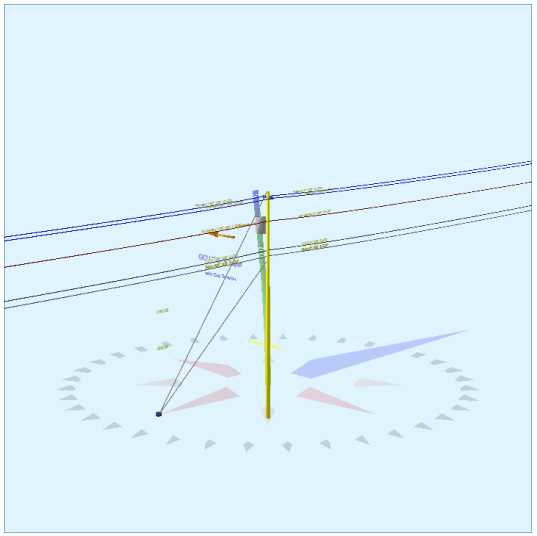
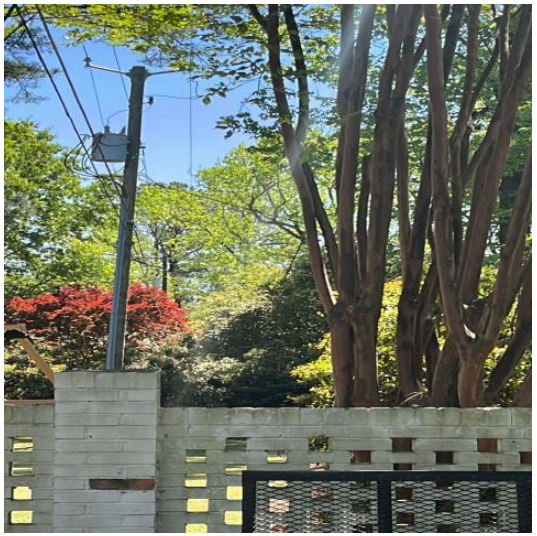
Pole Num:	**P.R731_116858871**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength Factor:	**0.85**
Aux Data 3	**Unset**	G/L Circumference (in):	**31.00**	Loading District:	**Light**	Transverse Wind LF:	**1.75**
Aux Data 4	**Unset**	G/L Fiber Stress (psi):	**8,000**	Ice Thickness (in):	**0.00**	Wire Tension LF:	**1.30**
Aux Data 5	**Unset**	Allowable Stress (psi):	**6,800**	Wind Speed (mph):	**59.29**	Vertical LF:	**1.90**
Aux Data 6	**Unset**	Fiber Stress Ht. Reduc:	**No**	Wind Pressure (psf):	**9.00**		
Latitude:	**0.000000 Deg**	Longitude:	**0.000000 Deg**			Elevation:	**0 Feet**





Pole Capacity Utilization (%)		**Height (ft)**	**Wind Angle (deg)**
Maximum	**42.2**	0.0	270.0
Groundline	**42.2**	0.0	270.0
Vertical	**2.3**	22.4	0.0

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**22,251**	268.1	270.0
Groundline	**22,251**	268.1	270.0
GL Allowable	**53,452**		

Guy System Component Summary				**Load From Worst Wind Angle on Pole**		**Individual Maximum Load**	
Description	**Lead Length (ft)**	**Lead Angle (deg)**	**Height (ft)**	**Nominal Capacity (%)**	**Wind Angle (deg)**	**Max Load Capacity (%)**	**Wind Angle (deg)**
Single Helix Anchor	25.0	180.0		**0.2**	270.0	**2.3**	320.0
EHS 3/8 (Down)			34.0	**0.3**	270.0	**1.2**	320.0
EHS 3/8 (Down)			22.0	**0.0**	270.0	**2.4**	0.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 268.1°

	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
Powers	224	24.2	**7,046**	31.7	**13.2**	**896**	342	4	**901**	**13.2**
Comms	224	24.2	**5,067**	22.8	**9.5**	**645**	342	4	**649**	**9.5**
GuyBraces	19	2.1	**555**	2.5	**1.0**	**71**	58	1	**71**	**1.0**
PowerEquipments	82	8.8	**3,369**	15.1	**6.3**	**429**	636	8	**437**	**6.4**
Pole	355	38.2	**5,551**	25.0	**10.4**	**706**	1,364	18	**724**	**10.6**
Insulators	24	2.6	**664**	3.0	**1.2**	**84**	34	0	**85**	**1.2**
Pole Load	928	100.0	**22,251**	100.0	**41.6**	**2,831**	2,777	36	**2,867**	**42.2**
Pole Reserve Capacity			**31,201**		**58.4**	**3,969**			**3,933**	**57.8**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 268.1°

	Shear Load* (lbs)	Applied Load (%)	Bending Moment (ft-lb)	Applied Moment (%)	Pole Capacity (%)	Bending Stress (+/- psi)	Vertical Load (lbs)	Vertical Stress (psi)	Total Stress (psi)	Pole Capacity (%)
FPL	579	62.4	**12,597**	56.6	**23.6**	**1,603**	1,706	22	**1,625**	**23.9**
CATV	75	8.1	**1,739**	7.8	**3.3**	**221**	114	1	**223**	**3.3**
AT&T	150	16.1	**3,328**	15.0	**6.2**	**423**	228	3	**426**	**6.3**
<Undefined>	125	13.4	**4,588**	20.6	**8.6**	**584**	729	10	**593**	**8.7**
Totals:	928	100.0	**22,251**	100.0	**41.6**	**2,831**	2,777	36	**2,867**	**42.2**

Detailed Load Components:

Power		Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-1,705	-15	1,233	-487
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,705	-15	1,233	2,923
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-1,705	15	1,233	-458
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,705	15	1,233	2,952
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-1,498	-25	1,083	-441
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,498	-25	1,083	2,556
											Totals:	**0**	**-50**	**7,096**	**7,046**

Comm	Owner	Height (ft)	Horiz. Offset (in)	Cable Diameter (in)	Sag at Max Temp (ft)	Cable Weight (lbs/ft)	Lead/Span Length (ft)	Span Angle (deg)	Wire Length (ft)	Tension (lbs)	Tension Moment* (ft-lb)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)

CATV	CATV	CATV	23.97	5.59	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-1,240	-27	896	-370
CATV	CATV	CATV	23.97	5.59	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,240	-27	896	2,109
Telco	AT&T	AT&T	22.97	5.64	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-1,188	-27	859	-356
Telco	AT&T	AT&T	22.97	5.64	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,188	-27	859	2,020
Telco	AT&T	AT&T	22.97	5.64	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-1,188	-27	859	-356
Telco	AT&T	AT&T	22.97	5.64	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,188	-27	859	2,020
											Totals:	**0**	**-160**	**5,227**	**5,067**

PowerEquipment		**Owner**	**Height (ft)**	**Horiz. Offset (in)**	**Offset Angle (deg)**	**Rotate Angle (deg)**	**Unit Weight (lbs)**	**Unit Height (in)**	**Unit Depth (in)**	**Unit Diameter (in)**	**Unit Length (in)**	**Offset Moment* (ft-lb)**	**Wind Moment* (ft-lb)**	**Moment at GL* (ft-lb)**
Transformer	1PH-15KVA		28.00	20.36	270.0	270.0	335.00	34.00	--	22.00	--	1,079	2,289	3,369
											Totals:	**1,079**	**2,289**	**3,369**

Insulator		**Owner**	**Height (ft)**	**Horiz. Offset (in)**	**Offset Angle (deg)**	**Rotate Angle (deg)**	**Unit Weight (lbs)**	**Unit Diameter (in)**	**Unit Length (in)**	**Offset Moment* (ft-lb)**	**Wind Moment* (ft-lb)**	**Moment at GL* (ft-lb)**
Deadend	Deadend 12.75"		33.00	0.00	90.0	90.0	3.00	3.80	12.75	-8	175	167
Deadend	Deadend 12.75"		33.00	0.00	270.0	270.0	3.00	3.80	12.75	8	175	182
Bolt	Deadend 12.75"		29.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	95	93
Bolt	Deadend 12.75"		24.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	79	76
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	75	73
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	75	73
									Totals:	**-11**	**674**	**664**

Guy Wire and Brace		**Owner**	**Attach Height (ft)**	**End Height (ft)**	**Lead/Span Length (ft)**	**Wire Diameter (in)**	**Percent Solid (%)**	**Lead Angle (deg)**	**Incline Angle (deg)**	**Wire Weight (lbs/ft)**	**Rest Length (ft)**	**Stretch Length (in)**
EHS 3/8	Down		34.00	0.00	25.00	0.375	75.00	180.0	53.5	0.273	40.55	0.01
EHS 3/8	Down		22.00	0.00	25.00	0.375	75.00	180.0	41.2	0.273	31.57	0.00

Guy Wire and Brace (Loads and Reactions)		**Elastic Modulus (psi)**	**Rated Tensile Strength (lbs)**	**Guy Strength Factor**	**Allowable Tension (lbs)**	**Initial Tension (lbs)**	**Loaded Tension*² (lbs)**	**Maximum Tension² (lbs)**	**Applied Tension³ (lbs)**	**Vertical Load (lbs)**	**Shear Load In Guy Dir (lbs)**	**Shear Load At Report Angle (lbs)**	**Moment at GL³ (ft-lb)**
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	168	153	37	29	22	1	376
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	329	299	0	0	0	0	179
									Totals:	**29**	**22**	**1**	**555**

Anchor/Rod Load Summary	**Owner**	**Rod Length AGL (in)**	**Lead Length (ft)**	**Lead Angle (deg)**	**Strength of Assembly (lbs)**	**Anchor/Rod Strength Factor**	**Allowable Load (lbs)**	**Max Load² (lbs)**	**Load at Pole MCU³ (lbs)**	**Max Required Capacity² (%)**
Single Helix Anchor		18.00	25.00	180.0	20,000	1.00	20,000	449	36	2.2

Pole Buckling

Buckling Constant	Buckling Column Height* (ft)	Buckling Section Height (% Buckling Col. Hgt.)	Buckling Section Diameter (in)	Minimum Buckling Diameter at GL (in)	Diameter at Tip (in)	Diameter at GL (in)	Modulus of Elasticity (psi)	Pole Density (pcf)	Ice Density (pcf)	Pole Tip Height (ft)	Buckling Load Capacity at Height (lbs)	Buckling Load Applied at Height (lbs)	Buckling Load Factor of Safety
0.71	22.44	33.83	9.01	7.53	6.05	9.87	1.60e+6	60.00	57.00	34.00	120,061	**1207.42**	**43.48**

Notes

Date	Author	Description
1/27/2021		Power Company Request
Power company load data has been requested. Email sent to Elmer Pole		
1/27/2021		General Description
General Statement: Non-AT&T facilities may not be accurately identified pending attachment information from attaching party.		