



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

October 28, 2008

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **EM-VER-025-081015** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 751 Higgins Road, Cheshire, Connecticut.

Dear Attorney Baldwin:

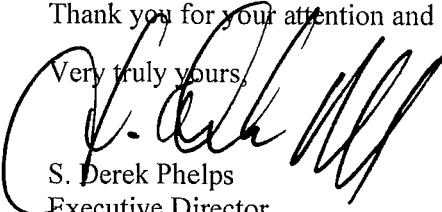
The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated October 15, 2009, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

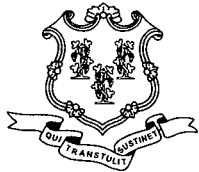
Thank you for your attention and cooperation.

Very truly yours,


S. Derek Phelps
Executive Director

SDP/MP/jb

c: The Honorable Matt Hall, Council Chairman, Town of Cheshire
Michael A. Milone, Town Manager, Town of Cheshire
William S. Voelker, AICP, Town Planner, Town of Cheshire
Christopher B. Fisher, Esq., Cuddy & Feder LLP



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Daniel F. Caruso
Chairman

October 16, 2008

The Honorable Matt Hall
Council Chairman
Town of Cheshire
Town Hall
84 South Main Street
Cheshire, CT 06410

RE: **EM-VER-025-081015** – Celco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 751 Higgins Road, Cheshire, Connecticut.

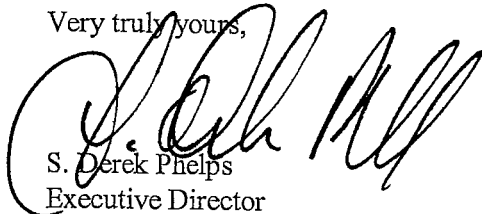
Dear Mr. Hall:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by October 30, 2008.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: William S. Voelker, AICP, Town Planner, Town of Cheshire
Michael A. Milone, Town Manager, Town of Cheshire

EM-VER-025-081015

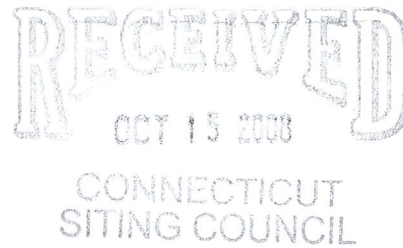
280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

ORIGINAL

October 15, 2008

Via Hand Delivery

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051



Re: **Notice of Exempt Modification – Antenna Swap
751 Higgins Road, Cheshire, Connecticut**

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains wireless telecommunications antennas at the 252-foot level on the existing 269-foot tower at the above-referenced address. The tower and the underlying property are owned by AT&T. The Council approved Cellco’s shared use of the existing facility on October 15, 1993. Cellco now intends to modify its installation by replacing six of its existing antennas on the tower with six (6) LPA-80063/6CF antennas at the same 252-foot level on the tower. Attached behind Tab 1 are the specifications for the proposed replacement antennas.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Michael A. Milone, Town Manager of the Town of Cheshire.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in any increase in the overall height of the existing structures. Cellco’s antennas will be located at the 252-foot level on the existing 269-foot tower.

2. The proposed modifications will not involve any modifications to ground-mounted equipment and, therefore, will not require the extension of the site boundaries.



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HART1-1478001-1

S. Derek Phelps
October 15, 2008
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3. The proposed modifications will not increase noise levels at the facility by six decibels or more.

4. The operation of the replacement antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. A cumulative power density table for Cellco's modified facility is included behind Tab 2.

Also included is a Structural Review confirming that the tower can support the proposed modifications. (See Tab 3).

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

Michael A. Milone, Cheshire Town Manager
Sandy M. Carter



Vertically Polarized, Log Periodic 63° / 14.5 dBd

LPA-80063/6CF

When ordering replace "___" with connector type.

Mechanical specifications

Length	1800 mm	70.9 in
Width	380 mm	15.0 in
Depth	332 mm	13.1 in
Depth with z-bracket	372 mm	14.6 in
4) Weight	12.3 kg	27.0 lbs
Wind Area		
Fore/Aft	0.68 m ²	7.4 ft ²
Side	0.60 m ²	6.5 ft ²
Rated Wind Velocity (Safety factor 2.0)	>219 km/hr >136 mph	
Wind Load @ 100 mph (161 km/hr)		
Fore/Aft	993 N	223 lbs
Side	872 N	196 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting and Downtilting

Mounting brackets attach to a pipe diameter of Ø50-102 mm (2.0-4.0 in). If the lock-down brace is used, the maximum diameter is Ø88.9 mm (3.5 in)

Mounting Bracket & Downtilt Bracket Kit
#21699999

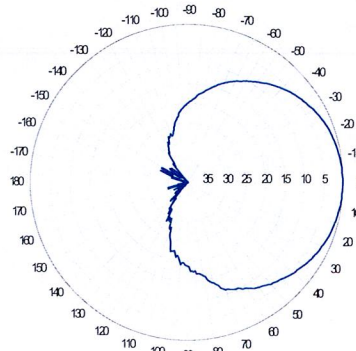
Electrical specifications

Frequency Range	806-960 MHz
Impedance	50Ω
3) Connector(s)	NE or E-DIN 1 port / center
1) VSWR	≤ 1.4:1
Polarization	Vertical
1) Gain	14.5 dBd
2) Power Rating	500 W
1) Half Power Angle	
H-Plane	63°
E-Plane	10°
1) Electrical Downtilt	0°
1) Null Fill	10%
Lightning Protection	Direct Ground

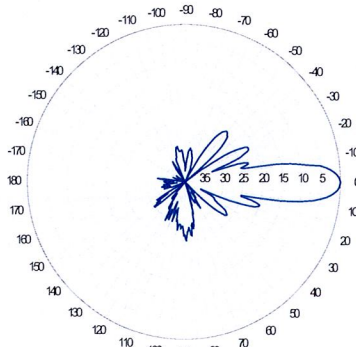
- 1) Typical values.
- 2) Power rating limited by connector only.
- 3) NE indicates an elongated N connector.
E-DIN indicates an elongated DIN connector.
- 4) The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

Radiation pattern¹⁾



Horizontal

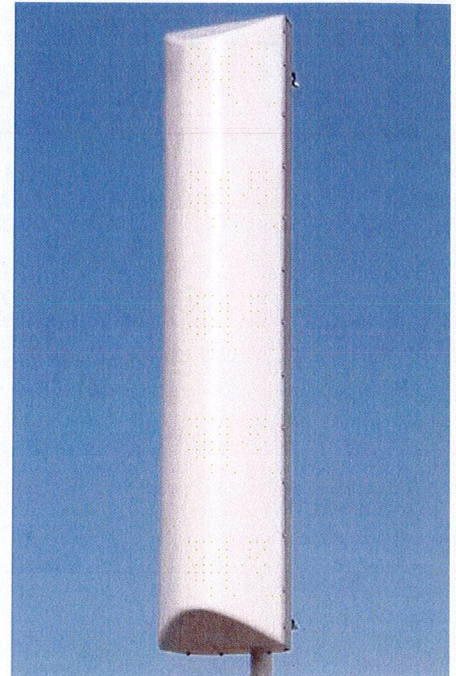


Vertical

Featuring upper side lobe suppression.

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back ratio.



Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

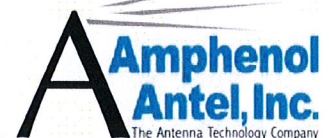
- True log-periodic design allows for superior front-to-side characteristics to minimize sector overlap.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

This Amphenol Antel antenna is under a five-year limited warranty for repair or replacement.

Antenna available with center-fed connector only.

CF Denotes a Center-Fed Connector.

806-960 MHz



Revision Date: 6/17/08

	General	Power	Density							
Site Name: Cheshire										
Tower Height: Verizon @ 252Ft.										
CARRIER	# OF CHAN.	WATTS ERP	HEIGHT	CALC. POWER DENS	FREQ.	MAX. PERMISS. EXP.	FRACTION MPE	Total		
*Cingular TDMA	16	100	259	0.0086	880	0.5867	1.46%			
*Cingular GSM	2	296	259	0.0032	880	0.5867	0.54%			
*Cingular GSM	2	427	259	0.0046	1930	1.0000	0.46%			
*Cingular TDMA	16	100	244	0.0097	880	0.5867	1.65%			
*Cingular GSM	2	296	244	0.0036	880	0.5867	0.61%			
*Cingular GSM	2	427	244	0.0052	1930	1.0000	0.52%			
*VoiceStream	8	160	212	0.0102	1930	1.0000	1.02%			
*Nextel	9	100	215	0.0070	851	0.5673	1.23%			
*VoiceStream	1	100	217	0.0008	2400	1.0000	0.08%			
*Sprint	4	500	225	0.0142	1930	1.0000	1.42%			
Verizon	9	235	252	0.0120	880	0.5866	2.04%			
Verizon	3	102	252	0.0017	1900	1.0000	0.17%			3.71%
* Source: Siting Council										



Mr. Larry Montee
AT&T Corporation National Tower Engineering
1200 Peachtree Street; Atlanta, GA 30309

October 9, 2008

Re: Structural Review of the AT&T Corporation Existing 250-ft Modified Type 'J' Tower
AT&T Corporation Site I.D. Cheshire CT Tower (AT&T CILI Code I.D. CHSHCTOT)
Location: 751 Higgins Road, Cheshire, CT, 06410; Lat. N 41° 29' 15", Long W 72° 55' 45"

Dear Mr. Montee,

Communication Structures Engineering, Inc. has completed a structural review of the existing AT&T 250-ft Modified Type 'J' Tower located at this AT&T Corporation site known as Cheshire, CT. In accordance with your request, we have performed a structural analysis of this tower to check its capability to support the existing loads as well as the new loads from the proposed Verizon Wireless panel antennas & transmission line additions. Per AT&T's requirements, the specific loading criteria that we utilized were those prescribed by the "2003 International Building Code" and "ANSI/TIA/EIA-222-F", "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." In accordance with the above codes the wind speed that we utilized for the analysis of this structure was the "3 second gust wind speed" of 105-mph (equivalent to a "fastest-mile wind speed" of 85-mph) as specified for New Haven County, CT area. A description of the existing tower, the applicable design criteria, the structural analysis procedure, and a description of the results of CSEI's structural analysis follow.

EXISTING TOWER INFORMATION & DATA

The original tower at this site was built in 1967 for AT&T Long Lines as a 250-ft Type 'J' Tower to support up to eight Western Electric KS15676 Horn Antennas on the 42-Ft X 42-Ft top antenna platform. This tower has since been modified several times when additional antennas were added. Currently only two of the KS15676 Horn Antennas are mounted at the top of the tower.

CSEI utilized the original 1967 tower design and fabrication drawings, as well as the later tower modification drawings to conduct our structural analysis of this tower. A CSEI engineer previously visited this site in 2001. At that time, CSEI climbed, photographed & reviewed the condition of the existing tower structure and confirmed equipment locations. The most current antenna information, which AT&T Corporation provided to us, was used to determine the existing tower & equipment loads for this analysis. AT&T's Tenant Specification Document, which was submitted by Verizon Wireless, was utilized to determine the now proposed Verizon Wireless antenna and cable replacements for this tower.

DESIGN CRITERIA

See the attached page for the applicable Design Criteria and Antenna Configuration that were used for this structural analysis.

STRUCTURAL ANALYSIS PROCEDURE

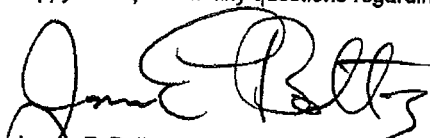
The referenced design criteria combined with wind tunnel test data from tests conducted on AT&T towers, antennas and antenna platforms were utilized to determine the applicable loads for this structure. A frame analysis was performed utilizing the stated wind loads and a computer model of the tower framing modeled on Power Line Systems' "Tower Program". The load carrying frame members of this structure were then checked for compliance with the AISC ASD "Specification for Structural Steel Buildings" and the "2003 International Building Code"

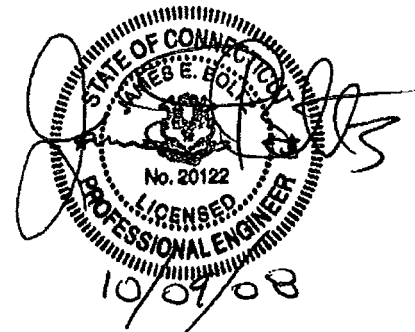
RESULTS OF STRUCTURAL ANALYSIS

Our analysis determined that all of the existing tower members would have maximum stress levels that are less than the allowable stresses permitted by the AISC Specification and the "2003 International Building Code". The tower foundation was also found to be adequate for the proposed loads. We have therefore concluded that this existing tower is capable of supporting the existing loads as well as the proposed Verizon Wireless additions in compliance with the "2003 International Building Code" & "ANSI/TIA/EIA-222-F" design criteria. This tower will not require any structural modifications or changes to support the listed equipment provided the Verizon Wireless antennas and transmission lines are installed in accordance with CSEI Drawing E1-08170 that will be prepared for this project.

If Verizon Wireless or any other carriers add any future additional equipment to this tower, this structure should be re-analyzed at that time. CSEI would be happy to respond to any questions regarding this structural analysis.

Sincerely,


James E. Boltz, P.E. (CT P.E. #20122)



- Attachments: 1.) Design Criteria for the AT&T Corp. 250-ft Type 'J' Tower at Cheshire CT
- 2.) Structural Calculations for AT&T Corp. 250-ft Type 'J' Tower at Cheshire CT

DESIGN CRITERIA

AT&T Tower Site: Cheshire, CT

LOCATION: 751 Higgins Road, Cheshire, CT,06410

Latitude N 41° 29' 15", Longitude W 72° 55' 45"

New Haven County, CT

DESIGN STANDARDS

2003 INTERNATIONAL BUILDING CODE

105 MPH (3 Second Gust Wind Speed)

&

ANSI/TIA/EIA-222-F

85 MPH (Fastest Mile Wind Speed)

In addition to the loads from the existing tower framing and platforms the loads from the following antennas and their associated transmission lines were considered in the analysis.

ANTENNA CONFIGURATION (Used for Structural Analysis)

Existing Antennas - To Remain on Tower

- 1.) (AT&T Corporation) Two KS15676 Pyramidal Horn Antennas at centerline of 257-ft above tower base plate and two associated WC281 (3-inch O.D.) waveguide runs.
- 2.) (Verizon Wireless) Six Decibel 948F85T2E-M Panel Antennas at 252-ft above tower base plate and six associated runs of 1.625 inch diameter coaxial cable.
- 3.) (Verizon Wireless) Six runs of 1.625 inch diameter coaxial cable from 252-ft above tower base plate to the base of the tower (These cables to be re-used for the new Verizon antennas listed below).
- 4.) (SNET) Three Panel Antennas at 252-ft above tower base plate and three associated runs of 1.625 inch diameter coaxial cable.
- 5.) (SNET) Six Panel Antennas at 240-ft above tower base plate and six associated runs of 1.625 inch diameter coaxial cable.
- 6.) (Sprint PCS) Six Decibel DB980H65 Panel Antennas at 225-ft above tower base plate and six associated runs of 1.625 inch diameter coaxial cable.
- 7.) (SGL) Three PGI-NOF Panel Antennas at 199-ft above tower base plate and three associated runs of 0.875 inch diameter coaxial cable.
- 8.) (T-Mobile) Eight EMS RR90-17-02 Dapa 58210 Panel Antennas at 212-ft above tower base plate and sixteen associated runs of 1.625 inch diameter coaxial cable.
- 9.) (Nextel Communications) Nine Decibel DB844H90 Panel Antennas (six at 212-ft & three @ 200-ft) above tower base plate and nine associated runs of 1.625 inch diameter coaxial cable.
- 10.) (AT&T Mobility) Six Allgon 7250.03 Panel Antennas at 170-ft above tower base plate and twelve associated runs of 1.625 inch diameter coaxial cable.
- 11.) (T-Mobile) Two 6-ft x 6ft X 8-ft Equipment Cabinets supported on the tower platform at 37-ft AGL. Includes Power & Telco Lines up to this T-Mobile equipment.

Existing Antennas - To be Removed from Tower

- (Verizon Wireless) Six Swedcom ALP-E-9011 Panel Antennas at 252-ft above tower base plate.

New (Proposed) Verizon Wireless Antennas - To Be Added on Tower

- (Verizon Wireless) Six Antel LPA-80063/6CF Panel Antennas at 252-ft above tower base plate

Cable Locations:

Our load calculations for this structural analysis assumes that all cable runs for customers listed in items numbered 2.) through 7.) (a total of 30 cable runs) are stacked in 3 rows on the existing 30-inch wide waveguide ladder in the middle of the south face of the tower. This assumption agrees with the latest information that we were provided.





COMMUNICATION STRUCTURES ENGINEERING, INC.
 5579-B Chamblee Dunwoody Rd. /Suite 517
 Dunwoody, GA 30338 (770) 951-8080

STRUCTURAL CALCULATIONS
FOR
AT&T Owned 250-ft Type 'J' Tower
Cheshire, CT

Verizon Wireless Installation

New Haven County, CT

Issue Date: October 9, 2008

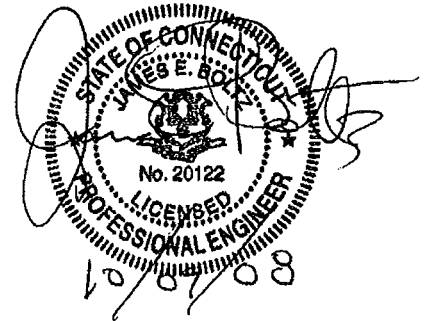


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DESIGN CRITERIA

AT&T Tower Site: Cheshire, CT

LOCATION: 751 Higgins Road, Cheshire, CT, 06410

Latitude N 41° 29' 15", Longitude W 72° 55' 45"

New Haven County, CT

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2003 INTERNATIONAL BUILDING CODE

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ANSI/TIA/EIA-222-F

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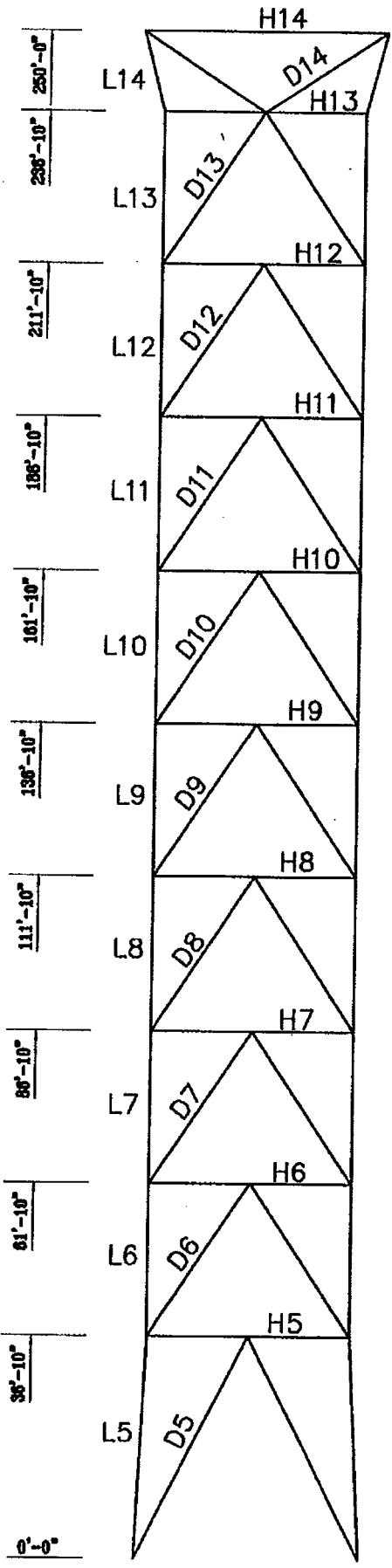
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250'-0" TYPE 'J' TOWER
ANALYSIS MODEL FOR
CHESHIRE, CT



Communication Structures Engineering, Inc.
5579-B Chamblee Dunwoody Rd. / Suite 517
Dunwoody, Georgia 30338
(770) 851-8080

 * TOWER - Analysis and Design - Copyright Power Line Systems, Inc. 1986-2006 *

Project Name : CHESHIRE, CT
 Project Notes:
 Project File : c:\pla\tower\examples\cheshire.tow
 Date run : 8:05:54 PM Tuesday, October 07, 2008
 by : Tower Version 9.23
 Licensed to : Communication Structures Engineering Inc.

Successfully performed linear analysis
 The model has 0 warnings.
 Member check option: TIA/EIA 222-F
 Connection rupture check: Not Checked
 Crossing diagonal check: Fixed
 Loads from file: c:\pla\tower\examples\cheshire.eia

Maximum element usage is 98.71% for Angle "GLX" in load case "WIND 45"

EIA Sections Information:

Section Label	Top Z (ft)	Bottom Z (ft)	Joint Count	Member Count	Top Width (ft)	Bottom Width (ft)	Gross Area (ft ²)	Face Area (ft ²)	Dead Load Adjust Factor	Face Area (ft ²)	Dead Load Adjust Factor
1	250.000	236.833	12	31	40.50	33.50	487.18	1.2900	1.0000	5.280	1.0000
2	236.833	211.833	16	25	33.50	33.50	837.50	2.2200	1.0000	2.560	1.0000
3	211.833	186.833	16	25	33.50	33.50	837.50	1.8600	1.0000	2.470	1.0000
4	186.833	161.833	16	25	33.50	33.50	837.50	2.0600	1.0000	2.130	1.0000
5	161.833	136.833	16	25	33.50	33.50	837.50	1.8900	1.0000	2.020	1.0000
6	136.833	111.833	16	25	33.50	33.50	837.50	1.8400	1.0000	2.040	1.0000
7	111.833	86.833	16	25	33.50	33.50	837.50	1.7200	1.0000	1.840	1.0000
8	86.833	61.833	16	25	33.50	33.50	837.50	1.7500	1.0000	1.850	1.0000
9	61.833	36.833	16	25	33.50	33.50	837.50	1.7000	1.0000	1.850	1.0000
10	36.833	0.000	12	12	33.50	37.00	1298.36	1.5300	1.0000	2.000	1.0000

Equipment Library:

Equipment Property Label Number	Stock Weight (lbs)	Wind Area (ft ²)	Ice Area (ft ²)	EIA Antenna Type	Shape or Drag Diameter Height (ft)	Coef. (ft)
DA 250	1500.0	77.50	0.00			
DA 236	400.0	26.25	0.00		1.00	0.00
DA 211	600.0	55.00	0.00		1.00	0.00
DA 186	150.0	8.75	0.00		1.00	0.00
DA 161	150.0	8.75	0.00		1.00	0.00
DA 36	300.0	48.00	0.00		1.00	0.00

Equipment Connectivity:

Equipment Attach Equipment ERA Antenna

Label Property Orientation Set Angle (deg)

P1	42P	DA 250	0.00
P2	42X	DA 250	0.00
P3	42XY	DA 250	0.00
P4	42Y	DA 250	0.00
P5	39P	DA 236	0.00
P6	39X	DA 236	0.00
P7	39XY	DA 236	0.00
P8	39Y	DA 236	0.00
P9	36P	DA 211	0.00
P10	36X	DA 211	0.00
P11	36XY	DA 211	0.00
P12	36Y	DA 211	0.00
P13	33P	DA 186	0.00
P14	33X	DA 186	0.00
P15	33XY	DA 186	0.00
P16	33Y	DA 186	0.00
P17	30P	DA 161	0.00
P18	30X	DA 161	0.00
P19	30XY	DA 161	0.00
P20	30Y	DA 161	0.00
P21	15P	DA 36	0.00
P22	15X	DA 36	0.00
P23	15XY	DA 36	0.00
P24	15Y	DA 36	0.00

Linear Appurtenances:

Description	From (ft)	To (ft)	Quantity	Shape	Width or Diameter (in)	Perimeter (in)	Unit Weight (lbs/ft)	In Face	Include Wind Load
CLIMBING LADDER	0	250	1	Flat	6	0	10	No	Yes
CIRCULAR WG	10	240	2	Round	3	0	11.4	No	Yes
COAXIAL CABLES	10	250	1	Flat	20	0	30	Yes	Yes

*** Loads Data

Loads from file: c:\pls\tower\examples\cheshire.eia

Structure Height Summary (used for calculating wind/ice adjust with height):
 Structure height above ground 250.00 (ft)

Elevation of structure bottom for wind height adjustment: 0.00 (ft)

Structure height for structure gust response factor: 250.00 (ft)

Structure gust response factor, gh: 1.0993

Guy installation temperature: 60.00 (deg F)

Tower Type: Rectangular Latticed

EIA Rev. F Load Cases:

Description	Factor	Wind Load Factor	Ice Load Factor	Strength Allowable Increase Factor	Basic Wind Speed (mph)	Basic Wind Dir. (Deg)	Ice Thick. (in)	Ice Density (lbs/ft ³)	Ice Temperature (deg F)	Point Loads	Joint Displ.
WIND 0	1.0000	1.0000	1.0000	1.3300	85.000	0	0.0000	0.0000	60.0		
WIND 45	1.0000	1.0000	1.0000	1.3300	85.000	45	0.0000	0.0000	60.0		
WIND 0+ICE	1.0000	1.0000	1.0000	1.3300	73.950	0	0.5000	57.0000	30.0		
WIND 45+ICE	1.0000	1.0000	1.0000	1.3300	73.950	45	0.5000	57.0000	30.0		

Equipment Load Case Information for "WIND 0":

Equipment Label	Property Set	Elevation Above Ground (ft)	Area (psf)	Ice Thick. (in)	Ice Area (ft ²)	Wind Incidence Angle (deg)	222-G CA	222-G CS	222-G CM	Antenna Axial Load (lbs)	Antenna Side Load (lbs)	Antenna Moment (MM)	Long. Trans. Load (lbs)	Vert. Load (lbs)
P1	DA 250	250.00	36.24	0.00	77.50	0.00				2808.73	0.00	1500.00	0.00	1500.00
P2	DA 250	250.00	36.24	0.00	77.50	0.00				2808.73	0.00	1500.00	0.00	1500.00
P3	DA 250	250.00	36.24	0.00	77.50	0.00				2808.73	0.00	1500.00	0.00	1500.00
P4	DA 250	250.00	36.24	0.00	77.50	0.00				936.75	0.00	400.00	0.00	400.00
P5	DA 236	236.83	35.69	0.00	26.25	0.00				936.75	0.00	400.00	0.00	400.00
P6	DA 236	236.83	35.69	0.00	26.25	0.00				936.75	0.00	400.00	0.00	400.00
P7	DA 236	236.83	35.69	0.00	26.25	0.00				1901.14	0.00	600.00	0.00	600.00
P8	DA 236	236.83	35.69	0.00	26.25	0.00				1901.14	0.00	600.00	0.00	600.00
P9	DA 211	211.83	34.57	0.00	55.00	0.00				1901.14	0.00	600.00	0.00	600.00
P10	DA 211	211.83	34.57	0.00	55.00	0.00				1901.14	0.00	600.00	0.00	600.00
P11	DA 211	211.83	34.57	0.00	55.00	0.00				291.79	0.00	150.00	0.00	150.00
P12	DA 211	211.83	34.57	0.00	55.00	0.00				291.79	0.00	150.00	0.00	150.00
P13	DA 186	186.83	33.35	0.00	8.75	0.00				291.79	0.00	150.00	0.00	150.00
P14	DA 186	186.83	33.35	0.00	8.75	0.00				280.06	0.00	150.00	0.00	150.00
P15	DA 186	186.83	33.35	0.00	8.75	0.00				280.06	0.00	150.00	0.00	150.00
P16	DA 186	186.83	33.35	0.00	8.75	0.00				280.06	0.00	150.00	0.00	150.00
P17	DA 161	161.83	32.01	0.00	8.75	0.00				280.06	0.00	150.00	0.00	150.00
P18	DA 161	161.83	32.01	0.00	8.75	0.00				280.06	0.00	150.00	0.00	150.00
P19	DA 161	161.83	32.01	0.00	8.75	0.00				280.06	0.00	150.00	0.00	150.00
P20	DA 161	161.83	32.01	0.00	8.75	0.00				280.06	0.00	150.00	0.00	150.00

1006.51 0.00 300.00
 1006.51 0.00 300.00
 1006.51 0.00 300.00

EIA Section Load Case Information for "WIND 0":

Section Label	Z of Top (ft)	Z of Bottom (ft)	Ave. Elev. (ft)	Elev. Above Gnd. (ft)	qzGh (psf)	Ice Thick. (in)	Ice qzGh (psf)	Ice Thick. (in)	Face AR (ft^2)	Face RR (ft^2)	Face CF (ft^2)	Face AG (ft^2)	Face CS (ft^2)	Face CA (ft^2)	Face CK (ft^2)	Face Axial (ft^2)	Antenna Side Load (lbs)	Antenna Moment (ft-lbs)	Antenna Long. Load (lbs)	Trans. Load (lbs)	Vert. Load (lbs)	NotF AAF (ft^2)	NotF CAF (ft^2)	NotF AAR (ft^2)	NotF CAR (ft^2)	NotF AAR*CAR (ft^2)	NotF WA (lbs)	NotF Total Weight (lbs)		
1	250.00	236.83	243.42	35.97	0.00	155.68	0.00	0.00	0.00	0.00	0.62	2.52	487.2	0.32	1.00	1.00	0.60	2.78	208.7	20370	155.7	14127	6.58	2.00	1.58	1.20	1.90	542	14669	60598
2	236.83	211.83	224.33	35.14	0.00	208.66	0.00	0.00	0.00	0.00	0.60	2.78	837.5	0.25	1.00	1.00	0.60	2.93	176.4	17585	12.50	2.00	12.50	1.20	15.00	1405	21776	19383		
3	211.83	186.83	199.33	33.97	0.00	176.37	0.00	0.00	0.00	0.00	0.59	2.93	837.5	0.21	1.00	1.00	0.60	3.08	149.9	14943	12.50	2.00	12.50	1.20	15.00	1359	18943	19869		
4	186.83	161.83	174.33	32.69	0.00	149.39	0.00	0.00	0.00	0.00	0.60	2.83	837.5	0.24	1.00	1.00	0.60	3.23	124.3	12433	12.50	2.00	12.50	1.20	15.00	1308	19551	20592		
5	161.83	136.83	149.33	31.28	0.00	124.33	0.00	0.00	0.00	0.00	0.60	2.85	837.5	0.23	1.00	1.00	0.60	3.38	99.4	99433	12.50	2.00	12.50	1.20	15.00	1251	18497	21546		
6	136.83	111.83	124.33	29.68	0.00	99.41	0.00	0.00	0.00	0.00	0.60	2.84	837.5	0.23	1.00	1.00	0.60	3.53	74.8	74833	12.50	2.00	12.50	1.20	15.00	1187	17634	22696		
7	111.83	86.83	99.33	27.84	0.00	74.81	0.00	0.00	0.00	0.00	0.60	2.84	837.5	0.23	1.00	1.00	0.60	3.68	49.6	49633	12.50	2.00	12.50	1.20	15.00	1114	16530	23975		
8	86.83	61.83	74.33	25.63	0.00	49.64	0.00	0.00	0.00	0.00	0.60	2.82	837.5	0.24	1.00	1.00	0.60	3.83	24.6	24633	12.50	2.00	12.50	1.20	15.00	1025	15458	28352		
9	61.83	36.83	49.33	22.79	0.00	24.79	0.00	0.00	0.00	0.00	0.60	2.82	837.5	0.24	1.00	1.00	0.60	4.08	9.6	9633	12.50	2.00	12.50	1.20	15.00	912	13722	30799		
10	36.83	0.00	18.42	20.32	0.00	20.32	0.00	0.00	0.00	0.00	0.59	3.09	1298.4	0.17	1.00	1.00	0.60	4.33	0.0	0.0	18.42	2.00	13.42	1.20	16.10	1076	15335	42014		

Equipment Load Case Information for "WIND 45":

Equipment Label	Property Set	Elevation Above Ground (ft)	qzGh (psf)	Ice Thick. (in)	Ice Total Area (ft^2)	Wind Incidence Angle (deg)	Wind Area (ft^2)	222-G CA	222-G CS	222-G CK	222-G Axial Load (lbs)	Antenna Side Load (lbs)	Antenna Moment (ft-lbs)	Antenna Long. Load (lbs)	Trans. Load (lbs)	Vert. Load (lbs)
P1	DA 250	250.00	36.24	0.00	77.50	315.00	315.00							1986.07	1986.07	1500.00
P2	DA 250	250.00	36.24	0.00	77.50	315.00	315.00							1986.07	1986.07	1500.00
P3	DA 250	250.00	36.24	0.00	77.50	315.00	315.00							1986.07	1986.07	1500.00
P4	DA 250	250.00	36.24	0.00	77.50	315.00	315.00							1986.07	1986.07	1500.00
P5	DA 236	236.83	35.69	0.00	26.25	315.00	315.00							662.38	662.38	400.00
P6	DA 236	236.83	35.69	0.00	26.25	315.00	315.00							662.38	662.38	400.00
P7	DA 236	236.83	35.69	0.00	26.25	315.00	315.00							662.38	662.38	400.00
P8	DA 236	236.83	35.69	0.00	26.25	315.00	315.00							662.38	662.38	400.00
P9	DA 211	211.83	34.57	0.00	55.00	315.00	315.00							1344.31	1344.31	600.00
P10	DA 211	211.83	34.57	0.00	55.00	315.00	315.00							1344.31	1344.31	600.00
P11	DA 211	211.83	34.57	0.00	55.00	315.00	315.00							1344.31	1344.31	600.00
P12	DA 211	211.83	34.57	0.00	55.00	315.00	315.00							1344.31	1344.31	600.00
P13	DA 186	186.83	33.35	0.00	8.75	315.00	315.00							206.33	206.33	150.00
P14	DA 186	186.83	33.35	0.00	8.75	315.00	315.00							206.33	206.33	150.00
P15	DA 186	186.83	33.35	0.00	8.75	315.00	315.00							206.33	206.33	150.00
P16	DA 186	186.83	33.35	0.00	8.75	315.00	315.00							206.33	206.33	150.00
P17	DA 161	161.83	32.01	0.00	8.75	315.00	315.00							198.03	198.03	150.00
P18	DA 161	161.83	32.01	0.00	8.75	315.00	315.00							198.03	198.03	150.00
P19	DA 161	161.83	32.01	0.00	8.75	315.00	315.00							198.03	198.03	150.00
P20	DA 161	161.83	32.01	0.00	8.75	315.00	315.00							198.03	198.03	150.00
P21	DA 36	36.83	20.97	0.00	48.00	315.00	315.00							711.71	711.71	300.00
P22	DA 36	36.83	20.97	0.00	48.00	315.00	315.00							711.71	711.71	300.00
P23	DA 36	36.83	20.97	0.00	48.00	315.00	315.00							711.71	711.71	300.00
P24	DA 36	36.83	20.97	0.00	48.00	315.00	315.00							711.71	711.71	300.00

EIA Section Load Case Information for "WIND 45":

Section Label	Z of Top (ft)	Z of Bottom Above Gnd. (ft)	Elev. (ft)	gwh (psf)	Ice Thick. (in)	Ice Area (ft ²)	Face AR (ft ²)	Face RR (ft ²)	Face CF (ft ²)	Face DF (ft ²)	Face DR (ft ²)	Face RR (ft ²)	Face CF (ft ²)	Face DF (ft ²)	Face DR (ft ²)	Face AE (ft ²)	Face WF (ft ²)	MotF AAF (ft ²)	MotF CAF (ft ²)	MotF AAR (ft ²)	MotF CAR (ft ²)	MotF AAR*CAR (ft ²)	MotF WA (lbs)	Total Wind Weight (lbs)	
																									AG
1	250.00	236.83	243.42	35.97	0.00	155.68	0.00	0.00	0.00	487.2	0.32	1.20	1.20	0.62	2.52	186.8	16953	6.58	2.00	1.58	1.20	1.90	542	17494	60598
2	236.83	211.83	224.33	35.14	0.00	208.66	0.00	0.00	0.00	837.5	0.25	1.19	1.19	0.60	2.78	247.7	24176	12.50	2.00	12.50	1.20	15.00	1405	25582	19383
3	211.83	186.83	199.33	33.97	0.00	176.37	0.00	0.00	0.00	837.5	0.21	1.16	1.16	0.59	2.93	204.2	20362	12.50	2.00	12.50	1.20	15.00	1359	21721	19869
4	186.83	161.83	174.33	32.69	0.00	196.88	0.00	0.00	0.00	837.5	0.24	1.18	1.18	0.60	2.83	231.6	21459	12.50	2.00	12.50	1.20	15.00	1308	22767	20592
5	161.83	136.83	149.33	31.28	0.00	193.39	0.00	0.00	0.00	837.5	0.23	1.17	1.17	0.60	2.85	226.9	20233	12.50	2.00	12.50	1.20	15.00	1251	21484	21546
6	136.83	111.83	124.33	29.68	0.00	194.81	0.00	0.00	0.00	837.5	0.23	1.17	1.17	0.60	2.84	228.6	19316	12.50	2.00	12.50	1.20	15.00	1187	20503	22696
7	111.83	86.83	99.33	27.84	0.00	194.65	0.00	0.00	0.00	837.5	0.23	1.17	1.17	0.60	2.84	228.6	18104	12.50	2.00	12.50	1.20	15.00	1114	19217	23975
8	86.83	61.83	74.33	25.63	0.00	199.64	0.00	0.00	0.00	837.5	0.24	1.18	1.18	0.60	2.82	235.3	17013	12.50	2.00	12.50	1.20	15.00	1025	18038	28352
9	61.83	36.83	49.33	22.79	0.00	199.00	0.00	0.00	0.00	837.5	0.24	1.18	1.18	0.60	2.82	234.5	15093	12.50	2.00	12.50	1.20	15.00	912	16005	30799
10	36.83	0.00	18.42	20.32	0.00	227.04	0.00	0.00	0.00	1298.4	0.17	1.13	1.13	0.59	3.09	256.8	16129	18.42	2.00	13.42	1.20	16.10	1076	17205	42014

Equipment Load Case Information for "WIND 0-ICE":

Equipment Label	Property Set	Elevation Above Ground (ft)	gwh (psf)	Ice Thick. (in)	Ice Area (ft ²)	Wind Incidence (deg)	Wind Area (ft ²)	222-G CA	222-G CS	222-G CM	222-G Axial Load (lbs)	Antenna Side Load (lbs)	Antenna Moment (ft-lbs)	Long. Trans. Load (lbs)	Vart. Load (lbs)
P1	DA 250	250.00	27.43	0.50	77.50	0.00	0.00				2125.93	0.00	1500.00	0.00	1500.00
P2	DA 250	250.00	27.43	0.50	77.50	0.00	0.00				2125.93	0.00	1500.00	0.00	1500.00
P3	DA 250	250.00	27.43	0.50	77.50	0.00	0.00				2125.93	0.00	1500.00	0.00	1500.00
P4	DA 250	250.00	27.43	0.50	77.50	0.00	0.00				2125.93	0.00	1500.00	0.00	1500.00
P5	DA 236	236.83	27.01	0.50	26.25	0.00	0.00				709.03	0.00	400.00	0.00	400.00
P6	DA 236	236.83	27.01	0.50	26.25	0.00	0.00				709.03	0.00	400.00	0.00	400.00
P7	DA 236	236.83	27.01	0.50	26.25	0.00	0.00				709.03	0.00	400.00	0.00	400.00
P8	DA 236	236.83	27.01	0.50	26.25	0.00	0.00				709.03	0.00	400.00	0.00	400.00
P9	DA 211	211.83	26.16	0.50	55.00	0.00	0.00				1438.98	0.00	600.00	0.00	600.00
P10	DA 211	211.83	26.16	0.50	55.00	0.00	0.00				1438.98	0.00	600.00	0.00	600.00
P11	DA 211	211.83	26.16	0.50	55.00	0.00	0.00				1438.98	0.00	600.00	0.00	600.00
P12	DA 211	211.83	26.16	0.50	55.00	0.00	0.00				1438.98	0.00	600.00	0.00	600.00
P13	DA 186	186.83	25.24	0.50	8.75	0.00	0.00				220.86	0.00	150.00	0.00	150.00
P14	DA 186	186.83	25.24	0.50	8.75	0.00	0.00				220.86	0.00	150.00	0.00	150.00
P15	DA 186	186.83	25.24	0.50	8.75	0.00	0.00				220.86	0.00	150.00	0.00	150.00
P16	DA 186	186.83	25.24	0.50	8.75	0.00	0.00				220.86	0.00	150.00	0.00	150.00
P17	DA 161	161.83	24.23	0.50	8.75	0.00	0.00				211.98	0.00	150.00	0.00	150.00
P18	DA 161	161.83	24.23	0.50	8.75	0.00	0.00				211.98	0.00	150.00	0.00	150.00
P19	DA 161	161.83	24.23	0.50	8.75	0.00	0.00				211.98	0.00	150.00	0.00	150.00
P20	DA 161	161.83	24.23	0.50	8.75	0.00	0.00				211.98	0.00	150.00	0.00	150.00
P21	DA 36	36.83	15.87	0.50	48.00	0.00	0.00				761.83	0.00	300.00	0.00	300.00
P22	DA 36	36.83	15.87	0.50	48.00	0.00	0.00				761.83	0.00	300.00	0.00	300.00
P23	DA 36	36.83	15.87	0.50	48.00	0.00	0.00				761.83	0.00	300.00	0.00	300.00
P24	DA 36	36.83	15.87	0.50	48.00	0.00	0.00				761.83	0.00	300.00	0.00	300.00

EIA Section Load Case Information for "WIND 0-ICE":

Section Label	Z of Top (ft)	Z of Bottom Above Gnd. (ft)	Elev. (ft)	gwh (psf)	Ice Thick. (in)	Ice Area (ft ²)	Face AR (ft ²)	Face RR (ft ²)	Face CF (ft ²)	Face DF (ft ²)	Face DR (ft ²)	Face RR (ft ²)	Face CF (ft ²)	Face DF (ft ²)	Face DR (ft ²)	Face AE (ft ²)	Face WF (ft ²)	MotF AAF (ft ²)	MotF CAF (ft ²)	MotF AAR (ft ²)	MotF CAR (ft ²)	MotF AAR*CAR (ft ²)	MotF WA (lbs)	Total Wind Weight (lbs)	
																									AG
1	250.00	236.83	243.42	27.22	0.50	155.68	0.00	0.00	0.00	487.2	0.35	1.00	1.00	0.63	2.42	165.9	10915	6.58	2.00	3.21	1.20	3.85	463	11378	64364

2 236.83	211.83	224.33	26.60	0.50	208.66	14.06	8.52	837.5	0.27	1.00	1.00	0.61	2.71	217.2	15675	12.50	2.00	18.75	1.20	22.50	1263	16939	21810
3	211.83	186.83	199.33	25.71	0.50	176.37	14.06	8.38	837.5	0.23	1.00	0.60	2.87	184.8	13612	12.50	2.00	18.75	1.20	22.50	1221	14933	22304
4	186.83	161.83	174.33	24.75	0.50	196.88	14.06	8.47	837.5	0.25	1.00	0.60	2.77	205.4	14065	12.50	2.00	18.75	1.20	22.50	1175	15240	23096
5	161.83	136.83	149.33	23.89	0.50	193.39	14.06	8.45	837.5	0.25	1.00	0.60	2.78	201.8	13304	12.50	2.00	18.75	1.20	22.50	1125	14429	24131
6	136.83	111.83	124.33	22.47	0.50	194.81	14.06	8.46	837.5	0.25	1.00	0.60	2.78	203.3	12685	12.50	2.00	18.75	1.20	22.50	1067	13752	25436
7	111.83	86.83	99.33	21.07	0.50	194.65	14.06	8.45	837.5	0.25	1.00	0.60	2.78	203.1	11890	12.50	2.00	18.75	1.20	22.50	1001	12891	26860
8	86.83	61.83	74.33	19.40	0.50	199.64	14.06	8.48	837.5	0.25	1.00	0.60	2.75	208.1	11122	12.50	2.00	18.75	1.20	22.50	921	12043	31250
9	61.83	36.83	49.33	17.25	0.50	199.00	14.06	8.48	837.5	0.25	1.00	0.60	2.76	207.5	9873	12.50	2.00	18.75	1.20	22.50	820	10892	33796
10	36.83	0.00	18.42	15.38	0.50	227.04	15.26	8.97	1298.4	0.19	1.00	0.59	3.04	236.0	11029	18.42	2.00	20.96	1.20	25.15	953	11983	45297

Equipment Load Case Information for "WIND 45+ICE":

Equipment Label	Property Set	Elevation Above Ground (ft)	Ice Thick. (in)	Total Area (ft ²)	Wind Incidence Angle (deg)	Wind Angle	222-g CA	222-g CS	222-g CM	Antenna Axial Load (lbs)			Antenna Side Moment (ft-lbs)			Long. Load	Trans. Load	Vert. Load
										Face	DR	RR	Face	AE	WT			
P1	DA 250	250.00	27.43	0.50	77.50	315.00				1503.26	1503.26	1500.00	1503.26	1503.26	1500.00			
P2	DA 250	250.00	27.43	0.50	77.50	315.00				1503.26	1503.26	1500.00	1503.26	1503.26	1500.00			
P3	DA 250	250.00	27.43	0.50	77.50	315.00				1503.26	1503.26	1500.00	1503.26	1503.26	1500.00			
P4	DA 250	250.00	27.43	0.50	77.50	315.00				1503.26	1503.26	1500.00	1503.26	1503.26	1500.00			
P5	DA 236	236.83	27.01	0.50	26.25	315.00				501.36	501.36	400.00	501.36	501.36	400.00			
P6	DA 236	236.83	27.01	0.50	26.25	315.00				501.36	501.36	400.00	501.36	501.36	400.00			
P7	DA 236	236.83	27.01	0.50	26.25	315.00				501.36	501.36	400.00	501.36	501.36	400.00			
P8	DA 236	236.83	27.01	0.50	26.25	315.00				501.36	501.36	400.00	501.36	501.36	400.00			
P9	DA 211	211.83	26.16	0.50	55.00	315.00				1017.51	1017.51	600.00	1017.51	1017.51	600.00			
P10	DA 211	211.83	26.16	0.50	55.00	315.00				1017.51	1017.51	600.00	1017.51	1017.51	600.00			
P11	DA 211	211.83	26.16	0.50	55.00	315.00				1017.51	1017.51	600.00	1017.51	1017.51	600.00			
P12	DA 211	211.83	26.16	0.50	55.00	315.00				1017.51	1017.51	600.00	1017.51	1017.51	600.00			
P13	DA 186	186.83	25.24	0.50	8.75	315.00				156.17	156.17	150.00	156.17	156.17	150.00			
P14	DA 186	186.83	25.24	0.50	8.75	315.00				156.17	156.17	150.00	156.17	156.17	150.00			
P15	DA 186	186.83	25.24	0.50	8.75	315.00				156.17	156.17	150.00	156.17	156.17	150.00			
P16	DA 186	186.83	25.24	0.50	8.75	315.00				156.17	156.17	150.00	156.17	156.17	150.00			
P17	DA 161	161.83	24.23	0.50	8.75	315.00				149.89	149.89	150.00	149.89	149.89	150.00			
P18	DA 161	161.83	24.23	0.50	8.75	315.00				149.89	149.89	150.00	149.89	149.89	150.00			
P19	DA 161	161.83	24.23	0.50	8.75	315.00				149.89	149.89	150.00	149.89	149.89	150.00			
P20	DA 161	161.83	24.23	0.50	8.75	315.00				149.89	149.89	150.00	149.89	149.89	150.00			
P21	DA 36	36.83	15.87	0.50	48.00	315.00				538.70	538.70	300.00	538.70	538.70	300.00			
P22	DA 36	36.83	15.87	0.50	48.00	315.00				538.70	538.70	300.00	538.70	538.70	300.00			
P23	DA 36	36.83	15.87	0.50	48.00	315.00				538.70	538.70	300.00	538.70	538.70	300.00			
P24	DA 36	36.83	15.87	0.50	48.00	315.00				538.70	538.70	300.00	538.70	538.70	300.00			

FIA Section Load Case Information for "WIND 45+ICE":

Section Label	Z of Top (ft)	Z of Bottom (ft)	Elev. Above Gnd. (ft)	Ice Thick. (in)	Ice Area (ft ²)	Face AF (ft ²)	Face AR (ft ²)	Face RR (ft ²)	Face DR (ft ²)	Face RR (ft ²)	Face CF (ft ²)	Face AE (ft ²)	Face RE (ft ²)	Face WT (ft ²)	Face MM (ft-lbs)	NotF AAR (ft ²)	NotF CAR (ft ²)	NotF ARB+CAR (ft ²)	NotF Total (lbs)	Total Weight (lbs)				
																					NotF AAR (ft ²)	NotF CAR (ft ²)	NotF ARB+CAR (ft ²)	NotF Total (lbs)
1	250.00	236.83	243.42	27.22	0.50	155.68	16.18	10.25	487.2	0.35	1.20	1.20	0.63	2.42	199.1	13098	6.56	2.00	3.21	1.20	3.85	463	13561	64364
2	236.83	211.83	224.33	26.60	0.50	208.66	14.06	8.52	837.5	0.27	1.20	1.20	0.61	2.71	260.5	18802	12.50	2.00	18.75	1.20	22.50	1263	20065	21810
3	211.83	186.83	199.33	25.71	0.50	176.37	14.06	8.38	837.5	0.23	1.17	1.17	0.60	2.87	216.3	15933	12.50	2.00	18.75	1.20	22.50	1221	17154	22304
4	186.83	161.83	174.33	24.75	0.50	196.88	14.06	8.47	837.5	0.25	1.19	1.19	0.60	2.77	241.1	16722	12.50	2.00	18.75	1.20	22.50	1125	17897	23096
5	161.83	136.83	149.33	23.68	0.50	193.39	14.06	8.45	837.5	0.25	1.19	1.19	0.60	2.78	239.3	15776	12.50	2.00	18.75	1.20	22.50	1001	16901	24131
6	136.83	111.83	124.33	22.47	0.50	194.81	14.06	8.46	837.5	0.25	1.19	1.19	0.60	2.78	241.1	15057	12.50	2.00	18.75	1.20	22.50	820	10892	31250
7	111.83	86.83	99.33	21.07	0.50	194.65	14.06	8.46	837.5	0.25	1.19	1.19	0.60	2.78	241.1	14112	12.50	2.00	18.75	1.20	22.50	1001	15113	26860

8	86.83	61.83	74.33	19.40	0.50	199.64	14.06	8.48	837.5	0.26	1.19	1.19	0.60	2.75	248.0	13250	12.50	2.00	18.75	1.20	22.50	921	14172	31250
9	61.83	36.83	49.33	17.25	0.50	199.00	14.06	8.48	837.5	0.25	1.19	1.19	0.60	2.76	247.1	11756	12.50	2.00	18.75	1.20	22.50	820	12576	33796
10	36.83	0.00	18.42	15.38	0.50	227.04	15.26	8.97	1298.4	0.19	1.14	1.14	0.59	3.04	269.1	12573	18.42	2.00	20.96	1.20	25.15	953	13526	45297

*** Analysis Results:

Summary of Joint Support Reactions For All Load Cases:

Load Case	Joint Label	Long. Force (kips)	Trans. Force (kips)	Vert. Force (kips)	Shear Force (kips)	Trans. Moment (ft-k)	Long. Moment (ft-k)	Vert. Moment (ft-k)	Bending Moment (ft-k)	Found. Usage
WIND 0	14P	-54.91	-24.09	484.49	59.96	-0.00	-0.00	-0.00	0.00	0.00
WIND 0	14X	-54.91	24.09	484.49	59.96	-0.00	-0.00	-0.00	0.00	0.00
WIND 0	14Y	-45.60	-14.77	-333.38	47.93	-0.00	-0.00	-0.00	0.00	0.00
WIND 45	14P	-60.71	-60.71	731.66	85.86	-0.00	-0.00	-0.00	0.00	0.00
WIND 45	14X	-29.54	-20.22	75.56	35.80	-0.00	-0.00	-0.00	0.00	0.00
WIND 45	14Y	-51.40	-51.40	-580.55	72.68	-0.00	-0.00	-0.00	0.00	0.00
WIND 0+ICE	14P	-44.10	-20.14	399.59	48.48	-0.00	-0.00	-0.00	0.00	0.00
WIND 0+ICE	14X	-44.10	20.14	399.59	48.48	-0.00	-0.00	-0.00	0.00	0.00
WIND 0+ICE	14Y	-33.93	-9.97	-234.22	35.36	-0.00	-0.00	-0.00	0.00	0.00
WIND 45+ICE	14P	-48.88	-48.88	594.46	59.13	-0.00	-0.00	-0.00	0.00	0.00
WIND 45+ICE	14X	-24.57	-14.39	82.69	28.47	-0.00	-0.00	-0.00	0.00	0.00
WIND 45+ICE	14Y	-38.71	-38.71	-429.09	54.74	-0.00	-0.00	-0.00	0.00	0.00
WIND 45+ICE	14Y	-14.39	-24.57	82.69	28.47	-0.00	-0.00	-0.00	0.00	0.00

*** Overall summary for all load cases - Usage = Maximum Stress / Allowable Stress
 Printed capacities do not include EIA allowable stress increase for wind load cases.
 Printed capacities do not include the strength factor entered for each loadcase.

Group Summary (Compression Portion):

Group Label	Group Desc.	Angle Type	Angle Size	Steel Strength (ksi)	Max Usage	Max In Control	Comp. Force (kips)	Comp. Control Load Case	L/R Comp. Capacity (kips)	Comp. Shear Capacity (kips)	Comp. Bearing Capacity (kips)	RLX RLY RLZ	L/R Length (ft)	Comp. No.	Bolts
L5	LEG	WF	W12 X 79	36.0	98.71	98.71	91X -619.161	WIND 45	471.631	0.000	0.000	0.167 0.167 0.167	24.29 36.916	1	0
L6	LEG	WF	W10 X 72	36.0	89.13	89.13	97X -502.975	WIND 45	424.307	0.000	0.000	0.250 0.250 0.250	28.96 25.000	1	0
L7	LEG	WF	W10 X 60	36.0	85.36	85.36	915X -399.619	WIND 45	351.978	0.000	0.000	0.250 0.250 0.250	29.18 25.000	1	0
L8	LEG	WF	W10 X 49	36.0	65.63	65.63	922X -306.873	WIND 45	351.554	0.000	0.000	0.250 0.250 0.250	29.53 25.000	1	0
L9	LEG	WF	W8 X 40	36.0	74.41	74.41	929X -225.113	WIND 45	227.479	0.000	0.000	0.250 0.250 0.250	36.76 25.000	1	0
L10	LEG	WF	W8 X 31	36.0	65.63	65.63	936X -154.714	WIND 45	177.256	0.000	0.000	0.250 0.250 0.250	37.13 25.000	1	0
L11	LEG	WF	W6 X 25	36.0	53.79	53.79	943X -96.668	WIND 45	135.117	0.000	0.000	0.250 0.250 0.250	49.34 25.000	1	0
L12	LEG	WF	W6 X 20	36.0	35.71	35.71	950X -51.156	WIND 45	107.718	0.000	0.000	0.250 0.250 0.250	50.00 25.000	1	0
L13	LEG	WF	W6 X 15.5	36.0	16.24	16.24	957X -17.954	WIND 45	83.125	0.000	0.000	0.250 0.250 0.250	51.37 25.000	1	0
L14	LEG	SAE	6X6X0.5	36.0	6.07	6.07	964X -9.068	WIND 45	112.235	0.000	0.000	0.250 0.250 0.250	35.76 14.067	1	0
D5	DIA	DAE	4X4X0.5	36.0	53.58	53.58	914X -75.810	WIND 0	106.387	0.000	0.000	0.167 0.333 0.167	90.17 41.255	1	0

DLA	DAS	4X3X0.5	36.0	75.30	75.30	99X	-80.731	WIND 0	80.611	0.000	0.000	0.000	0.250	0.333	0.250	104.49	30.093	1	0
D7	DAS	4X3X0.4375	36.0	77.40	77.40	917X	-73.921	WIND 0	71.811	0.000	0.000	0.000	0.250	0.333	0.250	103.65	30.093	1	0
D8	DAS	4X3X0.4375	36.0	69.65	69.65	924X	-66.525	WIND 0	71.811	0.000	0.000	0.000	0.250	0.333	0.250	103.65	30.093	1	0
D9	DAS	4X3X0.375	36.0	70.37	70.37	931X	-58.762	WIND 0	62.783	0.000	0.000	0.000	0.250	0.333	0.250	102.71	30.093	1	0
D10	DAS	3.5X2.5X0.5	36.0	73.86	73.86	938X	-50.568	WIND 0	51.476	0.000	0.000	0.000	0.250	0.333	0.250	128.24	30.093	5	0
D11	DAS	3.5X2.5X0.4375	36.0	67.36	67.36	945X	-41.458	WIND 0	46.275	0.000	0.000	0.000	0.250	0.333	0.250	126.97	30.093	5	0
D12	DAS	3.5X2.5X0.375	36.0	40.53	40.53	952P	-32.244	WIND 0	40.770	0.000	0.000	0.000	0.250	0.333	0.250	125.56	30.093	5	0
D13	DAS	3.5X2.5X0.375	36.0	14.70	14.70	959P	-21.976	WIND 0	40.770	0.000	0.000	0.000	0.250	0.333	0.250	125.56	30.093	5	0
H5	HOR	4X3X0.4375	36.0	33.93	33.93	966X	-5.199	WIND 0	26.586	0.000	0.000	0.000	0.500	0.500	0.500	164.51	39.429	5	0
H6	HOR	3.5X2.5X0.375	36.0	51.74	51.74	94Y	-39.659	WIND 45	59.257	0.000	0.000	0.000	0.500	0.500	0.500	80.40	16.750	1	0
H7	HOR	3.5X2.5X0.375	36.0	47.04	47.04	911XY	-40.778	WIND 0	59.257	0.000	0.000	0.000	0.500	0.500	0.500	91.36	16.750	1	0
H8	HOR	3.5X2.5X0.3125	36.0	49.76	49.76	926XY	-37.074	WIND 0	49.849	0.000	0.000	0.000	0.500	0.500	0.500	91.36	16.750	1	0
H9	HOR	3.5X2.5X0.3125	36.0	43.20	43.20	933XY	-28.641	WIND 0	49.849	0.000	0.000	0.000	0.500	0.500	0.500	91.36	16.750	1	0
H10	HOR	3.5X2.5X0.25	36.0	45.02	45.02	940Y	-24.040	WIND 0	40.151	0.000	0.000	0.000	0.500	0.500	0.500	92.20	16.750	1	0
H11	HOR	3.5X2.5X0.25	36.0	35.58	35.58	947XY	-19.001	WIND 0	40.151	0.000	0.000	0.000	0.500	0.500	0.500	92.20	16.750	1	0
H12	HOR	3.5X2.5X0.25	36.0	23.38	23.38	954XY	-12.483	WIND 0	40.151	0.000	0.000	0.000	0.500	0.500	0.500	92.20	16.750	1	0
H13	HOR	C10 X 15.3	36.0	13.98	13.98	961XY	-8.825	WIND 0	47.469	0.000	0.000	0.000	0.500	0.500	0.500	140.95	16.750	5	0
H14	HOR	C10 X 15.3	36.0	1.22	0.00	968X	0.000	WIND 0	34.974	0.000	0.000	0.000	0.250	0.250	0.250	170.41	40.500	5	0
R1	RUD	3X3X0.25	36.0	15.54	15.54	962Y	-3.057	WIND 45	14.792	0.000	0.000	0.000	0.250	0.250	0.250	120.04	23.688	5	0

Group Summary (Tension Portion):

Group Label	Group Desc.	Angle Type	Steel Strength (ksi)	Max Usage %	Max In Control Tens. %	Member	Tension Force (kips)	Load Case	Section Capacity (kips)	Shear Capacity (kips)	Conn. Tens. Capacity (kips)	Bearing Capacity (kips)	Conn. Tens. Rupture Capacity (kips)	Comm. Length No. of Bolts	Role
L5	LEG	WF	36.0	98.71	72.86	91Y	485.603	WIND 45	501.119	0.000	0.000	0.000	0.000	36.916	0
L6	LEG	WF	36.0	89.13	63.80	97Y	388.564	WIND 45	457.919	0.000	0.000	0.000	0.000	25.000	0
L7	LEG	WF	36.0	85.36	59.16	915Y	299.143	WIND 45	380.159	0.000	0.000	0.000	0.000	25.000	0
L8	LEG	WF	36.0	65.63	43.27	922Y	218.772	WIND 45	380.159	0.000	0.000	0.000	0.000	25.000	0
L9	LEG	WF	36.0	74.41	44.14	929Y	148.375	WIND 45	252.720	0.000	0.000	0.000	0.000	25.000	0
L10	LEG	WF	36.0	65.63	33.85	936Y	88.774	WIND 45	197.208	0.000	0.000	0.000	0.000	25.000	0
L11	LEG	WF	36.0	53.79	19.61	943Y	41.352	WIND 45	158.544	0.000	0.000	0.000	0.000	25.000	0
L12	LEG	WF	36.0	35.71	3.62	950Y	6.104	WIND 45	126.792	0.000	0.000	0.000	0.000	25.000	0
L13	LEG	WF	36.0	16.24	0.00	957Y	0.000	WIND 45	98.496	0.000	0.000	0.000	0.000	25.000	0
L14	LEG	SAE	36.0	6.07	0.00	964Y	0.000	WIND 45	124.200	0.000	0.000	0.000	0.000	14.067	0
D5	DIA	DAS	36.0	53.58	32.36	914XY	69.732	WIND 0	162.000	0.000	0.000	0.000	0.000	41.255	0
D6	DIA	DAS	36.0	75.30	40.85	920Y	76.281	WIND 0	140.400	0.000	0.000	0.000	0.000	30.093	0
D7	DIA	DAS	36.0	77.40	42.44	917XY	69.985	WIND 0	123.984	0.000	0.000	0.000	0.000	30.093	0
D8	DIA	DAS	36.0	69.65	38.21	924XY	63.014	WIND 0	123.984	0.000	0.000	0.000	0.000	30.093	0
D9	DIA	DAS	36.0	70.37	38.82	931XY	55.433	WIND 0	107.352	0.000	0.000	0.000	0.000	30.093	0
D10	DIA	DAS	36.0	73.86	30.00	938XY	47.398	WIND 0	118.800	0.000	0.000	0.000	0.000	30.093	0
D11	DIA	DAS	36.0	67.36	27.46	945XY	38.414	WIND 0	105.192	0.000	0.000	0.000	0.000	30.093	0
D12	DIA	DAS	36.0	59.46	24.16	952Y	29.291	WIND 0	91.152	0.000	0.000	0.000	0.000	30.093	0
D13	DIA	DAS	36.0	40.53	11.91	959Y	14.439	WIND 0	91.152	0.000	0.000	0.000	0.000	30.093	0
D14	DIA	DAS	36.0	14.70	3.54	966XY	4.290	WIND 0	91.152	0.000	0.000	0.000	0.000	30.093	0
H5	HOR	DAL	36.0	33.93	21.71	930Y	35.805	WIND 45	123.984	0.000	0.000	0.000	0.000	39.429	0
H6	HOR	DAL	36.0	51.74	35.44	911X	42.970	WIND 0	91.152	0.000	0.000	0.000	0.000	16.750	0
H7	HOR	DAL	36.0	47.04	32.19	919X	39.028	WIND 0	91.152	0.000	0.000	0.000	0.000	16.750	0
H8	HOR	DAL	36.0	49.76	34.16	926X	34.843	WIND 0	76.680	0.000	0.000	0.000	0.000	16.750	0
H9	HOR	DAL	36.0	43.20	29.81	933X	30.405	WIND 0	76.680	0.000	0.000	0.000	0.000	16.750	0
H10	HOR	DAL	36.0	45.02	31.10	940X	25.734	WIND 0	62.208	0.000	0.000	0.000	0.000	16.750	0

H11	HOR	DAL	3.5X2.5X0.25	36.0	35.58	24.95	947X	20.645	WIND 0	62.208	0.000	0.000	0.000	0.000	0
H12	HOR	DAL	3.5X2.5X0.25	36.0	23.38	20.16	954P	16.678	WIND 0	62.208	0.000	0.000	0.000	0.000	0
H13	HOR	CHN	C10 X 15.3	36.0	13.98	3.72	961P	6.277	WIND 0	127.008	0.000	0.000	0.000	0.000	0
H14	HOR	CHN	C10 X 15.3	36.0	1.22	1.22	967P	2.069	WIND 0+ICE	127.008	0.000	0.000	0.000	0.000	0
R1	RUD	SAE	3X3X0.25	36.0	15.54	7.39	962X	3.057	WIND 45	31.104	0.000	0.000	0.000	0.000	0

*** End of Report