/A

☐ IN PROCESS INSPECTION ☐ PRE INSTALLATION VERIFICATION ☐ INSTALLATION INSPECTION ☒ FINAL INSPECTION ☐ PRETEST INSPECTION

INSP. RESULTS

☒ INSPECTION COMPLETED, ALL APPLICABLE ITEMS SATISFACTORY

☐ INSPECTION COMPLETED, UNSATISFACTORY ITEMS LISTED BELOW

Sam Nell 4/8/80
QC INSPECTOR DATE

ITEM NO. 11	INSPECTION ATTRIBUTES 12	SAT	UNSAT	DATE	QC SIGNATURE
	FW 4 & 5 Removed per CMC 30594 R.1. See Attached WFML ~~SLB~~ 4/10/80 And MWDC. The Above Action completes disposition to NCR M-2002	✓			

FPRV

REMARKS (DWGS, SPECS, ETC.)

RELATED NCR NO. 15	I.R. CLOSED	DATE	SIGNATURE 16
M-2002	N/A		N/A QC INSPECTOR

Figure 16.1-1

QA RECORD

BROWN & ROOT, INC.
Quality Assurance Department
Nonconformance Report (NCR)
CPSES-35-1195

NCR NO. M-2374

PAGE 1 OF 9

DRAWING/IDENTIFICATION	TAG/ID NUMBER	LOCATION OR ELEVATION	RIR NO.
AF-1-037-002-S33R	AF-1-037-002-S33R	15' 10" S. 4-S & 5'9" W. E-S SG. # 1 805'4"	N/A

NONCONFORMING CONDITION

DOCUMENT VIOLATED: CP-CPM-6.9D REV. 0 PARA. 2.5.3 2.5.4 TREND CATEGORY M ~~M-10~~ CM

Item number 2, North piece of component support, AF-1-037-002-S33R, does not have any traceability mark stamped or etched on it. Material cannot be verified. Material is thus rendered indeterminate.

Hold tag applied

REPORTED BY:	DATE:	REVIEW/APPROVAL	DATE:	TIME:
Sam Bell	6/20/80		6-25-80	9:00 a.m.

DISPOSITION RESPONSIBILITY:	DISPOSITION ASSIGNED TO:	CAR NO.:	ASME CODE ITEM:
D. C. Frankum			X Yes ___ No

DISPOSITION:
REWORK XX REPAIR ___ USE AS IS ___ SCRAP ___ RETURN TO VENDOR ___

Remove nonconforming material (North piece of item number 2) and replace with verified SA-36 steel.

Rework in accordance with CMC-34851, R. 3 (attached).

CON. REVIEW/APPROVAL:	DATE:	QA/QC REVIEW:	DATE:
	7/28/80		7-28-80
ENG. REVIEW/APPROVAL: N/AC#	DATE: 7-24-80	ANI REVIEW:	DATE: 7/28/80
QA/QC ENG/INSPR. VERIFICATION:	DATE: 10-7-80		
ANI CONCURRENCE:	DATE: 10/7/80		
QA REVIEW/CLOSURE:	DATE: 10/7/80		

ITEM NO.	MATERIALS & OPERATIONS	QUAN	SHIP		P&S	L	C&S	PAINT	SLC	AISC
	SEISMIC PIPE RESTRAINT CONSISTING OF:	ONE								
	MATERIAL EXISTS IN FIELD									
	~~[illegible] (SA-36) 1'-[illegible] 1/2" Long, TW-22#~~	~~2~~				X		X		
2	C5x6.7 (SA-36) 0'-6 11/16" Long, TW-7#	2				X		X		
3	1/2" x 5 1/2" Hilti Kwik Bolt Concrete Anchors, TW=1# (11L41)	X2	[illegible]	6-11-80			X			
4	per CMC 34851 [illegible] 5-23-80 mc# 17773	2	KBK	5-23-80						
5	per CMC 34851 (1) mr# 60210	1	KBK	5-31-80						
6	per CMC 34851 (1) mr# 17773	1	KBK	5-31-80						
	SEISMIC ASSEMBLY SKETCH AND ENGINEERING	1								
	BUNDLE AND TAG	1								
	MARK # AF-1-037-002-S33R									

~~Apply one coat of Carbo Zinc #11 to above mat'l except th'ds which shall be coated w/a rust preventative.~~

INFORMATION COPY PPRV

Approved By: [illegible]

Date: [illegible]

FOR MATERIALS AND OPERATIONS SEE SKETCH NO. SHEET OF

Brown & Root, Inc.

ENGINEERS AND CONSTRUCTORS

CONDITIONS	Fx	Fy	Fz	Mx	My	Mz
DESIGN	—	—	—	—	—	—
NORMAL & UPSET	±658	±1030	—	—	—	—
EMERGENCY	±[illegible]	±1420	—	—	—	—
FAULTED	—	—	—	—	—	—

REF. DRAWING NUMBERS

PIPE: [illegible]

STEEL: [illegible]

ELECT: [illegible]

H.V.A.C.: [illegible]

DATE	DWN	APP	DESCRIPTION
			ISSUE FOR CONST
			REVISED AS NOTED PER ITT [illegible]
			REV'D AS NOTED PER ITT REV 2

CUSTOMER Texas Utilities Services, [illegible]

ORDER OR CONT. NO.

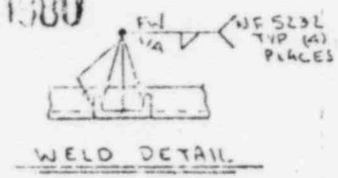
JOB NAME [illegible]

MARK NO. [illegible]

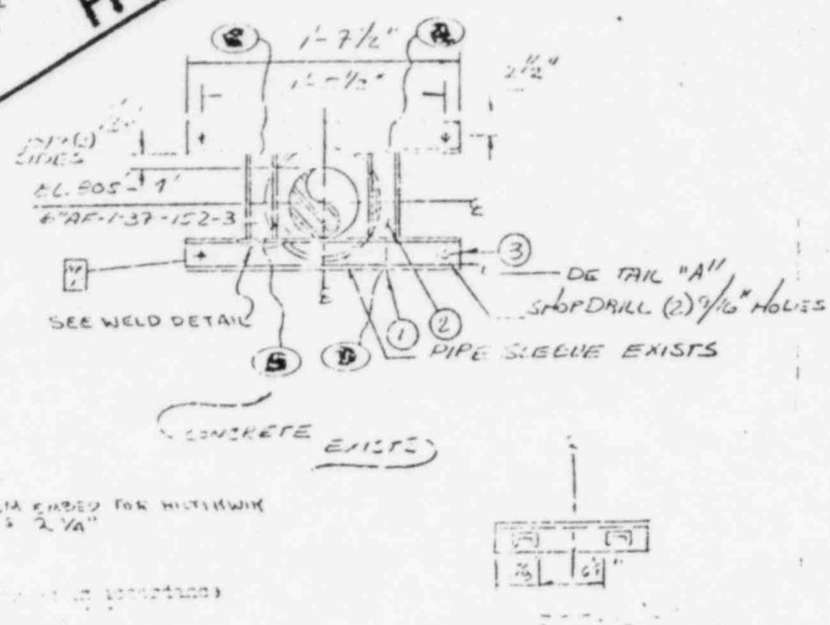
SKETCH NO.

SHEET 1 OF 1 REV. [illegible]

MAR 20 1980



WELD DETAIL



NOTE: ... EMBED FOR HILTI KWIK ... 2 1/4"

ITEM NO.	MATERIALS & OPERATIONS		
	SEISMIC PIPE RESTRAINT CONSISTING OF:		
	MATERIAL [illegible]		
1	C5x6.7 (A-36) 1'-7 1/2" LONG [illegible]		
	[illegible]		
3	1/2" x 5 1/2" HILTI Kwik bolt concrete Anchors, TW-1# (H.A1)		
	SEISMIC ASSEMBLY SKETCH AND ENGINEERING	1	
	BUNDLE AND TAG	1	
	MARK # AF-1-037-002-S33R		
	Apply one coat of [illegible] to [illegible] which shall be coated w/a rust preventative.		

Brown & Root, Inc.

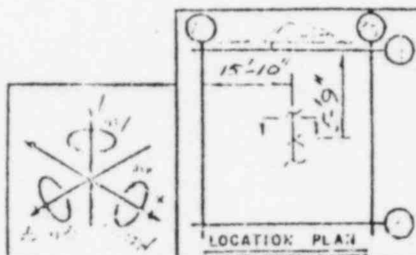
CONDITIONS	Fx	Fy	Fz	Mx	My	Mz
DESIGN						
NORMAL & UPSET	[illegible]	[illegible]				
EMERGENCY	[illegible]	[illegible]				
FAULTED						

REF. DRAWING NUMBERS

PIPE: [illegible] ELECT: [illegible]
STEEL: [illegible] H.V.A.C.: [illegible]

REV	DATE	DRAWN	CHK	APPR	DESCRIPTION
0	[illegible]	[illegible]			ISSUE FOR CONST
1	[illegible]	V.W.			REVISED AS NOTED PER ITT [illegible]
2	[illegible]	W.M.			REV'D AS NOTED PER ITT RIV2

CUSTOMER
ORDER OR CONT. NO.
JOB NAME
MARK NO.
SKETCH NO.
SHEET [illegible] OF [illegible]



THIRD PARTY INSPECTION YES ☒ NO ☐
CODE CLASS: ASME III-3

COMANCHE PEAK STEAM ELECTRIC STATION (CPSES)

COMPONENT MODIFICATION CARD (CMC)

△2 6/9/80

SERIAL NO. № 34851 REV. 3

1) APPLICATION: PIPE HANGER WELD MOD. [X] Q [X] NON-Q [NA] DESIGN CHANGE/~~DEVIATION~~ [X]

2) DWG. NO. AF-1-037-002-S33R BRH. REV 2

3) LINE NO./COMPONENT NO.

4) REASON FOR CHANGE: TO UTILIZE EMBED PLATE △3 NCR# M-2374
△1 TO INSTALL SHIM (DETAIL A)
△2 CHANGE WELD ITEM #2 TO ITEM #4

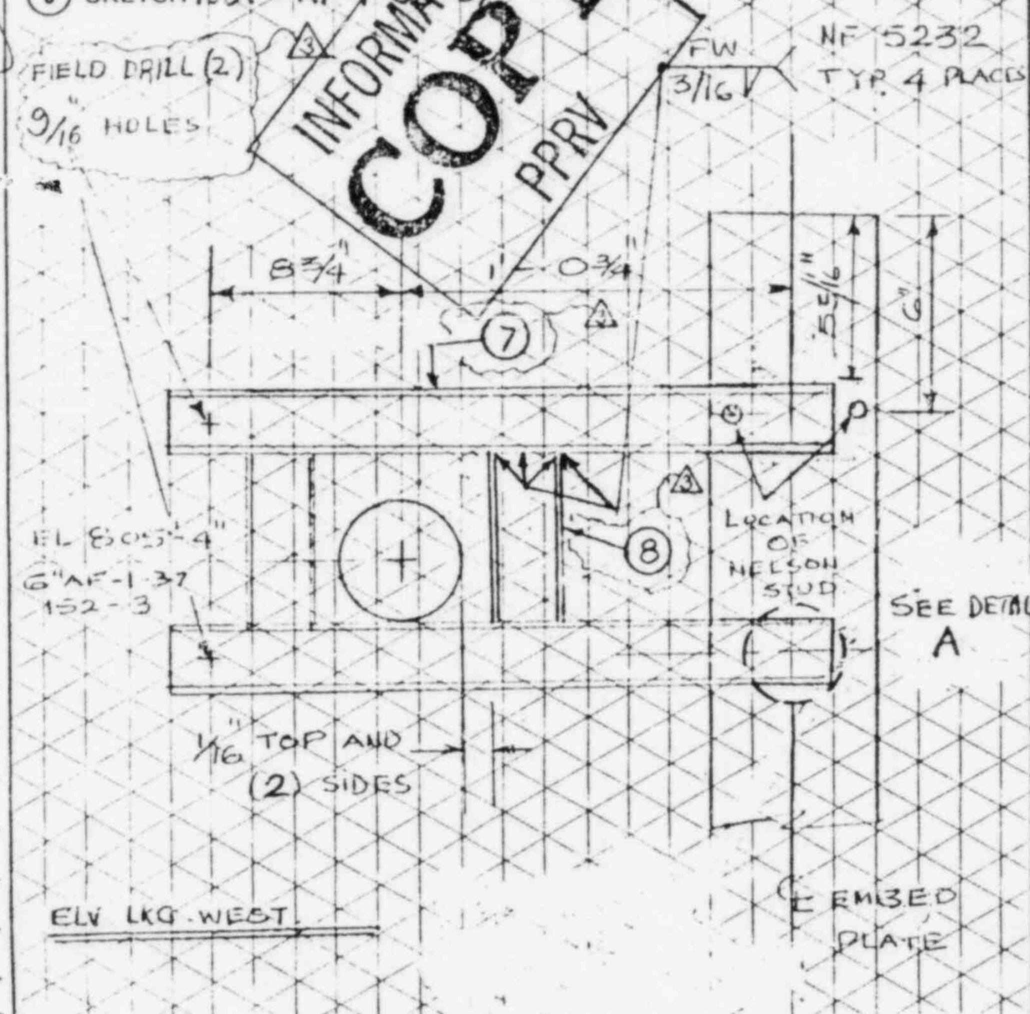
INFORMATION COPY PPRV

5) INSTRUCTIONS: NCR M-2374 by Hotty

REMOVE ✓
DELETE WELD #1 THRU #4
DELETE ITEM #1
DELETE - QUANTITY - 2
ITEM #3
DELETE ITEM #2, QUAN. 2

ADD △3 ✓
ITEM #7 C5 x 6.7 [SA-36] 2'-2½" LONG
QUANTITY - 2
CS PL 3/8" x 4" x 7" SA-36, DETAIL A
CS PL 1/4" x 4" x 7" SA-36, DETAIL A

6) SKETCH ISO: # AF-1-SB-07



7) ORIGINATOR
ARUN MAJMUDAR
NAME
[X] CPPE
[NA] ORIGINAL DESIGNER

8) APPROVED BY:

Approval	Date
Arun Majmudar	4/30/80
△1 Arun Majmudar	5/29/80
△2 John P. Donnan	
△3 [signature]	7-10-80

9) DISTRIBUTION

DISTRIBUTION	DCC CNTL NO.	QTY
THIS REVISION VOIDS AND SUPERSEDES DOCUMENT SERIAL NO. 34851 REV. 2		
Clara Holiday		

BROWN & ROOT, INC.
ENGINEERING DIVISION

15-3019

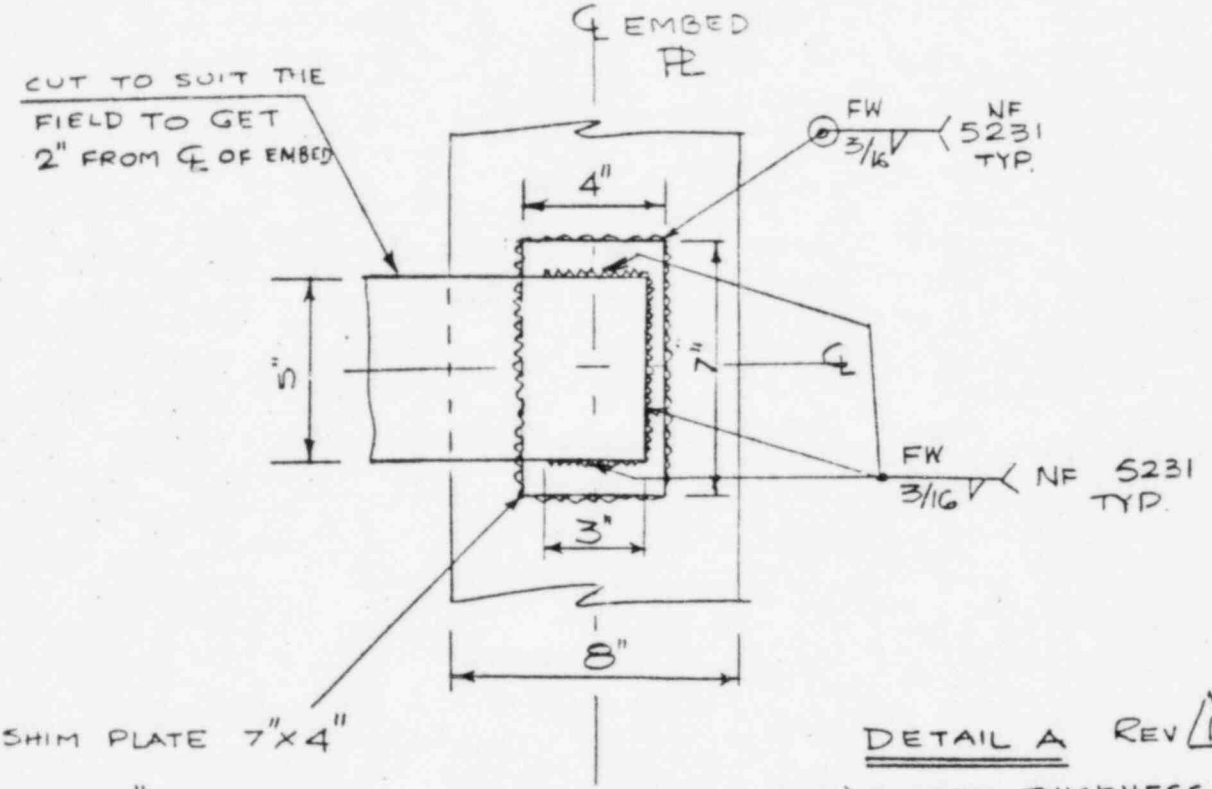
SHEET NO. 2

CLIENT CMC # 34851 REV (3) JOB NO.

SUBJECT AF-1-037-002-S33R REV 2

BASED ON DRAWING NO.

COMPUTER CHK'D. BY APP'D. BY DATE 5/29 19 80



DETAIL A REV 1

TYP. EXCEPT THICKNESS OF THE SHIM PLATE AS PER ITEM # (5) AND (6)

(5) USE 3/8" THICK PLATE AT TOP

(6) USE 1/4" THICK PLATE AT BOTTOM

NCR M-2374
pg 6 of 9

Brown & Root, Inc.

INSPECTION REPORT

PAGE ___ OF ___

PLANT CODE	SYSTEM CODE	COMPONENT CODE
1-4	5-10	11-16

AF-1-037-002-S33R

TAG/SPIN/IDENT NO						DRAWING/SPECIFICATION NO				SERIAL NO	
A	B	C	D	E	F	G	(Units)	H	(Units)	J	(Units)
17-55											

PUCHASE ORDER NUMBER	VEND CODE
58-69	70-73

MRR NUMBER	RIR NUMBER	VENDOR'S HEAT/LOT/BATCH NO.	COUNT UNITS QUANTITY	PURCH'S OR NO.	RLS/HOLD NO. CODE STATUS	INPUT DATE
74-79	80-85	86-95	96-105	106-111	112-121	122-127

PURPOSE AND TYPE OF INSPECTION/SURVEILLANCE: NCR # M-2374 Closure

RESULTS OF INSPECTION / SURVEILLANCE: Reworked in accordance with CMC-34851 Rev. 3. Deleted Item # 2 Added Item # 8. Inspected satisfactorily per disposition of NCR # M-2374

Hold Tag Removed

NCR NO. M-2374

Betty A. Williams
QC ENGINEER/INSPECTOR

DATE 10/6/80

QA-15.1/1-0(4-1-77)

[illegible]

MULTIPLE WELD DATA CARD

Weld Record 82-7019

SERIAL #
DRAWING # AF-1-037-002-[illegible]
LINE # 6"-A[illegible]-1-037-[illegible]

ITEM NO.	WPS NO.	REV.	ICN	WELD FILLER MATERIAL	WELD NOS.	P NO.	FABRICATION CODE & CLASS
[illegible]	11032	[illegible]	0	E7018	N/A	1-1	ACC STD ASME III- 3

NOTES: 1. APPLICABLE QC/ANI HOLD POINTS SHALL BE INDICATED BY CHECKMARK.
2. ANI INSPECTION POINTS INDICATED BY (X).
3. DENOTE SATISFACTORY INSPECTIONS BY AN "S"; UNSATISFACTORY INSPECTIONS BY A "U".

OPERATION #	OPERATIONS		
1	Support Number Identification	7	Spherical Bearings
2	Size, Configuration, Tolerance/Dwg.	8	All Welds/Dwg. & WPS (V.T.) *
3	Material Correct/Dwg.	9	Installation Complete
4	Fasteners Correct & Complete	10	Final PT/MT (as required)
5	Location & Elevation/Dwg.	11	
6	Spring Can Stops Installed	12	

PRODUCTION RELEASE

WELD NO	OPERATION	HOLDPOINTS WT	HOLDPOINTS QC	HOLDPOINTS ANI	CONST	SAT OR UNSAT	INSPECTION RESULTS (SIGN & DATE) QC OR WT	NDE CERT. LEVEL	ANI	NDEP/ REV.	MISC # CAL. B DUE DATE
NA	1	NA	✓	NC	[illegible]	[illegible]	[illegible]	II			
NA	2	NA	✓	NC	[illegible]	[illegible]	[illegible]	II			
NA	3	NA	✓	NC	[illegible]	[illegible]	[illegible]	II			
NA	4	NA	✓	NC	[illegible]	[illegible]	[illegible]	[illegible]			
NA	5	NA	✓	NC	[illegible]	SAT	[illegible]	II			
NA	6	NA	✓	NC	[illegible]	[illegible]	[illegible]	II			
NA	7	NA	✓	NC	[illegible]	[illegible]	[illegible]	II			
NA	8	NA	✓	NC	[illegible]	SAT	[illegible]	II		[illegible]	
NA	9	NA	NA	NC	✓						

Reviewed: [illegible]

INFORMATION COPY PPRV

[illegible] WE [illegible] QC ANI
APPROVAL SIGNATURES SHALL BE AFFIXED IN THE LINE IMMEDIATELY BELOW THE LAST STEP IN EACH SEQUENCE. [illegible] Final VT [illegible]

* Operations 1-8 are Final Inspections.

NCR M-2394
Pg 8 of 9

033[illegible]

WPS #	11032

NDC Serial No. 033[illegible]

Drawing No. AF-1-037-002-[illegible]

WELD FILLER MATERIAL LOG

Weld No. N/A

WELD NO.	DATE	SIZE/CLASS	WELDER SYMBOL	WPS/ICN #	HEAT/LOT # or CODE #	AMT. ISS.	AMT. RT'D.	ISSUANCE APPROVAL
N/A	[illegible]	[illegible]	[illegible]	[illegible]	A82[illegible] C26[illegible]	[illegible]	19	[illegible] P-213
N/A	6/14/80	1/8 E7018	A[illegible]	[illegible]	A82[illegible] C26[illegible]	20	6	[illegible] P.195
N/A	6/14/80	1/8 E7018	A[illegible]	[illegible]	A82[illegible] C26 3804	22	1	[illegible] P.198
N/A	6/15/80	1/8 E7018	A[illegible]	[illegible] 7-0	A82394 C26 1380[illegible]	10	5	[illegible] P.14[illegible]
N/A	6/14/80	1/8 E7018	A[illegible]	[illegible] 7-6	A82394 C26 1380[illegible]	[illegible]	22	[illegible] P.0[illegible]
N/A	[illegible]	1/8 E7018	ART	[illegible]	A82[illegible] C26 [illegible]	[illegible]	30	[illegible] P.211
N/A	8/4/80	1/8 E7018	ART	[illegible]	A82[illegible] C26[illegible]	30	0	[illegible] P.240
N/A	8/2[illegible]/80	[illegible] E7018	A[illegible]	[illegible]	643[illegible] [illegible]3[illegible]	15	0	[illegible] P.236

[illegible] 10/6/80

[illegible] 10/6/80

INFORMATION COPY PPRV

ITEM NO.	MATERIALS & OPERATIONS	QUAN.	SHIP		PGS	L	CGS		
	SEISMIC PIPE RESTRAINT CONSISTING OF MATERIAL PARTS LISTED:	ONE							
1	C6x8.2 (SA-36) ... Long, TW#22	2							
2	C6x8.2 (SA-36) 0'-6 11/16" Long, TW#2	2							
3	1/2" x 5 1/2" Hilti Kwik Bolt Concrete Anchors, TW#1#								
4	... 34851 ...			2-3-80					
5	... 34851 ... MT# 60710	1		5-31-80					
6	... 34851 ... MT# 17113	1		5-31-80					
	SEISMIC ASSEMBLY SKETCH FOR ENGINEERING	1							
	BUNDLE AND TAG	1							
	MARK # AF-1-037-002-S33								
	Apply one coat of ... to above ... except ... shall be coated w/a rust preventative.								
	Approved By: ... Date: ...	QUAN.	SHIP		PGS	L	CGS		

INFORMATION COPY PPRV

FOR MATERIALS AND OPERATIONS SEE SKETCH NO. SHEET OF

Brown & Root, Inc.

REF. DRAWING NUMBERS

PIPE: M1-0601-LFG14 ELECT:
STEEL: S1-0602... H.V.A.C.:

CONDITIONS	Fx	Fy	Fz	Mx	My	Mz
DESIGN						
NORMAL & UPSET	2658	11600				
EMERGENCY	...	...42...				
FAULTED						

DATE	DWN	CHK	APP	DESCRIPTION
				ISSUE FOR ...
				...
				REV'D AS NOTED PER ...

CUSTOMER Texas Utilities Services, Inc.

ORDER OR CONT. NO.

SKETCH NO.

REV.

TEXAS UTILITIES GENERATING CO.

COMANCHE PEAK STEAM ELECTRIC STATION
NONCONFORMANCE REPORT (NCR)

NCR No. M-80-00161 Rev. 1

UNIT	STRUCTURE/SYSTEM	ITEM/COMPONENT	TAG/ID NUMBER	LOCATION OR ELEVATION	RIR NO.
1	SG #1/AF (3700)	Pipe Support	AF-1-035-029-S33A	805'4", 15'10" S. of 4S, 9'9" W. of DS /1	N/A

REPORTING PERSONNEL

NONCONFORMING CONDITION

Paragraph 3.1.2.1 of CEI-20 states: that engineering approval is needed to drill through concrete reinforcing steel. The approval given for this drilling operation (meno page 3 of 4) allows drilling through probable template bar at 5½" depth. However, craft drilled through rebar at 2½" depth and notched rebar at 7" depth of same hole. This paragraph also states that carbide masonary bits be used for drilling concrete. Craft failed to change bits after cutting first rebar causing them to notch second rebar.

/1 Changes direction from East to West

REFERENCE DOCUMENT: CEI-20 REV 5 PARA 3.1.2.1

REPORTED BY: J. McCommas DATE: 11/6/80

QE

QE REVIEW/APPROVAL: J R Merritt DATE: 11/18/80 10

ACTION ADDRESSEE: J. T. Merritt DEPARTMENT: Engineering

ACTION ADDRESSEE

DISPOSITION:

REWORK _____ REPAIR _____ USE AS IS X SCRAP _____

See DCA-9091

ENG. REVIEW/APPROVAL: Gustavus J Adele DATE: 12/15/80

QE REVIEW APPROVAL: SPA J R Merritt DATE: 12/19/80

DISPOSITION VERIFICATION & CLOSURE: J R Merritt DATE: 12/19/80

COMMENTS:

NCR NO. ______

SPEEDISET © MOORE BUSINESS FORMS, INC. A Fort Worth, Texas

PAGE 30f4

Brown & Root, Inc.

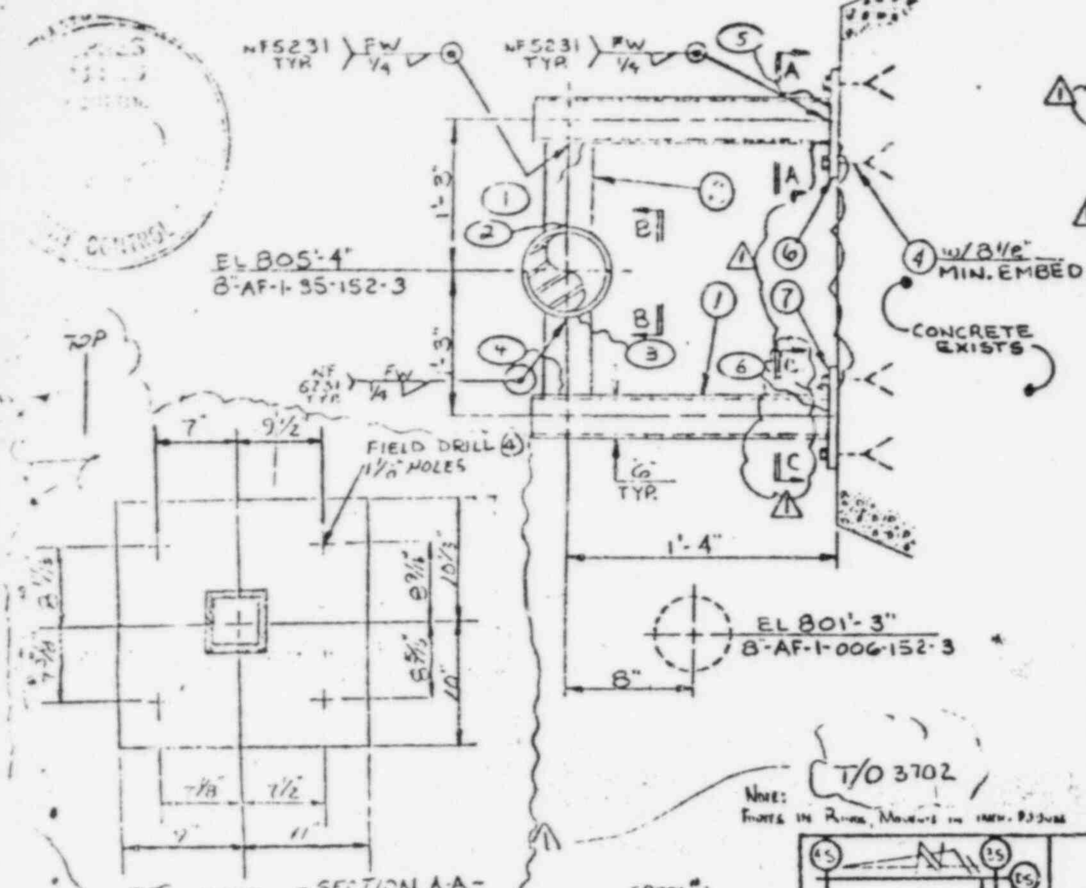
P.O. BOX 1001 GLEN ROSE, TEXAS 76043

MESSAGE	REPLY
To: Don Sutton REF. AF1-035-029-S33A DATE 10-19-80 THE REFERENCED HANGER HAS 1 ANCHOR HOLE HITTING REBAR AT 5½" DEEP ON THE TOP PLATE (BOTTOM RIGHT CORNER) THE ORIENTATION SEEMS TO BE AT A 45° ANGLE TO THE VERTICAL. PLEASE CHECK THIS OUT FOR REBAR CUTTING DUE TO THE IMPORTANCE OF THIS ANCHOR BY Rick Hankins EXT 560	DATE 10/23/80 No structural rebar should be encountered at these locations and depths. The bar encountered is probably a construction installed "template" bar and as such may be cut as requested. SIGNED D. G. Sutton

INSTRUCTIONS TO SENDER: 1. SEND TO JOB. FILE 2. SEND WHITE AND PINK COPIES WITH CARBON INTACT.

INSTRUCTIONS TO RECEIVER: 1. WRITE REPLY. 2. DETACH STUB, KEEP PINK COPY, RETURN WHITE COPY TO SENDER.

INFORMATION COPY PPRV



NO.	MATERIALS & OPERATIONS	QUAN	SHIP
	SEISMIC ANCHOR CONSISTING OF	One	
1	1/2" X 6" X 10" Structural Tubing (A500-76 GR.B) 1'-6 1/4" long [illegible]	2	1
2	Special HS 63N "C" Carbon Steel (A106 GR.B) 6" Schedule 80 Stanchion, 9 5/8" [illegible] D=1'-0", E=0'-8 1/2" [illegible] 40#	2	
3	Carbon Steel [illegible] Per Section A-A		
4	1" X 12" [illegible] (1144)		
5	1/2" X 1'-0 3/4" Carbon Steel [illegible] Plate, 1'-2 5/16" Long [illegible]		
6	1/2" X 20" X 20 1/8" LG. CS PLATE [illegible]	1	
7	1 1/2" X 19 3/4 X 20 1/2 LG CS PLATE [illegible]	1	
	SEISMIC ASSEMBLY SKETCH AND ENGINEERING	1	
	BUNDLE AND TAG	1	
	MARK #AF-1-035-029 S33A		

Apply one coat of Carbo Zinc #11 to above mat'l except th'ds which shall be coated w/a rust preventative.

[illegible] RH
Date: 12-10-79

FOR MATERIALS AND OPERATIONS SEE SKETCH NO. SHEET

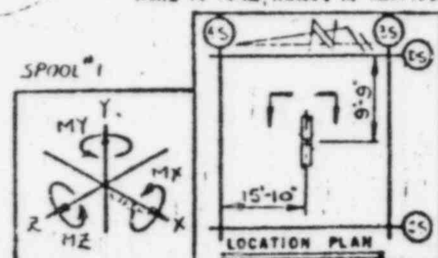
Brown & Root, Inc.

REF. DRAWING NUMBERS
PIPE: M1-0604-R.14 ELECT: [illegible]
STEEL: S1-0622-R.12 H.V.A.C.: [illegible]

CONDITIONS	Fx	Fy	Fz	Mx	My	Mz
DESIGN	—	—	—	—	—	—
NORMAL & UPSET	1832	1265	1576	[illegible]	1579	[illegible]
EMERGENCY	2555	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
FAULTED	—	—	—	—	—	—

REV	DATE	DWN	CHK	APP	DESCRIPTION
2	[illegible]	[illegible]	M	[illegible]	ISSUE FOR [illegible] FIELD FAB. PER [illegible]
1	9/6/82	R	R	[illegible]	REVD AS NOTED PER [illegible] 31815 & ITT R.2; [illegible]

CUSTOMER [illegible]
ORDER OR CONT. NO. C-[illegible]
JOB NAME [illegible] 1 & 2
MARK NO. AF-1-035-029-S33A
SKETCH NO. —
SHEET 1 OF 2 REV 1



THIRD PARTY INSPECTION YES NO
CODE CLASS: ASME III-3

NOTES:
1) All tolerances in accordance with QCP [illegible] U.N.O.
2) Fab. Procedure is FP-101N-4
3) All products designed in accordance with EPL File No. 1 Rev. 13

C.B.I. Iso. M1-3206-29 R K
ERP Iso. AF-1-SB-07 R12H
Data Point 1611 / PROB. 124 S10A
Pipe Mat'l. SA106 GR.B
Insul. — Ftg. [illegible]

#289

PAGE 4 of 4

NCR NO. ______

HAH, TUGCO

FIGURE 1.

COMANCHE PEAK STEAM ELECTRIC STATION
DESIGN CHANGE AUTHORIZATION

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

DCA NO. 9091

1. SAFETY RELATED DOCUMENT: XX YES _____ NO

2. ORIGINATOR: CPPE XX ORIGINAL DESIGNER _____

3. DESCRIPTION:

A. APPLICABLE ~~SPEC/DWG/DOCUMENT~~ 2323-S1-0628 REV. 13

B. DETAILS After drilling for installation of expansion bolts for pipe support, AF-1-035-029-S33A, the following problems have been revealed

1) One #8 vertical bar located in the wall face 14'-6" south of 4-S & located at 9'-3" west of D-S was accidently cut at elevation 805'- 11-1/2"

2) 8" typical embedded wall plate was drilled through at location in 1 above (detail A S-0786)

SOLUTION: The condition as described is acceptable.

4. SUPPORTING DOCUMENTATION:

NCR - M-80-161

5. APPROVAL SIGNATURES: DGS/bgf 11-17-80

A. ORIGINATOR: D. D. Sutton DATE 11/17/80

B. DESIGN REPRESENTATIVE: R M Kissinger DATE 11-18-80

6. VENDOR TRANSMITTAL REQUIRED: YES _____ NO XX

7. STANDARD DISTRIBUTION:

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

JOB NO. 35-1193
DCA FOR V 1-80

ARMS INDEXED

Figure 16.1-1

BROWN & ROOT, INC.

QA RECORD

Quality Assurance Department
Nonconformance Report (NCR)
CPSES-35-1195

DATE:

NCR NO. M-2507 R. 2

PAGE 1 OF 28

DRAWING/IDENTIFICATION	TAG/ID NUMBER	LOCATION OR ELEVATION	RIR NO.
* See below	* See below	Fab Shop	N/A

NONCONFORMING CONDITION

DOCUMENT VIOLATED: NF-3271.5(b) NF-4711 REV. ______ PARA. ______ TREND CATEGORY M-19

* CC-1-028-029-S33R, CC-1-126-015-F43R and SW-1-004-009-A33R

It was found that spherical bearing adjustable ends could be completely removed from the strut body. Threads on the adjustable ends were not upset in order to prevent ends from being removed. Also there are no sight holes in the strut bodies to determine thread engagement.

Revision 1:

Generic - Numerous struts installed without sight holes or upset threads. Thread engagement between body and eye rod assembly is indeterminate.

Revision 2: Final disposition.

Hold tag applied

REPORTED BY:	DATE:	REVIEW/APPROVAL:	DATE:	TIME:
L. W. Mansfield	9/18/80	James [signature]	11/6/80	1:00 P.M.

DISPOSITION RESPONSIBILITY:	DISPOSITION ASSIGNED TO:	CAR NO.:	ASME CODE ITEM:
D. C. Frankum			XX Yes ___ No

DISPOSITION:

REWORK ____ REPAIR XX* USE AS IS XX* SCRAP ___ RETURN TO VENDOR ____

Partial disposition:

Verify all NPSI sway struts not yet installed in accordance with CP-CPM-9.11.

Supports already installed will be dispositioned shortly.

See attached for final disposition.*

FOIA-85-59

S/5

QA RECORD

RTN.	QA REVIEW
L	CH 1-29-81
FILE NO.	15.1
SUBFILE NO.	M-2507 R 2

CON. REVIEW/APPROVAL:	DATE:	QA/QC REVIEW:	DATE:
Bob Stone	11/06/80	James [signature]	11/6/80
ENG. REVIEW/APPROVAL:	DATE:	ANI REVIEW:	DATE:
R. T. Wolantenus	11/6/80	John [signature]	11/6/80
QA/QC ENG/INSPR. VERIFICATION:	DATE:		
Jerry L. Mathews	1-29-81		
ANI CONCURRENCE:	DATE:		
[signature]	1-29-81		
QA REVIEW/CLOSURE:	DATE:		
James [signature]	1-29-81		

INFORMATION COPY PPRV

Final disposition to
NCR M-2507

NCR M-2507 B 2 of 3

* Verify and either "use as is" or repair as required.

Struts not installed - Verify per NPS Procedure MI-5, Revision 0, transmitted by NPSI-12-1053 dated 10/23/80.

Struts installed - Verify per NPS Procedure MI-3, Revision 0, transmitted by NPSI-12-1009 dated 10/2/80.

If threads are shown to be not upset they shall be upset as follows:
1. Coupling nut welded to pipe - upset per NPSI Procedure PMI-3.1.2 transmitted by NPSI-12-1052 dated 10/23/80.
2. Coupling nut not welded to pipe - upset per NPSI Procedure PMI-3.1.1 transmitted by NPSI-12-1055 dated 10/23/80.

Above to be performed by NPSI personnel at the CPSES site under the auspices of their QA program.

All sway struts shipped from NPSI facilities on or after 10/20/80 will be identified with a ½" five-pointed star stamp on each end to indicate verification of thread upset.

nps industries, inc.
one harmon plaza
secaucus, new jersey 07094
201-865-6550 telex 14-1435

October 23, 1980
NPSI-12-1053

Texas Utilities Services, Inc.
P.O. Box 1002
Glen Rose, Texas 76043

RECEIVED
NOV 3 1980
P & H STATUS

Attention: J.T. Merritt, Jr./R.T. Wolantejus

Subject: Texas Utilities Gen. Co.
Comanche Peak Stm. Elec. Sta.
Units 1 and 2
Purchase Order No. CP0046 A.1

Subject: (MI No. 5) Procedure for Confirming Upset Threads for Rigid Sway Struts for TUSI Project (Struts not Installed)

Ref.: NPSI-12-1016, TWX-12,489
NPSI-12-1052, NPSI-12-0988

Gentlemen:

NPS Industries is transmitting to TUSI (MI No. 5, Rev. 0) Procedure for Confirming Upset Threads for Rigid Sway Struts for TUSI Project (Struts not Installed) for your use.

If I can be of any further assistance, please do not hesitate to contact me.

Very truly yours,

NPS INDUSTRIES, INC.

Herman W. D'Errico

Herman W. D'Errico
Project Manager

HWD:rmg
Attachments: (1) 4 pages

cc: H.R. Rock, G&H 2L
D.C. Frankum, B&R 1L
J.T. Merritt, TUSI 0L, 1L, 1A
R.E. Holloway, G&H 1L
J. Oliver, NPSI @ TUSI 1L

INFORMATION
COPY
PPRV

nps industries, inc.

nps

MAINTENANCE & INSPECTION

NCRM ... p2 4 of 28

MI No. 5	Dated 10/16/80	Revision No. 0	

TITLE: PROCEDURE FOR CONFIRMING UPSET THREADS FOR RIGID SWAY STRUTS FOR TUSI PROJECT (STRUTS NOT INSTALLED)

SCOPE OF:

INFORMATION COPY PPRV

	APPROVAL SIGNATURES			
	Original Issue	Rev.1	Rev.2	Rev.3
Author	R.P. [signature] 10/20/80			
Approved	[signature] 10/22/80			

Revision No. 0	Title: PROCEDURE FOR CONFIRMING UPSET THREADS FOR RIGID SWAY STRUTS FOR TUSI PROJECT (STRUTS NOT INSTALLED)	Maintenance & Inspection No. MI #5
Date: 10/16/80		Page 1 of 1

NCRM-2507 R2
Pg. 5 of 28

1.0 PURPOSE

To verify that the sway strut threads are upset, and provide measurements for verification of MI #3.

2.0 SCOPE

This procedure is intended for use on TUSI CPSES Project Sway Struts shipped prior to October 20, 1980, which have not been installed. (Installed struts will be verified using MI #3.)

3.0 ATTACHMENTS

Table 1 - Sway Strut Eye Rod Size (Attachment 1)
MI #5 Worksheet (Attachment 2)

4.0 PROCEDURE

4.1 Locate support and record mark number, determine and record sway strut size by measuring eye rod and determine and record whether eye rod is forged or fabricated type. (See Table 1)

4.2 Attempt to back out the eye rod. If eye rod can be fully unscrewed, the eye rod thread is not upset. If not, it is upset. Record the condition, upset or not upset.

4.3 If the eye rod thread is not upset, prior to its reinsertion, measure and record the L dimension, left and right eye rod length, and E dimension (each side if fabricated). (See Table 1.) Record measurements on MI #5 worksheet.

4.3.1 Upset the eye rod per PMI 3.1.1 (if coupling nut is not welded to the pipe) or PMI 3.1.2 (if coupling nut is welded to the pipe) and verify upset as described in 4.2 above.

4.4 After the eye rod upset is verified by attempted removal, stamp the eye rod with a 1/4" five-pointed star and record this fact.

4.5 Sign and date the record on MI #5 worksheet.

Dated [illegible]

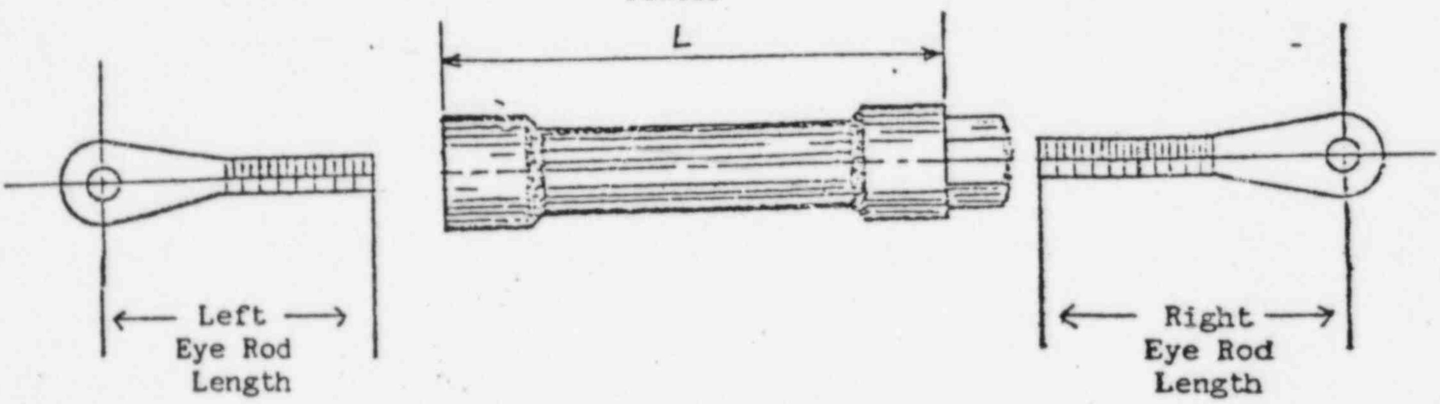
TABLE 1

SWAY STRUT EYE ROD SIZE

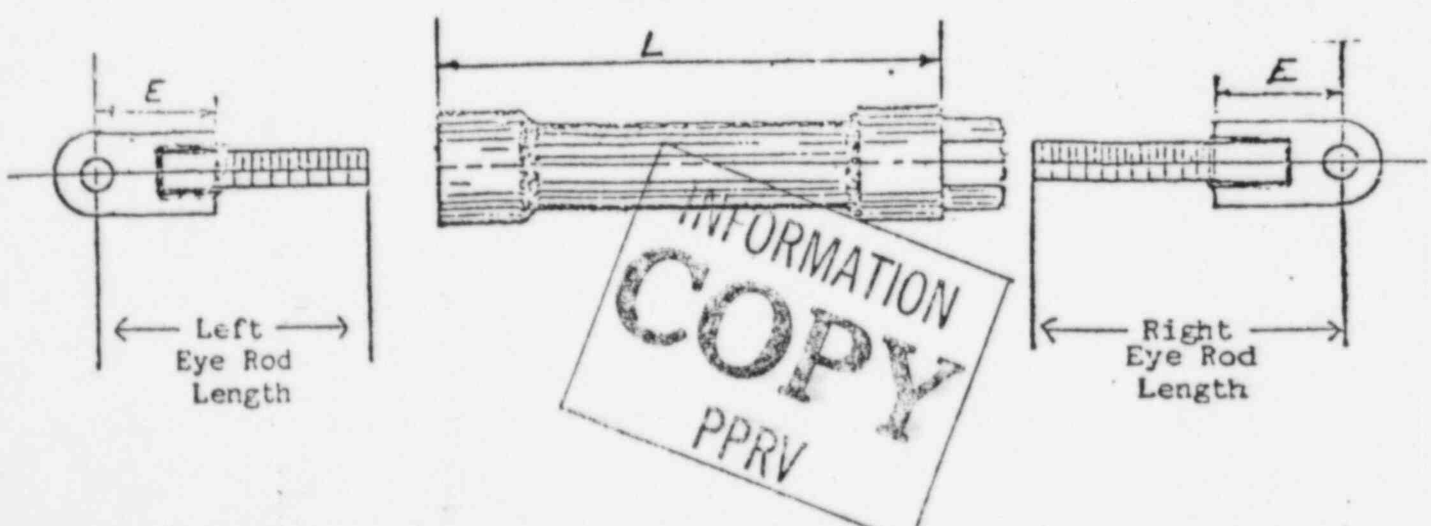
STRUT SIZE	EYE ROD SIZE	TYPES
06	3/4" - UNC	Forged and Fabricated
08	1" - UNC	Forged and Fabricated
10	1-1/8" - UNC	Forged and Fabricated
12	1-1/4" - UNC	Forged
14	1-3/4" - UNC	Forged and Fabricated
20	2-1/2" - UNC	Fabricated
24	3" - UNC	Fabricated
36	4-1/2" - 4UN	Fabricated

SWAY STRUT MEASUREMENTS

FORGED



FABRICATED



MT #5 WORKSHEET

Mark Number	Size	Forged/ Welded	Eye Rods Found Upset				L Dimension	Left Eye Rod Length	Left Eye Rod E Dimension	Right Eye Rod Length	Right Eye Rod E Dimension	Upset Verified and Stamped				Inspection Performed By (Signature & Date)
			Left		Right							Left		Right		
			Yes	No	Yes	No						Yes	No	Yes	No	

nps industries, inc.
one harmon plaza
secaucus, new jersey 07094
201-865-6550 telex 14-1435

NCR m. 85-9k2
Pg. 8 of 28.

October 2, 1980
NPSI-12-1009

Texas Utilities Services, Inc.
P.O. Box 1002
Glen Rose, Texas 76043

RECEIVED OCT 10 1980 P & H STATUS

Attention: J.T. Merritt, Jr./R.T. Wolantejus

Subject: Texas Utilities Gen. Co.
Comanche Peak Stm. Elec. Sta.
Units 1 and 2
P.O. No. CP0046A.1

Subject: Procedure for confirming Full Thread Engagement via eyerod measurement for Rigid Sway Struts

Ref.: TWX 12, 489

Gentlemen:

We are transmitting herewith NPS Industries MI-3 Rev. 0 "Procedure for confirming full thread engagement via eye-rod measurement for rigid sway struts".

This procedure provides means for confirming full engagement by taking simple direct measurements. It is designed to be conservative in that it is based on an extra 1" for each forged eyerod and 1½" for each fabricated eyerod (based upon nominal dimensions) past full engagement for accepting a given condition. These extra allowances allow for considerably more than the tolerances in the parts and therefore make the procedure conservative.

It should be noted that if the procedure does not confirm full engagement for a particular strut, there probably still is full engagement and further inspection should be performed to determine its full engagement.

If NPSI can be of any further assistance, please do not hesitate to contact us.

Very truly yours,

NPS Industries, Inc.

Herman W. D'Errico

Herman W. D'Errico
Project Manager

INFORMATION COPY PPRV

HWD:pmr
Attachments: 3 pages

cc: H.R. Rock, G&H 2L
D.C. Frankum, B&R 1L
J.T. Merritt, TUSI OL, 1L, 2A
R.E. Holloway, G&H 1L