



101 California Street, Suite 1000, San Francisco, CA 94111-5894

415/397-5600

June 18, 1984  
84056.006

60-445

Mrs. Juanita Ellis  
President, CASE  
1426 S. Polk  
Dallas, Texas 75224

SUBJECT: Telecon Transmittal #4  
Comanche Peak Steam Electric Station  
Independent Assessment Program - Phase 4  
Job No. 84056

Dear Mrs. Ellis:

Enclosed please find telecons associated with the Phase 4 Independent Assessment Program.

If you have any questions or desire to discuss any of these documents please do not hesitate to call. If you are unable to reach me in the Cygna San Francisco office ask for Ms. Donna Oldag at the same number.

Very truly yours,

*N. H. Williams*

N. H. Williams  
Project Manager

NHW/  
Attachment

cc: Mr. D. Wade (TUEC) w/attachment  
Mr. S. Treby (USNRC) w/attachment  
Mr. G. Grace (TUEC) w/attachment  
Mr. D. Pigott (Orrick, Herrington & Sutcliffe) w/o

8411260349 840618  
PDR ADOCK 05000445  
A PDR

2222  
1/1 See Attached



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	5/24/84
Subject:	Data Request	Time:	9:00 a.m.
		Place:	Site
Participants:	D. Bleeker	of	B&R
	J. Minichiello		Cygna

Item	Comments	Required Action By
	Cygna requested the drawings, CMCs and DCAs noted below.	
1.	Please provide the following documents: Drawing Nos. (latest revision) BCP-CC-1-AB-005, BRP-CC-1-SB-004, BRP-CC-1-AB-009 and all CMCs and DCAs against that revision	
2.	Please provide all CMCs and DCAs for the following BRP and BRHL drawings: BRHL-CC-1-AB-005, Rev. 7 BRHL-CC-1-AB-006, Rev. 6 BRHL-CC-1-AB-010, Rev. 1 BRHL-CC-1-AB-009, Rev. 2 BRHL-CC-2-AB-001, Rev. 0 BRHL-CC-2-AB-005, Rev. 2 BRHL-CC-2-AB-009, Rev. 2  BRP-CC-1-AB-006, Rev. 14 BRP-CC-1-AB-010, Rev. 11 BRP-CC-2-AB-001, Rev. 9 BRP-CC-2-AB-005, Rev. 7 BRP-CC-2-AB-009, Rev. 17 BRP-CC-1-SB-001, Rev. 15 BRP-CC-1-SB-002, Rev. 7 BRP-CC-1-SB-005, Rev. 11 BRP-CC-1-SB-003, Rev. 10  BRP-CC-1-AB-046, Rev. 7 BRP-CC-1-AB-030, Rev. 8 BRP-CC-1-AB-003, Rev. 15	

Signed: *N. H. Williams* /eam Page 1 of 5

Distribution:



# Communications Report

Item	Comments	Required Action By
	BRP-CC-1-AB-007, Rev. 12 BRP-CC-1-AB-005, Rev. 17  BRP-CC-1-AB-009, Rev. 12 BRP-CC-1-AB-013, Rev. 16  BRP-CC-1-AB-049, Rev. 13  BRP-CC-1-AB-060, Rev. 15 BRP-CC-1-EC-018, Rev. 9  BRP-CC-1-EC-019, Rev. 9 BRP-CC-1-EC-002, Rev. 12  BRP-CC-1-AB-008, Rev. 15  BPR-CC-1-AB-041, Rev. 10  BRP-CC-1-SB-009, Rev.8  BRP-CC-1-SB-008, Rev. 15 BRP-CC-1-RB-049, Rev. 12  BRP-CC-1-RB-033, Rev. 12  BRP-CC-1-RB-001, Rev. 12  BRP-CC-1-RB-036, Rev. 12  BRP-CC-1-RB-037, Rev. 14	
3.	<u>List of Supports</u>  Please provide <u>all</u> revisions to these BRH drawings, plus all CMCs and DCAs written against <u>any</u> revision.  1-005      CC-1-019-012-A43K CC-1-019-013-A43S CC-1-019-011-A43K CC-1-019-010-A43K CC-1-019-014-A43R CC-1-019-009-A43R CC-1-019-008-A43R CC-1-019-700-A43S CC-1-019-701-A43K CC-1-019-702-A43R CC-1-051-006-A43K 1-009      CC-1-019-005-A43R CC-1-019-005-A43K CC-1-019-002-A33R	



# Communications Report

Item	Comments	Required Action By
1-006	CC-1-019-004-A33R CC-1-019-007-A33K CC-1-019-001-A33R CC-1-019-003-A33R CC-X-080-700-A43S CC-X-080-700-A43K CC-1-086-001-A43S CC-1-086-002-A43K CC-1-051-700-A43K CC-1-050-005-A43R CC-1-050-701-A43S (axial) CC-1-050-004-A43R CC-1-050-006-A43S CC-1-050-003-A43K	
2-009	CC-1-050-001-A43S (axial) CC-2-050-001-A43S (axial) CC-2-050-704-A43S CC-2-050-002-A43R CC-2-050-706-A43S CC-2-050-702-A43K (OH elbow) CC-2-050-004-A43R CC-2-050-705-A43R CC-2-050-701-A43S CC-2-050-007-A43K CC-2-050-008-A43K CC-2-050-700-A43K CC-2-050-703-A43S	
1-010 2-001	CC-1-050-002-A43R CC-2-019-709-A43K CC-2-019-708-A43K CC-2-019-707-A43S CC-2-019-710-A43K CC-2-019-705-A43R CC-2-019-706-A43R (axial) CC-2-019-716-A43K CC-2-019-704-A43R CC-2-019-703-A43S CC-2-019-702-A43K CC-2-019-714-A43K CC-2-019-715-A43K CC-2-019-713-A43S (axial)	
2005	CC-2-019-008-A43R CC-2-019-007-A43K CC-2-019-712-A33K CC-2-019-711-A33R CC-2-019-700-A33R CC-2-019-701-A33K CC-2-019-004-A33K CC-2-019-003-A33R	





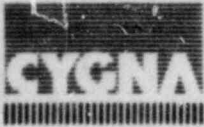
# Communications Report

Item	Comments	Required Action By
	<u>SUMMARY</u>	
	63 Supports 11 Local Stress Calculations 15 Springs 25 Snubbers 23 Rigids	
4)	Drawings to be ordered <u>with</u> associated change paper (i.e., DCA's and CMC's)  2323-E1-0009 Rev. CP2 2323-E1-0080 Sht. 21 Rev. 5 2323-E1-0031 Sht. 41 Rev. 14 2323-E1-0054 Sht. 20 Rev. 11 2323-E1-0061 Sht. 4 Rev. 7 2323-E1-0061 Sht. 16 Rev. 7 2323-E1-0077 Sht. 2 Rev. CP2 2323-E1-0080 Sht. 1 Rev. 18 2323-E1-0080 Sht. 7 Rev. CP1 2323-E1-0155 Sht. - Rev. CP1 2323-E1-0166 Sht.- Rev. CP2 2323-E1-0172 Sht. 6 Rev. 9 2323-E1-0172 Sht. 7 Rev. 14 2323-E1-0172 Sht. 41 Rev. CP1 2323-E1-0173 Sht. 36 Rev. 6 2323-E1-0174 Sht. 4 Rev. CP1 2323-E1-0174 Sht. 12 Rev. 20 2323-E1-0175 Sht. 4 Rev. 5	
5)	Change paper <u>only</u> associated with the following drawings  2323-E1-0050 Sht. 1 Rev. 3 2323-E1-0050 Sht. 5 Rev. 5 2323-E1-0050 Sht. 6 Rev. CP1 2323-E1-0050 Sht. 8 Rev. CP1 2323-E1-0050 Sht. 10 Rev. 8 2323-E1-0050 Sht. 12 Rev. 9 2323-E1-0050 Sht. 14 Rev. 6 2323-E1-0050 Sht. 16 Rev. CP1 2323-E1-0050 Sht. 18 Rev. 7 2323-E1-0050 Sht. 53 Rev. 8	
6)	Additional drawings and/or documents to be ordered <u>with</u> associated change paper (i.e., DCA's and CMC's)  2323-E1-1700 Sht. - Rev. 322 2323-E1-0031 Sht. 25 Rev. 12 2323-E1-0031 Sht. 26 Rev. 11 2323-M1-2200-08 Sht. 1, Latest Rev.	



# Communications Report

Item	Comments	Required Action By
	<p>2323-M1-2200-25 Sht. 1, Latest Rev. 2323-M1-2303-06 Sht. 1, Latest Rev. 2323-M1-2311-01 Sht. 1, Latest Rev.</p> <p>FSAR Sections 7.2, 7.3, 7.4, 7.5</p>	



# Communications Report

Company: Texas Utilities ☐ Telecon ☒ Conference Report

Project: Comanche Peak Steam Electric Station Job No. 94056

Independent Assessment Program - Phase 4 Date: June 7, 1984

Subject: Calculations For Justification of 1.0 Amplification Time: 11:30 A.M.

Factor Place: G&H, New York

Participants: \_\_\_\_\_ of \_\_\_\_\_

Jung Pier G&H

John Russ CES

Item	Comments	Required Action By
	<p>Mr. Peir delivered to Cygna, for review, the following items:</p> <ol style="list-style-type: none"><li>1. Calculation Binder DMI-14C, Set 1, Rev. 0</li><li>2. Computer Output Binders:<ol style="list-style-type: none"><li>a. DMI-19P1, Rev. 0</li><li>b. DMI-19P2, Rev. 0</li><li>c. DMI-19P3, Rev. 0</li><li>d. DMI-19P4, Rev. 0</li></ol></li></ol>	

Signed: NH Williams Page 1 of 1

Distribution: N. Williams, D. Wade, G. Grace, J. Russ, R. Hess, S. Treby, J. Ellis,



# Communications Report

Company:	Texas Utilities	<input checked="" type="checkbox"/> Telecon	<input type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	5/31/84
Subject:	CCW Piping Design	Time:	A.M.
		Place:	N.Y., N.Y.
Participants:	Mr. Mentel	of	G&H
	R. Hess		Cygn

Item	Comments	Required Action By
1.	Asked Henry if there was any way to tell if piping was seismically designed from the pipe I.D. number.	
2.	Henry stated that the last digit in the I.D. was the piping class. All class 1, 2, and 3 piping is seismic. He was not sure if all class 5 pipe was seismic or if it was dependent on it being installed in a seismic structure. Henry suggested we talk to John Irons to clarify this item.	

Signed: *N. Williams* /MS Page 1 of 1  
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C. Ellis, Project File





# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	6/5/84
Subject:	Mechanical Design Review	Time:	PM
		Place:	New York
Participants:	Borys Czarnogorski	of	Gibbs & Hill
	Paul Rainey		Cygn

Item	Comments	Required Action By
	<p>The contents/location of various items in the FSAR was discussed.</p> <p>The HVAC Chillers per section 9.4E-1 are NNS and non-seismic I.</p> <p>Table 17A-1 Item 31 categorizes the CCW piping to the HVAC chillers as piping Category 5. The supports are NNS, Seismic II.</p> <p>Pages 3.2-5 thru 3.2-11 of the FSAR describe seismic Category II components and Class 5 requirements.</p>	

Signed: *N. Williams* /rke Page 1 of 1

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# Communications Report

Company:	Texas Utilities	<input checked="" type="checkbox"/> Telecon	<input type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	6/4/84
Subject:	Attached Trays and Support Configurations	Time:	4:50 pm
		Place:	G&H, New York
Participants:	Pravin Patel	of	G&H, CPSES Site
	John Russ		CES

Item	Comments	Required Action By
	<p>I asked Mr. Patel if it was possible to determine the following data from the individual support FSE drawings:</p> <ol style="list-style-type: none"><li>1. How many trays are located within the support span, and</li><li>2. Where the trays are located within the support span.</li></ol> <p>Mr. Patel stated that the individual FSE drawings would not show the above information. He stated that the drawings would show the total maximum allowable tray widths, but not the actual tray width. Since the trays are field run, Mr. Patel stated that the actual location within the space could not be given on the FSE drawings. Mr. Patel also stated that the bolt holes for the tray clips are drilled based on the field run location of the tray.</p>	

Signed: *NA Williams* /rke Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, S. Treby, J. Russ, J. Ellis, Project File



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	6/4/84
Subject:	Mechanical Review	Time:	PM
		Place:	NY, NY
Participants:	Wanda Christali	of	G&H
	P. Rainey		CES
	R. Hess		CES

item	Comments	Required Action By
1.	Wanda stated that the S.S.I. (cooling water) was a separate source from the lake which is used for the circulating water system.	
2.	Asked Wanda if she had gotten us a copy of the valve list and line list yet. She said she had requested a copy from the site but did not know when it would arrive.	
3.	Wanda also noted that the latest C&W flow calculations were still not complete in regards to verification. She indicated it could be 2-3 weeks until we get them.	

Signed: N.A. Williams /rke Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, S. Treby, R. Hess, P. Rainey, J. Foley, J. Ellis,  
Project File



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	June 6, 1984
Subject:	Drawings	Time:	
		Place:	
Participants:	J. Foley	of	Cygna
	Borys Czarnogorski		G&H

Item	Comments	Required Action By
	Please provide a full size set of Drawings Nos.:  2323-A1-500 A1-508 A1-511 A1-509 A1-510 A1-0502 A1-0501	

Signed:	<i>N. Williams</i>	Page	1	of	1
Distribution:	N. Williams, D. Wade, G. Grace, R. Hess, P. Rainey, J. Foley, S. Treby, J. Ellis,				
1020.01a	Project File				





# Communications Report

Company: Texas Utilities ☐ Telecon ☒ Conference Report

Project: Comanche Peak Steam Electric Station Job No. 84056

Independent Assessment Program - Phase 4 Date: June 5, 1984

Subject: Mechanical Review Time: P.M.

Place: New York, NY

Participants: John Irons of G&H

R. Hess CES

Item	Comments	Required Action By
1)	Asked John about the existence and availability of the sizing calculation for the CCW heat exchanger. He said that this calculation was very old and had been superceded by newer system calcs. He will attempt to locate a record copy and supply us with a roadmap of how all the CCW calculations fit together. It was noted that some CCW data is contained in other system calcs. such as S.S.W. and S.S.I.	
2)	John stated that he believed that the CCW side of the ventilation chillers (CPX-CHEICE-01,02,03 & 04) were seismically designed even though the chillers themselves were not. I told John that there was no information on, or requirement for this in the chiller specification. John will have someone look into this and tell us where and how this requirement is documented.	

Signed: *N. Williams* /MS Page 1 of 1

Distribution: N. Williams, D. Wade, G. Grace, R. Hess, P. Painey, J. Foley, S. Treby, J. Ellis,  
Project File



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	June 7, 1984
Subject:	Mech. Review	Time:	11:00 A.M.
		Place:	New York, N.Y.
Participants:	Tom Hawkins	of	G&H
	R. Hess		CES

Item	Comments	Required Action By
1)	Discussed availability of current valve list and pipe line designation list for the CCW system. The issues of the lists we received earlier in the week are February 1982 (valve) and May 23, 1984 (pipe).	
2)	Tom said that these lists are now being updated at the site with the reason for the update being to make them more useful for operations. Due to this update it is not feasible for G&H to provide us with a more current copy. However, if we have specific questions on the lists they will research the individual items and provide specific answers.	
3)	I told Tom that we would work this way (with existing lists) for the time being. We can note differences between existing design document requirements and the existing lists, but we cannot detect changes made to the lists and not reflected in the design documents. Tom said he believed that M. Strange at the site could give us a list of D.C.A.'s against these lists in the future. Told Tom we would have to check on this later but we would work with what we have for the time being.	

Signed: *N. Williams* /MS Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, R. Hess, P Rainey, J. Foley, J. Minichiello, S. Treby, J. Ellis, Project File



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	5/30/84
Subject:	Data Request	Time:	9:00 a.m.
		Place:	Site
Participants:	C. Ray	of	G&H
	J. Minichiello		Cygn

Item	Comments	Required Action By
	<p>Cygn requested the following:</p> <ol style="list-style-type: none"><li>1. QA Book for stress problem AB-1-60 (latest revision).</li><li>2. Computer Output for AB-1-60 (same revision).</li></ol>	

Signed: N. Williams Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, J. Minichiello, S. Treby, J. Ellis, Project File



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	5/31/84
Subject:	CCW System Operation	Time:	AM
		Place:	New York
Participants:	John Irons	of	Gibbs & Hill
	Paul Rainey		Cygna

Item	Comments	Required Action By
	<p>John clarified that during normal power operation, one CCW pump is running and is supplying cooling water to both safeguards trains and the non-safeguards loop.</p> <p>If the operating pump is tripped, the redundant CCW pump (and associated service water pump) starts on low pump discharge pressure. The valve supplying the non-safeguards loop from the redundant pump does not change position since it was already open.</p>	





## Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	5/30/84
Subject:	Structural Review Introduction	Time:	10:20 a.m.
		Place:	G&H, New York
Participants:	Ed Bezkor, Anil Kenhre	of	G&H
	Bill Horstman, John Russ, Desmond Stevens		Cygn

Item	Comments	Required Action By
	Mr. Russ introduced the Cygna structural review team (Messrs. Horstman, Russ and Stevens) to Messrs. Bezkor and Kenhre. Messrs. Bezkor and Kenhre, who are Cygna's G&H contacts while Mr. Peter Huang is on vacation, were told that Cygna's review would be performed according to applicable protocol. To facilitate this, Mr. Russ, structural review group leader, will interface with G&H personnel.	

Signed:	<i>N. Williams</i>	Page	1	of	1
Distribution:	N. Williams, D. Wade, G. Grace, R. Hess, T. Wittig, S. Treby, J. Ellis				
1020.01a	Project File				



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	5/31/84
Subject:	Amplification Factors for Cable Tray Analysis	Time:	10:00 a.m.
		Place:	G&H, New York
Participants:	Jerry Jan, Jong Pier, Borys Czarnogorski	of	G&H
	B. Hess, B. Horstman, J. Russ, D. Stevens		Cygna

Item	Comments	Required Action By
	Messrs. Jan and Pier delivered a draft copy of the report "Justification of the Equivalent Static Hood Method Using a Factor of 1.0 Times Peak Spectrum Acceleration for the Design of Cable Tray Supports; Comanche Peak Units 1 and 2," dated May 30, 1984. Mr. Jan stated that a final copy would be issued within a week or two. Calculations upon which the report is based will be available to Cygna on Wednesday, June 6, 1984. Cygna requested the calculations regarding the justification of a factor of 1.0 for conduit support. Mr. Jan stated that such calculations exist and would be delivered to Cygna by this afternoon.	

Signed:	<i>N. Williams</i>	Page	1	of	1
Distribution:	N. Williams, D. Wade, G. Grace, R. Hess, T. Wittig, S. Treby, J. Ellis,				



# Communications Report

Company:	<u>Texas Utilities</u>	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	<u>Comanche Peak Steam Electric Station</u> <u>Independent Assessment Program - Phase 4</u>	Job No.	<u>84056</u>
		Date:	<u>5/30/84</u>
Subject:	<u>Data Request</u>	Time:	<u>2:00 p.m.</u>
		Place:	<u>Site</u>
Participants:	<u>S. Donald</u>	of	<u>DCC</u>
	<u>J. Minichiello</u>		<u>Cygna</u>

Item	Comments	Required Action By
	Cygna requested a copy of Specification 2323-MS-200 (latest revision).	

Signed: N. Williams Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, J. Minichiello, S. Treby, J. Ellis, Project File



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	5/30/84
Subject:	Data Request	Time:	11:30 a.m.
		Place:	site
Participants:	D. Bleeker	of	DCC
	J. Minichiello		Cygn

Item	Comments	Required Action By
	Cygn requested copies of the following drawings (latest revision plus any CMC's or DCA's).	
1.	PD-154357, All sheets (P. O. CP-0020B.2)	
2.	PD-154362, All sheets (P. O. CP-0020B.2)	
3.	PD-116337, All sheets (P. O. CP-0020C)	
4.	PD-11862-9, All sheets (P. O. CP-0020C)	
5.	1-74-06-32467D1 (P. O. CP-0020B.2)	
6.	AP-1410-1 (P. O. CP-0020B.2)	
7.	2323-M2-0229	
8.	2323-M2-0230	
9.	2323-M2-0231	

Signed: N. Williams Page 1 of 1  
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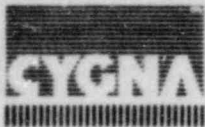


# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	June 7, 1984
Subject:	Mechanical Review	Time:	3:00 P.M.
		Place:	New York, NY
Participants:	Tom Hawkins	of	G&H
	R. Hess		CEJ

Item	Comments	Required Action By
1)	Tom stated that, contrary to our previous conversation, M. Strange cannot provide a listing of changes to the valve list since February 1982. He only tracks DCA's against design documents and the valve list is not considered a design document.	
2)	G&H/TUSI can supply changes associated with specific valves by listing DCA's against specifications and drawings. There is also a B&R "as installed" verification document which can be checked to verify what is in the plant.	

Signed: *N. Williams* /MS Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, R. Hess, P. Rainey, J. Foley, S. Treby, J. Ellis,



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	5/31/84
Subject:	Data Request	Time:	3:15
		Place:	Site
Participants:	D. Bleeker	of	DCC
	J. Minichiello		Cygna

Item	Comments	Required Action by
1.	Cygna requested the following drawings (drawing only).	
a.	CC-1-050-004-A43R, Rev. 0	
b.	CC-1-050-006-A43R, Rev. 0	
c.	CC-1-050-003-A43R, Rev. 0 and 1	
d.	CC-1-019-012-A43K, Rev. 0	
e.	CC-1-019-013-A43S, Rev. 0	
f.	CC-1-019-011-A43K, Rev. 0	
g.	CC-1-019-010-A43K, Rev. 0	
h.	CC-1-019-014-A43R, Rev. 0	
i.	CC-1-019-009-A43R, Rev. 0	
j.	CC-1-019-008-A43R, Rev. 0	
k.	CC-1-051-006-A43K, Rev. 1	
l.	CC-X-080-001-A43K, All revisions	
m.	CC-1-086-002-A43R, Rev. 0 and 1	
n.	CC-1-050-005-A43R, Rev. 0, 1 and 2	
2.	Cygna requested the following CMC's.	
a.	CMC 36517, Rev 6, Sheet 2	
b.	CMC 9066, Rev. 2	
c.	6498, Rev. 1	
d.	8779, Rev. 3	
e.	9066, Rev. 1	
f.	33597, Rev. 0 and 1	
g.	35600, Rev. 0	
h.	35599, Rev. 0 and 1	
i.	35598, Rev. 0 and 1	
j.	35606, Rev. 0	
k.	35608, Rev. 0	
l.	35643, Rev. 0 and 1	

Signed: *NH Williams* Page 1 of 2  
Distribution: N. Williams, D. Waue, G. Grace, J. Minichiello, S. Treby, J. Ellis, Project File



# Communications Report

Item	Comments	Required Action By
m.	35617, Rev. 0, 1 and 2	
n.	35594, Rev. 0 and 1	
3.	Cygnal requested a copy of drawing CC-1-050-700-A43K, all revisions plus all CMC's and DCA's.	



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	5/31/84
Subject:	CCW System Seismic Design	Time:	AM
		Place:	New York
Participants:	John Irons	of	Gibbs & Hill
	Paul Rainey		Cygna

Item	Comments	Required Action By
	<p>John clarified that piping with line designation numbers with the subscript 5, is <u>not</u> safety related, however, it <u>is</u> seismic.</p> <p>Piping with subscripts 1, 2 or 3 are safety class and seismic.</p> <p>Piping with the subscript G is not safety related and is not seismic.</p>	

Signed: *W. Williams* Page 1 of 1  
/rke  
Distribution: N. Williams, D. Wade, G. Grace, R. Hess, J. Foley, S. Treby, J. Ellis, Project



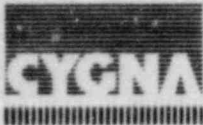


# Communications Report

Company:	<u>Texas Utilities</u>	<input checked="" type="checkbox"/> Telecon	<input type="checkbox"/> Conference Report
Project:	<u>Comanche Peak Steam Electric Station</u>	Job No.	<u>84756</u>
	<u>Independent Assessment Program - Phase 4</u>	Date:	<u>June 4, 1984</u>
Subject:	<u>Cygnal Review Schedule at G&amp;H</u>	Time:	<u>A.M.</u>
		Place:	<u>G&amp;H</u>
Participants:	<u>J. C. Waal</u>	of	<u>Cygnal</u>
	<u>Borys Czarnogorski</u>		<u>G&amp;H</u>

Item	Comments	Required Action By
	<p>Borys called to see if I would be coming to New York this week. I told him probably not since we were still working on the checklists. He asked if he could tell Bob Ballard that we would be there next week. I told him that I wasn't sure of our schedule yet because we were still working on the checklists, but he could tell Ballard that we would not be there this week. Borys asked who else would be coming to New York City with me. I told him that I didn't know yet. He asked me if Paul Toner would be coming with me. I told him I didn't know.</p> <p>I told Borys that we were reviewing project guides and I would call him later in the day with a list of project guides that we would like copies of, including historical copies.</p>	

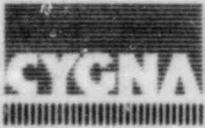
Signed:	<u>MA Williams</u>	Page	<u>1</u>	of	<u>1</u>
Distribution:	<u>N. Williams, D. Wade, G. Grace, S. Biho, J. Waal, S. Treby, J. Ellis,</u>				
1020.01a	<u>Project File</u>				



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	June 8, 1984
Subject:	Design Document Receipt	Time:	1:45 P.M.
		Place:	G&H Offices
Participants:	T. R. Martin	of	Cygn
	O. Urquiola		G&H
	F. Metz		G&H
	P. Lanji		G&H

Item	Comments	Required Action By
	Receive file copies of all documentation requested at 10:45 A.M. June 8, 1984 excluding the vendor data for the CCWS valves requested. Oscar will forward this information to me.	



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	June 8, 1984
Subject:	Mechanical Review	Time:	P.M.
		Place:	New York
Participants:	W. Christali	of	G&H
	R. Hess		CES

Item	Comments	Required Action By
1)	Requested that Wanda provide us with the G&H criteria for the installation and arrangement of flow measuring orifices.	

Signed: W.A. Williams /MS Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, R. Hess, P. Rainey, T. Foley, S. Treby, J. Ellis,



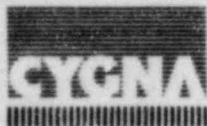
# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	June 8, 1984
Subject:	Electrical Installation Drawings	Time:	8:30 A.M.
		Place:	G&H
Participants:	Davy Yang	of	G&H
	Randy Uhlar		Cygnal

Item	Comments	Required Action By
1)	<p>Received from Davy Yang physical electrical drawings related with the auxiliary building (i.e., tray, conduit, tray segment equipment).</p> <p>All drawings will be checked against the most recent copy of the drawing list, for correct revision.</p> <p>Change paper (DCA's and CMC's) will also be ordered and reviewed for all drawings reviewed.</p>	

Signed: *N. H. Williams* /MS Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, R. Hess, T. Martin, R. Uhlar, S. Treby, J. Ellis,





## Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	May 30, 1984
Subject:	Electrical Physical Design Methodology	Time:	10:00 A.M.
		Place:	G&H
Participants:	Davy Yang	of	G&H
	Randy Uhlar		Cygna

Item	Comments	Required Action By
1)	<p>Being involved in the tracking of scheduled cables to check for proper routing and separation criteria, I requested an explanation as to how G&amp;H physical electrical drawings (cable tray, conduit) are set up.</p> <p>Choosing a cable at random from E1-1700, Davy Yang proceeded to explain their methodology in routing cables and walked it through. He explained how the single digit sheets (1, 2, 3, 4 . . .) following a particular drawing are the overall tray, conduits and equipment plan views for a particular area and elevation, with the two digit series (11, 12, 13, . . .) being the cable tray segment sheets which identify and locate all trays for the same area and elevation.</p> <p>He also directed me to the cable tray and conduit general note drawings (E1-1701, 1702) which provided greater detail and clarification. He also explained the cable tray segment ID number. This included an explanation of the three numbers following the ID number which is G&amp;H's x, y, z coordinate (i.e., locating a tray segment by (x) elevation, (y) East-West and (z) North-South from an established y, z axis.</p>	

Signed:

*N. Williams*

/MS Page 1 of 1

Distribution: N. Williams, D. Wade, G. Grace, R. Hess, T. Martin, S. Treby, J. Ellis,



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	June 7, 1984
Subject:	Thru Wall Sleeves	Time:	11:00 A.M.
		Place:	G&H
Participants:	Davy Yang	of	G&H
	Randy Uhlar		Cygna

Item	Comments	Required Action By
1)	<p>Having run across 'thru wall sleeves' in the routing of several cables within the E1-1700 cable schedule, I requested an explanation as to how their identification (e.g., TWS-E-006-0829-4869-4797) related with the physical electrical drawings (e.g., E1-600, 700 series) and the conduit thru wall opening drawings (e.g., E1-0609).</p> <p>Davy Yang stated that the thru wall sleeve identification itself 'TWS-E-006' is not shown on the electrical installation or wall opening drawings, but only on reference G&amp;H drawings, for in-house use for the computer cable routing program. Only by using the x,y,z coordinates following the wall sleeve ID number can you cross reference the cable routing to the physical electrical drawings to determine what sleeves are to be used. He also stated that the cross sectional area provided within the group of sleeves which are used to pass cables from a tray on one side of a wall to the other exceeds the allowable cable tray fill requirements.</p>	



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	84056
	Independent Assessment Program - Phase 4	Date:	June 1, 1984
Subject:	Data Request	Time:	10:30
		Place:	Site
Participants:	R. Baker, G. Grace	of	TUEC
	J. Minichiello		Cygn

item	Comments	Required Action By
	Cygn requested the following procedures for their walkdown preparation:  QI-QP-11.10-1 ) CP-QP-11.13 ) QI-QP-11.13-1 ) QI-QAP-12.1 )..... G. Grace QI-QAP-16.1 ) QI-QAP-18.2 )  CP-EI-4.0-13 ) CP-EI-4.5-4 ) CP-EI-4.5-10 )..... R. Baker CP-EI-4.0-22 ) CP-EI-4.0-37 )	

Signed:	<i>N. Williams</i>	/MS Page 1 of 1
Distribution:	N. Williams, D. Wade, G. Grace, J. Minichiello, S. Treby, J. Ellis	
	Project File	



# Communications Report

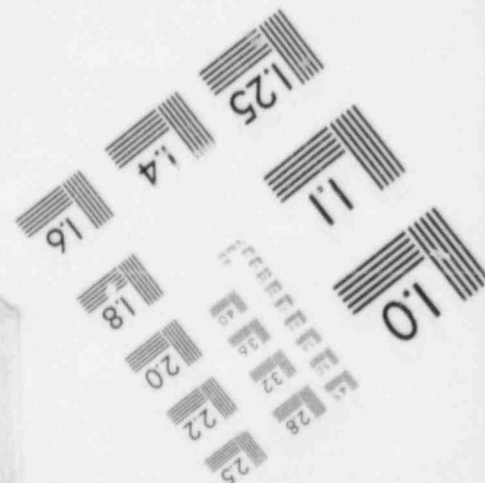
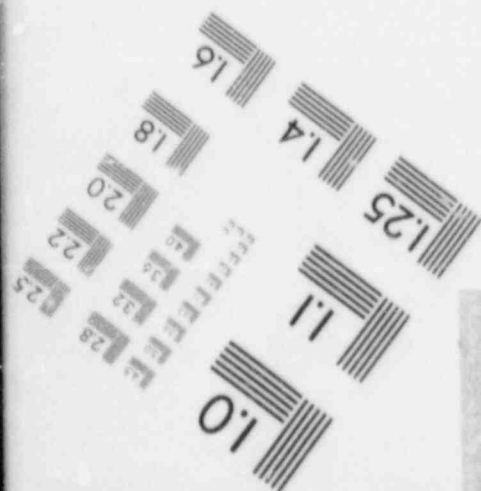
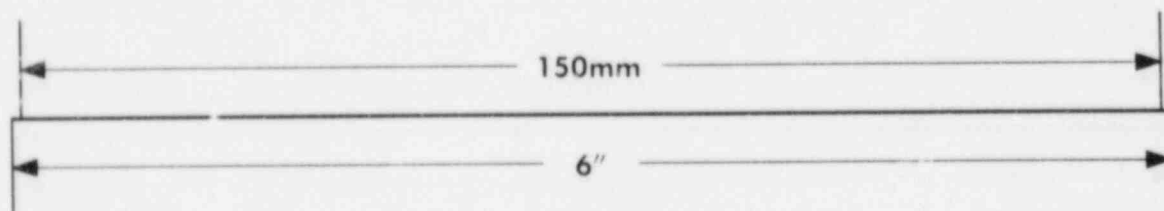
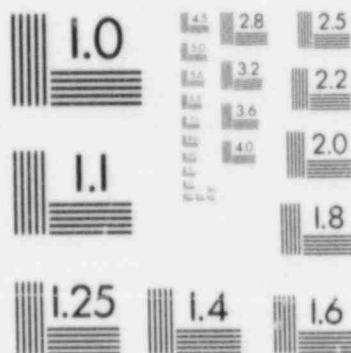
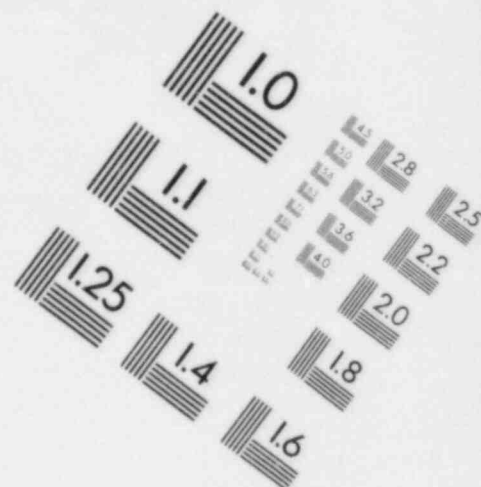
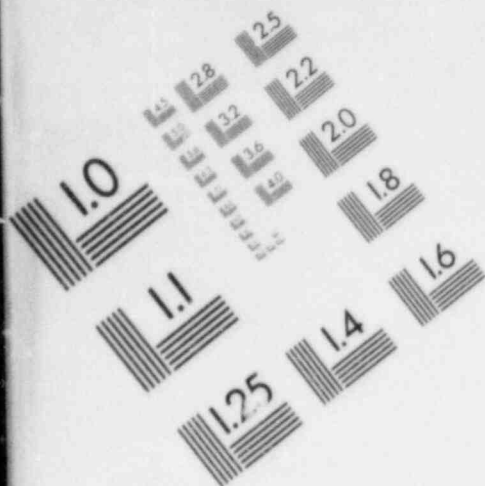
Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	6/1/84
Subject:	Data Request	Time:	9:00
		Place:	Site
Participants:	S. Donald	of	DCC
	J. Minichiello		Cygna

Item	Comments	Required Action By
	Cygna requested a copy of specification 2323-MS-46A, latest revision plus CMC's and DCA's.	

Signed: *N.A. Williams* /rke Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, J. Minichiello, S. Treby, J. Ellis, Project File



IMAGE EVALUATION  
TEST TARGET (MT-3)



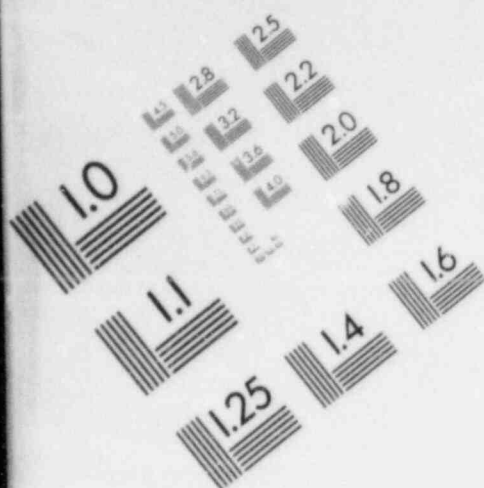
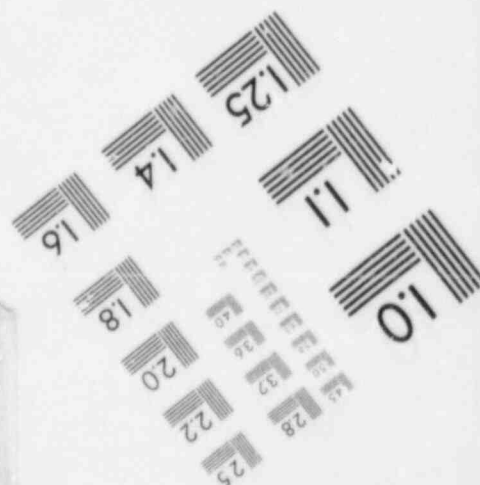
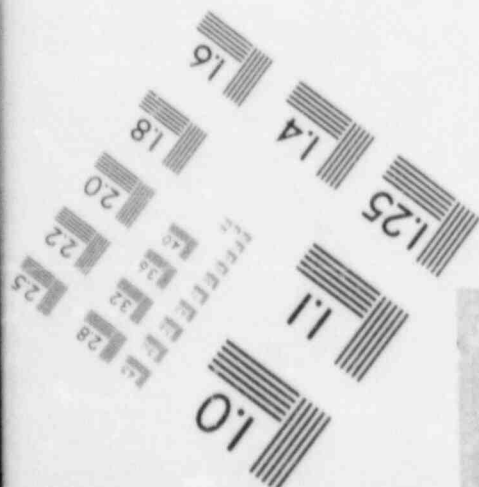
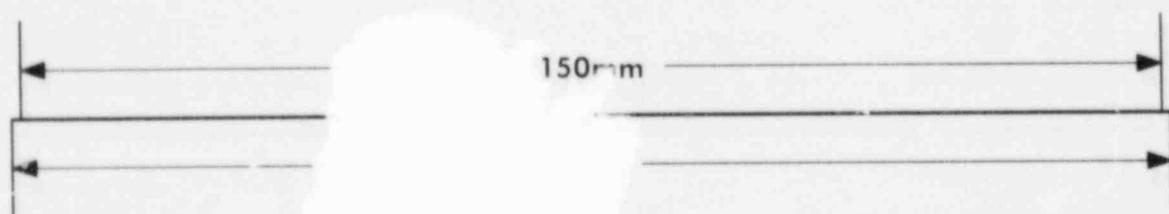
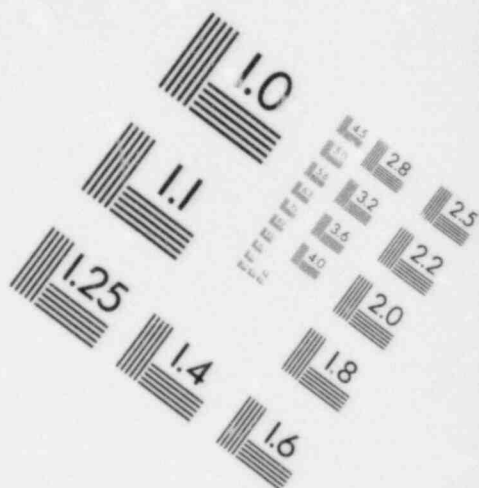


IMAGE EVALUATION  
TEST TARGET (MT-3)





# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station Independent Assessment Program - Phase 4	Job No.	84056
		Date:	5/30/84
Subject:	Data Request	Time:	11:30 a.m.
		Place:	site
Participants:	D. Bleeker	of	DCC
	J. Minichiello		Cygn

Item	Comments	Required Action By
	Cygn requested copies of the following drawings (latest revision plus any CMC's or DCA's).	
1.	PD-154357, All sheets (P. O. CP-0020B.2)	
2.	PD-154362, All sheets (P. O. CP-0020B.2)	
3.	PD-116337, All sheets (P. O. CP-0020C)	
4.	PD-11862-9, All sheets (P. O. CP-0020C)	
5.	1-74-06-32467D1 (P. O. CP-0020B.2)	
6.	AP-1410-1 (P. O. CP-0020B.2)	
7.	2323-M2-0229	
8.	2323-M2-0230	
9.	2323-M2-0231	

Signed: *N. Williams* /jw Page 1 of 1  
Distribution: N. Williams, D. Wade, G. Grace, J. Minichiello, S. Treby, J. Ellis, Project File



# Communications Report

Company:	Texas Utilities	<input type="checkbox"/> Telecon	<input checked="" type="checkbox"/> Conference Report
Project:	Comanche Peak Steam Electric Station	Job No.	04056
	Independent Assessment Program - Phase 4	Date:	5/9/84
Subject:		Time:	9:45 a.m.
		Place:	CPSES Site
Participants:	Ivan Vogelsang	of	TUGCO
	John Russ		CES

Item	Comments	Required Action By
	<p>I received the attached sheets from Mr. Vogelsang which list the cable tray supports, conduit numbers and the drawings on which the trays, supports and conduits are shown. The lists are for the power lines to the following MOV's:</p> <ul style="list-style-type: none"><li>1-HV-4512</li><li>1-HV-4513</li><li>1-HV-4514</li><li>1-HV-4515</li><li>1-HV-4572</li><li>1-HV-4574</li></ul>	

Signed: N. Williams /e:m Page 1 of 1

Distribution: N. Williams, D. Wade, G. Grace R. Hess, J. Russ, S. Treby, J. Ellis, Project File



LHV4512:

EΦ100551:

Conduit  
Drawings

- C12Φ02934 - E1-601-01
- C12Φ00990 - E1-700-01
- C12Φ04695 - E1-700-01
- C12Φ04700 - E1-701-01

Tray Drawings

- T12ΦSBC32 thru T12ΦSBC25 - E1-601-01
- T12ΦABC24 thru T12ΦABC10 - E1-714-
- T12ΦABC09 thru T12ΦABC06 - E1-700-01

Tray Segments  
Drawings

- T12ΦSBC32 thru T12ΦSBC25 - E1-601-11
- T12ΦABC24 thru T12ΦABC10 - E1-714-11
- T12ΦABC09 thru T12ΦABC06 - E1-700-11

Tray Support  
Drawings

- T12ΦSBC32 thru T12ΦSBC25 - E1-601-01 S
- T12ΦABC24 thru T12ΦABC10 - E1-714 S
- T12ΦABC09 thru T12ΦABC06 - E1-700-01 S

GIRRS & HILL, INC.  
ENGINEERS DESIGNERS CONSTRUCTORS  
NEW YORK

CLIENT TEXAS UTILITIES SERVICES INC.  
STATION COMANCHE PEAK (UNI&COM)  
JOB NUMBER 2323A\*

CABLE SCHEDULE 2323-E1-1700  
ISSUE 322  
DATE 12/01/83  
PAGE NO. 420. 19

REPORT SECTION NO. 420 480V MOTOR CONTROL CENTER SAFEGUARD BUS 1EB3-1 PWR CABLES  
\*\*\*\*\*

REF DWG

REV. CODE	CABLE NUMBER	ORIGIN	DESTINATION	FUNCTION/REMARKS	PHY WIRE	CABLE DESCRIPTION	TYPE NO.	CABLE LENGTH	SYS CODE
11G ED10055*	MCC 1EB3-1 FRAME 6 CCW NOSAF LP 1 RCV 480V POWER FEED				601 007	3/C-10 AWG	W-126	309	11
*****	CP1 EPMCEB03-06 MOV AB 1HV4512				701 007	W/ ORANGE JACKET 600 V PWR	CL 7	1X	

1EB3-1-06-0799-4852-4798

(C-12002934 3 FEET OF 3 INCH GS CONDUIT )

T120SBC32-0801-4853-4798 T120SBC32-0801-4853-4808 T120SBC31-0801-4853-4825 T120SBC30-0801-4853-4843

T120SBC29-0801-4855-4845 T120SBC28-0799-4855-4853 T120SBC27-0799-4855-4855 T120SBC26-0798-4855-4855

T120SBC25-0798-4855-4880 T120ABC24-0798-4855-4906 T120ABC23-0798-4851-4906 T120ABC22-0798-4851-4914

T120ABC21-0803-4851-4921 T120ABC20-0803-4851-4941 T120ABC19-0802-4851-4945 T120ABC18-0802-4851-4953

T120ABC17-0804-4851-4958 T120ABC16-0804-4851-4979 T120ABC15-0800-4851-4979 T120ABC14-0800-4851-4982

T120ABC13-0799-4856-4982 T120ABC12-0799-4861-4982 T120ABC11-0798-4864-4982 T120ABC10-0798-4868-4982

TWS-A-002-0799-4870-4982

(C-12000990 3 FEET OF 4 INCH GS CONDUIT )

T120ABC09-0798-4872-4982 T120ABC08-0798-4874-4982 T120ABC07-0798-4879-4986 T120ABC06-0800-4884-4986

T120ABC05-0800-4897-4986 T120ABC04-0805-4897-4986

(C-12004695 29 FEET OF 2 INCH GS CONDUIT )

JB1A2730 -0822-4900-4995

(C-12004700 4 FEET OF 1IN FLX LIQTT CND )

1HV4512 -0823-4903-4995

\*\*\*\*\*

1HV4513:

EG100614:

Cond. +  
Drawings

C12G03389 - E1-700-01

C12G03126 - E1-700-01

C12G05087 - E1-700-01

C12G05086 - E1-701-01

C12G05254 - E1-701-01

Tray Drawings

T12GABF34 + 33 - E1-700-01

T12GABF02 + 03 - E1-700-01

Tray Segment  
Drawings

T12GABF34,33,02,03 - E1-700-11

Tray Support  
Drawings

T12GABF34,33,02,03 - E1-700-01 S

CLIENT TEXAS UTILITIES SERVICES INC.  
STATION COMANCHE PEAK(UNINCIM)  
JOB NUMBER 232JA\*

CABLE SCHEDULE 2323-11 1100  
15 SUS 122  
DATE 12/01/81  
PAGE NO. 421. 21

REPORT SECTION NO. 421 480V MOTOR CONTROL CENTER SAFEGUARD BUS 1EB4-1 PWR CABLES

REV. CODE	CABLE NUMBER	ORIGIN	DESTINATION	FUNCTION/REMARKS	PHY WIRE	CABLE DESCRIPTION	TYPE NO.	CABLE LENGTH	SYS CODE
-----------	--------------	--------	-------------	------------------	----------	-------------------	----------	--------------	----------

13G EG100614	MCC 1EB4-1 FRAME 6 CCW NOSAF LP 1 RCV 480V POWER FEED	740 007	3/C-10 AWG	W-226	176	11
*****	CP1EPMCEB04-06 MOV AB 1HV4513	741 007	W/ GREEN JACKET	CL 7	1X	
			800 V PWR			

1EB4-1-06-0798-4912-4907  
(C-12G03389 8 FEET OF 2 INCH GS CONDUIT )  
T12GABF34-0800-4912-4911 T12GABF33-0800-4921-4911  
(C-12G03126 70 FEET OF 3 INCH GS CONDUIT )  
T12GABF02-0800-4935-4977 T12GABF03-0800-4916-4977  
(C-12G05087 25 FEET OF 2 INCH GS CONDUIT )  
JB1A264G -0825-4924-4975  
(C-12G05086 17 FEET OF 2 INCH GS CONDUIT )  
JB1A263G -0829-4916-4980  
(C-12G05254 23 FEET OF 1 INCH GS CONDUIT )  
1HV4513 -0823-4918-4995



1HV4514:

EØ100552:

Conduit  
Drawings

C12Ø02934 - E1-601-01

C12Ø00990 - E1-700-01

C12Ø02935 - E1-700-01

Tray  
Drawings

T12ØSBC32 thru T12ØSBC25 - E1-601-01

T12ØABC24 thru T12ØABC10 - E1-714

T12ØABC09 thru T12ØABC03 - E1-700-01

Tray Segment  
Drawings

T12ØSBC32 thru T12ØSBC25 - E1-601-11

T12ØABC24 thru T12ØABC10 - E1-714-11

T12ØABC09 thru T12ØABC03 - E1-700-11

Tray Support  
Drawings

T12ØSBC32 thru T12ØSBC25 - E1-601-01 S

T12ØABC24 thru T12ØABC10 - E1-714 S

T12ØABC09 thru T12ØABC03 - E1-700-01 S

CLIENT  
STATION  
JOB NUMBER

TEXAS UTILITIES SERVICES INC.  
COMANCHE PEAK (UNIBCOM)  
2323A\*

CABLE NUMBER 2323A\*  
ISSUE 322  
DATE 12/01/83  
PAGE NO. 420. 20

REPORT SECTION NO. 420 480V MOTOR CONTROL CENTER SAFEGUARD BUS 1EB3-1' PWR CABLES

REF DWG

REV. CODE	CABLE NUMBER	ORIGIN	DESTINATION	FUNCTION/REMARKS	PHY WIRE	CABLE DESCRIPTION	TYPE NO.	CABLE SYS LENGTH CODE
7A	EO100552	MCC 1EB3-1 FRAME 6 CCM NOSAF LP 1 RCV 480V POWER FEED			601 007	3/C-10 AWG	W-126	301 11
		CP1-EPMCEB03-06 MJV AB IHV4514			700 050	W/ ORANGE JACKET 800 V PWR	CL 7	1X

1EB3-1-06-0799-4852-4798

(C-12002934 3 FEET OF 3 INCH GS CONDUIT )

T120SBC32-0801-4853-4798 T120SBC32-0801-4853-4808 T120SBC31-0801-4853-4825 T120SBC30-0801-4853-4843  
T120SBC29-0801-4855-4845 T120SBC28-0799-4855-4853 T120SBC27-0799-4855-4855 T120SBC26-0798-4855-4855  
T120SBC25-0798-4855-4880 T120ABC24-0798-4855-4906 T120ABC23-0798-4851-4906 T120ABC22-0798-4851-4914  
T120ABC21-0803-4851-4921 T120ABC20-0803-4851-4941 T120ABC19-0802-4851-4945 T120ABC18-0802-4851-4953  
T120ABC17-0804-4851-4958 T120ABC16-0804-4851-4979 T120ABC15-0800-4851-4979 T120ABC14-0800-4851-4982  
T120ABC13-0799-4856-4982 T120ABC12-0799-4851-4982 T120ABC11-0798-4884-4982 T120ABC10-0798-4868-4932  
TWS-A-002-0799-4870-4982

(C-12000990 3 FEET OF 4 INCH GS CONDUIT )

T120ABC09-0798-4872-4982 T120ABC08-0798-4874-4982 T120ABC07-0798-4879-4986 T120ABC06-0800-4884-4986  
T120ABC05-0800-4887-4986 T120ABC04-0805-4887-4988 T120ABC03-0805-4910-4986

(C-12002635 9 FEET OF 1-1/2 INCH GS CONDUIT AND 3 FEET OF FLEX)

IHV4514-0803-4920-4987

1HV4515:

EG100615:

Conduit  
Drawings C12G03389- E1-700-01  
C12G03126- E1-700-01  
C12G02851- E1-700-01

Tray Drawings T12GABF34,33,02,03- E1-700-01

Tray Segment  
Drawings T12GABF34,33,02,03- E1-700-11

Tray Support  
Drawings T12GABF34,33,02,03- E1-700-015

7A EG100615 MCC 1EB4-1 FRAME 6 CCW HE/NOSAF LP CV 480V POWER FEED  
\*\*\*\*\* CPIEPMCEB04-06 MOV AB 1HV4515

700 007 3/C-10 AWG W-226 150 11  
700 050 W/ GREEN JACKET CL 7 1X  
600 V PWR

1EB4-1-06-0798-4912-4907

(C-12G03389 6 FEET OF 2 INCH GS CONDUIT )

T12GABF34-0800-4912-4911 T12GABF33-0800-4921-4911

(C-12G03126 70 FEET OF 3 INCH GS CONDUIT )

T12GABF02-0800-4935-4977 T12GABF03-0800-4918-4977

(C-12G02851 28 FEET OF 1 INCH GS CONDUIT AND 3 FEET OF FLEX)

1HV4515 -0799-4919-5006

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LHV 4572:

EØ100555:

conduit  
Drawings C12Ø02936 - E1-601-01  
C12Ø02937 - E1-601-01

Tray Drawings T12ØSBC32 TRRV 28 + 35 thru 37 - E1-601-01

Tray Segment  
Drawings T12ØSBC32 TRRV 28 + 35 thru 37 - E1-601-11

Tray support  
Drawings T12ØSBC32 TRRV 28 + 35 thru 37 - E1-601-015

GIRRS & HILL, INC.  
ENGINEERS DESIGNERS CONSTRUCTORS  
NEW YORK

CLIENT TEXAS UTILITIES SERVICES INC.  
STATION COMANCHE PEAK(UN1&COM)  
JOB NUMBER 2323A\*

CABLE SCHEDULE 2323-E1-1700  
ISSUE J22  
DATE 12/01/83  
PAGE NO. 420 23

REPORT SECTION NO. 420 480V MOTOR CONTROL CENTER SAFEGUARD BUS 1EB3-1 PWR CABLES

REF DWG

REV. CODE	CABLE NUMBER	ORIGIN	DESTINATION	FUNCTION/REMARKS	PHY WIRE	CABLE DESCRIPTION	TYPE NO.	CABLE LENGTH	SYS CODE
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7A	ED100555	MCC 1EB3-1 FRAME 7 RHR HE 1	OUTLET CV 480V POWER FEED		601 007	3/C-10 AWG	W-126	114	11
		CP1-EPMCEB03-07 MOV SG	1H/4572		601 050	W/ ORANGE JACKET 600 V PWR	CL 7	1X	

1EB3-1-07-0799-4852-4800

(C-120C2936 3 FEET OF 3 INCH GS CONDUIT )

T120SBC32-0801-4853-4800 T120SBC32-0801-4853-4808 T120SBC31-0801-4853-4825 T120SBC30-0801-4853-4843

T120SBC29-0801-4855-4845 T120SBC28-0799-4855-4853 T120SBC35-0799-4856-4853 T120SBC36-0799-4882-4853

T120SBC37-0799-4895-4853

(C-12002937 4 FEET OF 1 INCH GS CONDUIT AND 3 FEET OF FLEX)

1H/4572 -0804-4895-4855

LHV 4574:

EQ 100556:

conduit  
Drawings

C12Ø02936 - E1-601-01

C12Ø02938 - E1-601-01

Tray drawings T12ØSBC32 thru 28 + 35 thru 37 - E1-601-01

Tray segment  
Drawings T12ØSBC32 thru 28 + 35 thru 37 - E1-601-11

Tray support  
Drawings T12ØSBC32 thru 28 + 35 thru 37 - E1-601-015

7A ED100556 MCC 1EB3-1 FRAME 7 CONTN SPRAY HE 1 480V POWER FEED  
\*\*\*\*\* CP1-EPNCEB03-07 DCV SG MOV 1HV4574

601 007 3/C-10 AWG W-126 114 11  
601 050 W/ ORANGE JACKET CL 7 1X  
600 V PWR

1EB3-1-07-0799-4852-4800

(C-12002936 3 FEET OF 3 INCH GS CONDUIT )

T120SBC32-0801-4853-4800 T120SBC32-0801-4853-4808 T120SBC31-0801-4853-4825 T120SBC30-0801-4853-4843

T120SBC29-0801-4855-4815 T120SBC28-0799-4855-4853 T120SBC35-0799-4856-4853 T120SBC36-0799-4382-4863

T120SBC37-0799-4896-4853

(C-12002938 3 FEET OF 1 INCH GS CONDUIT AND 3 FEET OF FLEX)

1HV4574 -0804-4896-4852

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STATION  
JOB NUMBER

VERA UTILITY SERVICES, INC.  
CORPORATE PEAK (UNIBCOM)  
2121A

CABLE SCHEDULE 2323-E1-1700  
ISSUE 322