SECTION B

PART I
COMPUTER INPUT CALCULATIONS

ANALYSIS

CASE TWO

/COMTRAN/ GUYED TOWER ANALYSIS
JOB: 666 Ft. Guyed Tower, REVISED ANALYSIS, 75 MPh Basic Velo., EIA/TIA 222E

3 SIDES
7 SPANS
33 SECTIONS
MISC 5.00% WEIGHT
MISC 2.00% AREA
BASE PIER ELEVATION = 1.00
GUST RESPONSE FACTOR (Gh) = 1.04
BASIC WIND VELOCITY = 75.00
WIND ANGLE = 0
THIS RUN USED VERSION EIA 222-E

SPAN DATA

SPAN	LENGTH (FT)	WIND PRES (PSF)	WEIGHT (KIPS)	WIND LOAD (KIPS)	AVERAGE I (INFT)**2	SYST TYPE	TORS STIFF (KIP-FT)
1	93.500	16.928	5.098	1.977	24.209	N	104.230
2	95.167	22.655	5.155	2.683	24.209	N	104.230
3	95.167	26.295	5.155	3.114	24.209	N	104.230
4	95.167	28.975	5.155	3.431	24.209	N	104.230
5	94.500	31.138	5.119	3.662	24.209	N	104.230
6	95.167	32.978	4.563	3.905	19.550	N	104.230
7	94.432	34.591	4.294	4.065	17.891	N	104.230

SECTION DATA

SEC	PANEL HT (FT)	FACE WDTH (FT)	LENGTH (FT)	SHAPE FACTOR CF	SOL-RATIO e	ROUND S/F Rr
1	5.000	4.000	18.500	2.568	0.209	0.592
2	5.000	4.000	20.000	2.583	0.204	0.591
3	5.000	4.000	20.000	2.583	0.204	0.591
4	5.000	4.000	20.000	2.583	0.204	0.591
5	5.000	4.000	20.000	2.583	0.204	0.591
6	5.000	4.000	20.000	2.583	0.204	0.591
7	5.000	4.000	20.000	2.583	0.204	0.591
8	5.000	4.000	20.000	2.583	0.204	0.591
9	5.000	4.000	20.000	2.583	0.204	0.591
10	5.000	4.000	20.000	2.583	0.204	0.591
11	5.000	4.000	20.000	2.583	0.204	0.591
12	5.000	4.000	20.000	2.583	0.204	0.591
13	5.000	4.000	20.000	2.583	0.204	0.591
14	5.000	4.000	20.000	2.583	0.204	0.591
15	5.000	4.000	20.000	2.583	0.204	0.591
16	5.000	4.000	20.000	2.583	0.204	0.591
17	5.000	4.000	20.000	2.583	0.204	0.591
18	5.000	4.000	20.000	2.583	0.204	0.591
19	5.000	4.000	20.000	2.583	0.204	0.591
20	5.000	4.000	20.000	2.583	0.204	0.591
21	5.000	4.000	20.000	2.583	0.204	0.591
22	5.000	4.000	20.000	2.583	0.204	0.591
23	5.000	4.000	20.000	2.583	0.204	0.591
24	5.000	4.000	20.000	2.583	0.204	0.591
25	5.000	4.000	20.000	2.583	0.204	0.591
26	5.000	4.000	20.000	2.583	0.204	0.591
27	5.000	4.000	20.000	2.583	0.204	0.591
28	5.000	4.000	20.000	2.583	0.204	0.591
29	5.000	4.000	20.000	2.583	0.204	0.591
30	5.000	4.000	20.000	2.583	0.204	0.591
31	5.000	4.000	20.000	2.583	0.204	0.591
32	5.000	4.000	20.000	2.583	0.204	0.591
33	5.000	4.000	24.600	2.582	0.204	0.591

666 Ft. Guyed Tower, REVISED ANALYSIS, 75 MPh Basic Velo., EIA/TIA 222E

MEMBER DATA: LEGS

SEC	LEG TYPE	DIMENSIONS (IN)	XSECT (SQIN)	I (IN**4)	POUNDS PER FT	SQFT PER FT
1	PIPE	3.500x 0.300	3.016	3.894	10.263	0.173
2	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
3	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
4	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
5	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
6	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
7	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
8	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
9	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
10	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
11	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
12	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
13	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
14	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
15	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
16	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
17	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
18	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
19	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
20	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
21	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
22	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
23	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
24	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
25	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
26	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
27	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
28	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
29	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
30	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
31	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
32	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
33	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172

MEMBER DATA: DIAGONALS

SEC	DIAG TYPE	DIMENSIONS (IN)	POUNDS PER FT	SQFT PER FT	PCS
1	ROD	0.625	1.044	0.031	24
2	ROD	0.625	1.044	0.031	24
3	ROD	0.625	1.044	0.031	24
4	ROD	0.625	1.044	0.031	24
5	ROD	0.625	1.044	0.031	24
6	ROD	0.625	1.044	0.031	24
7	ROD	0.625	1.044	0.031	24
8	ROD	0.625	1.044	0.031	24
9	ROD	0.625	1.044	0.031	24
10	ROD	0.625	1.044	0.031	24
11	ROD	0.625	1.044	0.031	24
12	ROD	0.625	1.044	0.031	24
13	ROD	0.625	1.044	0.031	24
14	ROD	0.625	1.044	0.031	24
15	ROD	0.625	1.044	0.031	24
16	ROD	0.625	1.044	0.031	24
17	ROD	0.625	1.044	0.031	24
18	ROD	0.625	1.044	0.031	24
19	ROD	0.625	1.044	0.031	24
20	ROD	0.625	1.044	0.031	24
21	ROD	0.625	1.044	0.031	24
22	ROD	0.625	1.044	0.031	24

666 Ft. Guyed Tower, REVISED ANALYSIS, 75 MPh Basic Velo., EIA/TIA 222E

/TPREP/ TRANSMISSION LINE PREPARATION
JOB: 666' Guyed Tower, REVISED ANALYSIS, 75 Mph Basic Vel., EIA/TIA 222E

24 TRANSMISSION LINES
7 SPANS
BASIC WIND VELOCITY: 75.000
ICE RADIUS : 0.000
GUST RESPONCE (GH) : 1.041
BASEPIER ELEVATION : 1.000
THIS RUN USED EIA 222-E

TRANSMISSION LINE DATA

NO	DESCRIPTION	LBS/FT	SQFT/FT	EXPOSURE (%)	ELEVATION (FT) LOWER	UPPER
1	LADDER	5.00	0.2250	100.00	10.00	664.00
2	3-1/8" R.C.	2.60	0.3125	100.00	10.00	664.00
3	3-1/8" R.C.	2.60	0.3125	100.00	10.00	664.00
4	1" COND.	1.68	0.1315	100.00	10.00	664.00
5	7/8" HELIAX	0.54	0.1110	100.00	10.00	650.00
6	3" HELIAX	1.80	0.3030	100.00	10.00	638.00
7	1-5/8" HELIAX	1.04	0.1980	100.00	10.00	580.00
8	7/8" HELIAX	0.54	0.1110	100.00	10.00	537.00
9	7/8" HELIAX	0.54	0.1110	100.00	10.00	523.00
10	7/8" HELIAX	0.54	0.1110	100.00	10.00	511.00
11	7/8" HELIAX	0.54	0.1110	75.00	10.00	501.00
12	7/8" HELIAX	0.54	0.1110	75.00	10.00	486.00
13	7/8" HELIAX	0.54	0.1110	75.00	10.00	403.00
14	7/8" HELIAX	0.54	0.1110	75.00	10.00	402.00
15	7/8" HELIAX	0.54	0.1110	50.00	10.00	393.00
16	7/8" HELIAX	0.54	0.1110	50.00	10.00	375.00
17	7/8" HELIAX	0.54	0.1110	50.00	10.00	363.00
18	7/8" HELIAX	0.54	0.1110	25.00	10.00	289.00
19	1-5/8" HELIAX	1.04	0.1980	25.00	10.00	230.00
20	1-5/8" HELIAX	1.04	0.1980	25.00	10.00	190.00
21	1-5/8" HELIAX	1.04	0.1980	25.00	10.00	170.00
22	7/8" HELIAX	0.54	0.1110	25.00	10.00	119.00
23	7/8" HELIAX	0.54	0.1110	25.00	10.00	98.00
24	7/8" HELIAX	0.54	0.1110	0.00	10.00	30.00

SPAN DATA

SPAN	LENGTH (FT)	WIND PRES (PSF)	XMSN WT (KIPS)	WIND LOAD (KIPS)
1	93.500	16.928	2.132	3.757
2	95.167	22.655	2.311	5.608
3	95.167	26.295	2.062	6.196
4	95.167	28.975	1.958	6.662
5	94.500	31.138	1.730	6.305
6	95.167	32.978	1.555	5.662
7	94.432	34.591	1.302	4.323

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/OMNIDAT/ REMAINING TOWER INPUT DATA
JOB: 666' Guyed Tower, REVISED ANALYSIS, 75 Mph basic Vel., EIA/TIA 222E

2 CARD DATA: BASIC INFORMATION

7 GUY LEVELS
HINGED BASE
0.000 INCH RADIAL ICE ON GUYS
AMBIENT TEMPERATURE = 30.0 DEG F
INTERMEDIATE LOADS ARE CONSIDERED
NO INSULATORS ARE CONSIDERED

3 CARD DATA: GUY LEVEL INFORMATION

LVL	# GUYS AT LVL	AVERAGE WIND VELOCITY (MI/HR)	CONCENTRATED LOADS (KIPS) WEIGHT	WIND LOAD
1	3	81.200	0.00	0.00
2	3	87.900	0.00	0.00
3	3	92.600	0.00	0.00
4	3	96.200	0.00	0.00
5	3	99.200	0.00	0.00
6	3	101.700	0.00	0.00
7	3	103.900	0.00	0.00

LVL	MOMENTS (KIP-FT) WINDWARD DIRECTION			NORMAL DIRECTION			TORQUES (KIP-FT) WINDWARD DIRECTION		
	A	B	C	A	B	C	A	B	C
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4 CARD DATA: GUY AND LEVER ARM ANGLES

LVL	GUY #	ANGLE GUY MAKES W/WIND (DEG) WIND A	WIND B	WIND C	ANGLE LEVER ARM MAKES W/WIND (DEG) WIND A	WIND B	WIND C
1	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
2	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
3	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
4	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
5	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
6	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
7	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		

666' Guyed Tower, REVISED ANALYSIS, 75 Mph basic Vel., EIA/TIA 222F

5 CARD DATA: INTERMEDIATE LOAD INFORMATION

NO	ELEV (FT)	CONCENTRATED LOADS (KIPS) WEIGHT	WIND LOAD
1	29.0	0.10	0.08
2	98.0	0.10	0.09
3	119.0	0.10	0.09
4	140.0	0.10	0.09
5	170.0	0.10	0.09
6	180.0	0.10	0.09
7	190.0	0.10	0.25
8	230.0	0.20	0.30
9	289.0	0.10	0.14
10	343.0	0.10	0.15
11	373.0	0.10	0.15
12	393.0	0.10	0.15
13	402.0	0.10	0.16
14	403.0	0.10	0.16
15	486.0	0.10	0.16
16	501.0	0.10	0.16
17	511.0	0.10	0.16
18	523.0	0.10	0.17
19	537.0	0.10	0.17
20	549.0	0.15	0.24
21	569.0	0.15	0.24
22	589.0	0.15	0.24
23	609.0	0.15	0.24
24	629.0	0.15	0.24
25	638.0	0.15	0.20
26	648.0	0.15	0.20
27	650.0	0.10	0.18

NO	MOMENTS (KIP-FT) WINDWARD DIRECTION A	B	C	NORMAL DIRECTION A	B	C	TORQUES (KIP-FT) WINDWARD DIRECTION A	B	C
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

666' Guyed Tower, REVISED ANALYSIS, 75 Mph basic Vel., EIA/TIA 222E

6 CARD DATA: GUY CABLE INFORMATION

LVL	GUY #	DISTANCE (FT) HORIZ	VERT	TENS (KIPS)	STRAND TYPE	UNIT WT (LB/FT)	DIAM (IN)	AE (KIPS)	BS (KIPS)	LEVER ARM (FT)
1	ALL	260.00	103.50	5.00	EHS7	0.8130	0.6250	4700.	42.40	2.500
2	ALL	260.00	198.50	4.00	EHS7	0.8130	0.6250	4700.	42.40	2.500
3	ALL	260.00	294.00	6.00	EHS19	1.1550	0.7500	6720.	58.30	2.500
4	ALL	400.00	393.50	4.00	EHS7	0.8130	0.6250	4700.	42.40	2.500
5	ALL	400.00	488.00	6.00	EHS19	1.1550	0.7500	6720.	58.30	2.500
6	ALL	400.00	583.00	7.00	EHS19	1.5810	0.8750	9340.	79.70	2.500
7	ALL	400.00	678.00	12.00	EHS19	2.0730	1.0000	11940.	104.50	2.500

9 CARD DATA: PULL-OFF INFORMATION

WEIGHT (KIPS)	WIND LOAD (KIPS)	MOMENT (KIP-FT)	TORQUES (KIP-FT) WIND A	WIND B	WIND C
18.00	8.90	393.80	0.00	0.00	0.00

10 CARD DATA: PANEL INFORMATION

SPAN	PANEL HEIGHT (FT) TOP	BOTTOM	UNIFORM	# UNIF PANELS
1	5.000	3.500	5.000	17
2	5.084	5.083	5.000	17
3	5.084	5.083	5.000	17
4	5.084	5.083	5.000	17
5	4.750	4.750	5.000	17
6	5.084	5.083	5.000	17
7	4.716	4.716	5.000	17

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/ATLAS/ ALLOWABLE TOWER LOADS

JOB: 664 Ft. Guyed Tower - 75 Mph Basic velocity, EIA 222E

ALLOWABLE LOADS ARE INCREASED BY A FACTOR OF: 1.333

NO	TYPE	DIMENSIONS (IN)	UNS LTH (IN)	RAD (IN)	XSECT (SQIN)	BOLT (SQIN)	YIELD (KSI)	MAX LOAD (KIPS)	CLASS
1	PIPE	3.500x 0.300	60.00	1.136	3.016	0.000	50.0	96.13	CMPR1
2	PIPE	3.500x 0.216	60.00	1.164	2.228	0.000	50.0	71.62	CMPR1
3	ROD	0.625	0.00	0.156	0.307	0.000	50.0	12.28	TENSN
4	ROD	1.000	45.00	0.250	0.785	0.000	50.0	4.82	CMPR1

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ANALYSIS

CASE THREE

'COMTRAN/ GUYED TOWER ANALYSIS
JOB: 666 Ft. Guyed Tower - REVISED ANALYSIS - 75 Mph Basic Vel., EIA 222E

3 SIDES
7 SPANS
33 SECTIONS
MISC 5.00% WEIGHT
MISC 2.00% AREA
BASE PIER ELEVATION = 1.00
GUST RESPONSE FACTOR (Gh) = 1.04
BASIC WIND VELOCITY = 75.00
WIND ANGLE = 0
THIS RUN USED VERSION EIA 222-E

SPAN DATA

SPAN	LENGTH (FT)	WIND PRES (PSF)	WEIGHT (KIPS)	WIND LOAD (KIPS)	AVERAGE I (INFT)**2	SYST TYPE	TORS STIFF (KIP-FT)
1	93.500	16.928	5.098	2.058	24.209	N	104.230
2	95.167	22.655	5.155	2.792	24.209	N	104.230
3	95.167	26.295	5.155	3.241	24.209	N	104.230
4	95.167	28.975	5.155	3.571	24.209	N	104.230
5	94.500	31.138	5.119	3.811	24.209	N	104.230
6	95.167	32.978	4.563	4.065	19.550	N	104.230
7	94.432	34.591	4.294	4.231	17.891	N	104.230

666 Ft. Guyed Tower - REVISED ANALYSIS - 75 Mph Basic Vel., EIA 222F

SECTION DATA

SEC	PANEL HT (FT)	FACE WDTH (FT)	LENGTH (FT)	SHAPE FACTOR CF	SOL-RATIO e	ROUND S/F Rr
1	5.000	4.000	18.500	2.568	0.209	0.592
2	5.000	4.000	20.000	2.583	0.204	0.591
3	5.000	4.000	20.000	2.583	0.204	0.591
4	5.000	4.000	20.000	2.583	0.204	0.591
5	5.000	4.000	20.000	2.583	0.204	0.591
6	5.000	4.000	20.000	2.583	0.204	0.591
7	5.000	4.000	20.000	2.583	0.204	0.591
8	5.000	4.000	20.000	2.583	0.204	0.591
9	5.000	4.000	20.000	2.583	0.204	0.591
10	5.000	4.000	20.000	2.583	0.204	0.591
11	5.000	4.000	20.000	2.583	0.204	0.591
12	5.000	4.000	20.000	2.583	0.204	0.591
13	5.000	4.000	20.000	2.583	0.204	0.591
14	5.000	4.000	20.000	2.583	0.204	0.591
15	5.000	4.000	20.000	2.583	0.204	0.591
16	5.000	4.000	20.000	2.583	0.204	0.591
17	5.000	4.000	20.000	2.583	0.204	0.591
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MEMBER DATA: LEGS

SEC	LEG TYPE	DIMENSIONS (IN)	XSECT (SQIN)	I (IN**4)	POUNDS PER FT	SQFT PER FT
1	PIPE	3.500x 0.300	3.016	3.894	10.263	0.173
2	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
3	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
4	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
5	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
6	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
7	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
8	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
9	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
10	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
11	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
12	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
13	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
14	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
15	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
16	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
17	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
18	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
19	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
20	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
21	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
22	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
23	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
24	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
25	PIPE	3.500x 0.300	3.016	3.894	10.263	0.172
26	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
27	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
28	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
29	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
30	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
31	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
32	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172
33	PIPE	3.500x 0.216	2.228	3.017	7.583	0.172

MEMBER DATA: HORIZONTALS

SEC	HORIZ TYPE	DIMENSIONS (IN)	POUNDS PER FT	SQFT PER FT	PCS
1	ROD	1.000	2.673	0.049	15
2	ROD	1.000	2.673	0.049	15
3	ROD	1.000	2.673	0.049	15
4	ROD	1.000	2.673	0.049	15
5	ROD	1.000	2.673	0.049	15
6	ROD	1.000	2.673	0.049	15
7	ROD	1.000	2.673	0.049	15
8	ROD	1.000	2.673	0.049	15
9	ROD	1.000	2.673	0.049	15
10	ROD	1.000	2.673	0.049	15
11	ROD	1.000	2.673	0.049	15
12	ROD	1.000	2.673	0.049	15
13	ROD	1.000	2.673	0.049	15
14	ROD	1.000	2.673	0.049	15
15	ROD	1.000	2.673	0.049	15
16	ROD	1.000	2.673	0.049	15
17	ROD	1.000	2.673	0.049	15
18	ROD	1.000	2.673	0.049	15
19	ROD	1.000	2.673	0.049	15
20	ROD	1.000	2.673	0.049	15
21	ROD	1.000	2.673	0.049	15
22	ROD	1.000	2.673	0.049	15
23	ROD	1.000	2.673	0.049	15
24	ROD	1.000	2.673	0.049	15
25	ROD	1.000	2.673	0.049	15
26	ROD	1.000	2.673	0.049	15
27	ROD	1.000	2.673	0.049	15
28	ROD	1.000	2.673	0.049	15
29	ROD	1.000	2.673	0.049	15
30	ROD	1.000	2.673	0.049	15
31	ROD	1.000	2.673	0.049	15
32	ROD	1.000	2.673	0.049	15
33	ROD	1.000	2.673	0.049	18

/TPREP/ TRANSMISSION LINE PREPARATION
JOB: 666 Ft. Guyed Tower - 75 Mph Basic Velocity, EIA 222F, REVISED ANALYSIS

23 TRANSMISSION LINES
7 SPANS
BASIC WIND VELOCITY: 75.000
ICE RADIUS : 0.000
GUST RESPONCE (GH) : 1.041
BASEPIER ELEVATION : 1.000
THIS RUN USED EIA 222-E

TRANSMISSION LINE DATA

NO	DESCRIPTION	LBS/FT	SQFT/FT	EXPOSURE (%)	ELEVATION (FT) LOWER	UPPER
1	LADDER	5.00	0.2250	100.00	10.00	664.00
2	3-1/8" R.C.	2.60	0.3125	100.00	10.00	664.00
3	1" COND.	1.68	0.1315	100.00	10.00	664.00
4	7/8" HELIAX	0.54	0.1110	100.00	10.00	650.00
5	3" HELIAX	1.80	0.3030	100.00	10.00	638.00
6	1-5/8" HELIAX	1.04	0.1980	100.00	10.00	580.00
7	7/8" HELIAX	0.54	0.1110	100.00	10.00	537.00
8	7/8" HELIAX	0.54	0.1110	75.00	10.00	523.00
9	7/8" HELIAX	0.54	0.1110	75.00	10.00	511.00
10	7/8" HELIAX	0.54	0.1110	75.00	10.00	501.00
11	7/8" HELIAX	0.54	0.1110	50.00	10.00	486.00
12	7/8" HELIAX	0.54	0.1110	50.00	10.00	403.00
13	7/8" HELIAX	0.54	0.1110	50.00	10.00	402.00
14	7/8" HELIAX	0.54	0.1110	25.00	10.00	393.00
15	7/8" HELIAX	0.54	0.1110	25.00	10.00	375.00
16	7/8" HELIAX	0.54	0.1110	25.00	10.00	363.00
17	7/8" HELIAX	0.54	0.1110	25.00	10.00	289.00
18	1-5/8" HELIAX	1.04	0.1980	25.00	10.00	230.00
19	1-5/8" HELIAX	1.04	0.1980	25.00	10.00	190.00
20	1-5/8" HELIAX	1.04	0.1980	0.00	10.00	170.00
21	7/8" HELIAX	0.54	0.1110	0.00	10.00	119.00
22	7/8" HELIAX	0.54	0.1110	0.00	10.00	98.00
23	7/8" HELIAX	0.54	0.1110	0.00	10.00	30.00

SPAN DATA

SPAN	LENGTH (FT)	WIND PRES (PSF)	XMSN WT (KIPS)	WIND LOAD (KIPS)
1	93.500	16.928	1.915	2.853
2	95.167	22.655	2.064	4.351
3	95.167	26.295	1.814	4.858
4	95.167	28.975	1.711	5.204
5	94.500	31.138	1.484	5.088
6	95.167	32.978	1.308	4.590
7	94.432	34.591	1.057	3.302

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/OMNIDAT/ REMAINING TOWER INPUT DATA
JOB: 666 Ft. Guyed Tower - REVISED ANALYSIS - 75 Mph Basic Vel., EIA 222F

2 CARD DATA: BASIC INFORMATION

7 GUY LEVELS
HINGED BASE
0.000 INCH RADIAL ICE ON GUYS
AMBIENT TEMPERATURE = 30.0 DEG F
INTERMEDIATE LOADS ARE CONSIDERED
NO INSULATORS ARE CONSIDERED

3 CARD DATA: GUY LEVEL INFORMATION

LVL	# GUYS AT LVL	AVERAGE WIND VELOCITY (MI/HR)	CONCENTRATED LOADS (KIPS) WEIGHT	WIND LOAD
1	3	81.200	0.00	0.00
2	3	87.900	0.00	0.00
3	3	92.600	0.00	0.00
4	3	96.200	0.00	0.00
5	3	99.200	0.00	0.00
6	3	101.700	0.00	0.00
7	3	103.900	0.00	0.00

666 Ft. Guyed Tower - REVISED ANALYSIS - 75 Mph Basic Vel., EIA 222E

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4 CARD DATA: GUY AND LEVER ARM ANGLES

LVL	GUY #	ANGLE GUY MAKES W/WIND (DEG) WIND A	WIND B	WIND C	ANGLE LEVER ARM MAKES W/WIND (DEG) WIND A	WIND B	WIND C
1	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
2	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
3	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
4	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
5	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
6	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		
7	ALL	60.00	0.00	30.00	LEVER ARM ANGLE INFO NOT REQD		

666 Ft. Guyed Tower - REVISED ANALYSIS - 75 Mph Basic Vel., EIA 222E

5 CARD DATA: INTERMEDIATE LOAD INFORMATION

NO	ELEV (FT)	CONCENTRATED LOADS (KIPS) WEIGHT	WIND LOAD
1	29.0	0.10	0.08
2	98.0	0.10	0.09
3	119.0	0.10	0.09
4	160.0	0.10	0.09
5	170.0	0.10	0.09
6	180.0	0.10	0.09
7	190.0	0.10	0.25
8	230.0	0.20	0.30
9	289.0	0.10	0.14
10	363.0	0.10	0.15
11	375.0	0.10	0.15
12	393.0	0.10	0.15
13	402.0	0.10	0.16
14	403.0	0.10	0.16
15	486.0	0.10	0.16
16	501.0	0.10	0.16
17	511.0	0.10	0.16
18	523.0	0.10	0.17
19	537.0	0.10	0.17
20	549.0	0.15	0.24
21	569.0	0.15	0.24
22	589.0	0.15	0.24
23	609.0	0.15	0.24
24	629.0	0.15	0.24
25	638.0	0.15	0.20
26	648.0	0.15	0.20
27	650.0	0.10	0.18

NO	MOMENTS (KIP-FT) WINDWARD DIRECTION			NORMAL DIRECTION			TORQUES (KIP-FT) WINDWARD DIRECTION		
	A	B	C	A	B	C	A	B	C
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

666 Ft. Guyed Tower - REVISED ANALYSIS - 75 Mph Basic Vel., EIA 222E

9 CARD DATA: PULL-OFF INFORMATION

WEIGHT (KIPS)	WIND LOAD (KIPS)	MOMENT (KIP-FT)	TORQUES (KIP-FT) WIND A	WIND B	WIND C
17.00	8.90	393.60	0.00	0.00	0.00

10 CARD DATA: PANEL INFORMATION

SPAN	PANEL HEIGHT (FT) TOP	BOTTOM	UNIFORM	# UNIF PANELS
1	5.000	3.500	5.000	17
2	5.084	5.083	5.000	17
3	5.084	5.083	5.000	17
4	5.084	5.083	5.000	17
5	4.750	4.750	5.000	17
6	5.084	5.083	5.000	17
7	4.716	4.716	5.000	17

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/ATLAS/ ALLOWABLE TOWER LOADS
JOB: 666 Ft. Guyed Tower - REVISED ANALYSIS - 75 Mph Basic Vel., EIA 222E

ALLOWABLE LOADS ARE INCREASED BY A FACTOR OF: 1.333

NO	TYPE	DIMENSIONS (IN)	UNS LTH (IN)	RAD (IN)	XSECT (SQIN)	BOLT (SQIN)	YIELD (KSI)	MAX LOAD (KIPS)	CLASS
1	PIPE	3.500x 0.300	60.00	1.136	3.016	0.000	50.0	96.13	CMPR1
2	PIPE	3.500x 0.216	60.00	1.164	2.228	0.000	50.0	71.62	CMPR1
3	ROD	0.625	0.00	0.156	0.307	0.000	50.0	12.28	TENSN
4	ROD	1.000	45.00	0.250	0.785	0.000	50.0	4.82	CMPR1

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