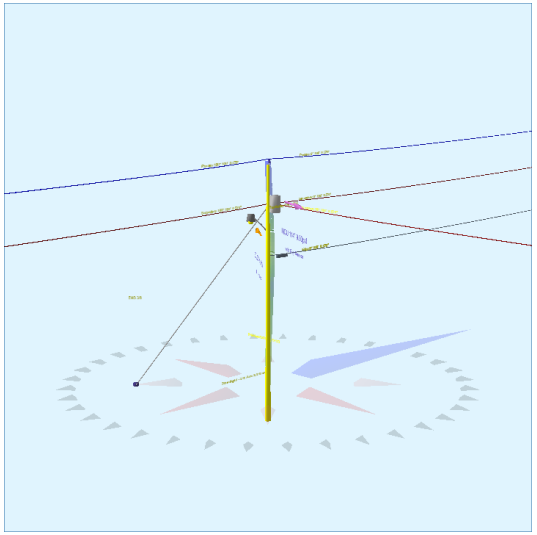
Pole Num:	**93070686_P.F133**	Pole Length / Class:	**45 / 4**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.50**	Construction Grade:	**C**	Pole Strength Factor:	**0.85**
Aux Data 3	**Unset**	G/L Circumference (in):	**34.82**	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	**52.3**	23.0	114.4
Groundline	**46.3**	0.0	307.0
Vertical	**6.6**	28.1	45.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	**16,983**	168.8	114.4
Groundline	**34,217**	336.0	307.0
GL Allowable	**75,750**		

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	23.0	225.0		**18.6**	114.4	**23.8**	60.0
EHS 3/8 (Down)			31.0	**26.8**	114.4	**37.8**	60.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 336.0°

	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	-566	-27.5	**-17,926**	-52.4	**-23.7**	**-1,609**	285	3	**-1,606**	**-23.6**
Comms	2,880	140.0	**66,128**	193.3	**87.3**	**5,936**	114	1	**5,937**	**87.3**
GuyBraces	-777	-37.8	**-24,411**	-71.3	**-32.2**	**-2,191**	4,506	47	**-2,145**	**-31.5**
PowerEquipments	72	3.5	**1,844**	5.4	**2.4**	**166**	636	7	**172**	**2.5**
Pole	393	19.1	**6,939**	20.3	**9.2**	**623**	1,928	20	**643**	**9.5**
Streetlights	39	1.9	**1,151**	3.4	**1.5**	**103**	86	1	**104**	**1.5**
Insulators	16	0.8	**493**	1.4	**0.7**	**44**	28	0	**45**	**0.7**
Pole Load	2,057	100.0	**34,217**	100.0	**45.2**	**3,072**	7,584	79	**3,150**	**46.3**
Pole Reserve Capacity			**41,533**		**54.8**	**3,728**			**3,650**	**53.7**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 336.0°

	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	-173	-8.4	**-10,987**	-32.1	**-14.5**	**-986**	2,213	23	**-963**	**-14.2**
AT&T	2,880	140.0	**66,128**	193.3	**87.3**	**5,936**	114	1	**5,937**	**87.3**
<Undefined>	-650	-31.6	**-20,923**	-61.2	**-27.6**	**-1,878**	5,257	54	**-1,824**	**-26.8**
Totals:	2,057	100.0	**34,217**	100.0	**45.2**	**3,072**	7,584	79	**3,150**	**46.3**

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	39.53	3.34	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	56,320	-6	481	56,795
Primary	FPL	FPL	39.53	3.34	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-56,320	-6	481	-55,846
Secondary	FPL	FPL	31.97	5.71	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-20,314	25	658	-19,631
Secondary	FPL	FPL	31.97	5.71	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	45,546	-11	389	45,924
Secondary	FPL	FPL	31.97	5.71	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-45,546	-11	389	-45,168
											Totals:	**-20,314**	**-10**	**2,397**	**-17,927**

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)
Telco	AT&T	AT&T	22.97	6.23	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	32,723	-12	279	32,991

Telco	AT&T	AT&T	22.97	6.23	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	32,723	-12	426	33,138
											Totals:	**65,447**	**-24**	**706**	**66,129**

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		32.00	20.71	90.0	90.0	335.00	34.00	--	22.00	--	-448	2,291	1,844
											Totals:	**-448**	**2,291**	**1,844**

Streetlight		**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)**
General	Streetlight - 3 ft. Arm		27.00	4.00	270.0	270.0	45.00	24.00	20.00	3.00	36.00	97	1,055	1,151
											Totals:	**97**	**1,055**	**1,151**

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"		38.50	0.00	90.0	90.0	3.00	3.80	12.75	-1	179	178
Bolt	Deadend 12.75"		32.00	0.00	0.0	0.0	3.00	2.00	15.00	2	92	94
Bolt	Deadend 12.75"		32.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	92	91
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	66	65
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	66	65
									Totals:	**-2**	**494**	**493**

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		31.00	0.00	23.00	0.375	75.00	225.0	53.3	0.273	36.91	0.86

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 Tension[2] (lbs)**	**Applied Tension[3] (lbs)**	**Vertical Load (lbs)**	**Shear Load In Guy Dir (lbs)**	**Shear Load At Report Angle (lbs)**	**Moment at GL[3] (ft-lb)**
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	5,233	4,757	3,717	2,978	2,224	-796	-24,411
									Totals:	**2,978**	**2,224**	**-796**	**-24,411**

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 Load[2] (lbs)**	**Load at Pole MCU[3] (lbs)**	**Max Required Capacity[2] (%)**
Single Helix Anchor		18.00	23.00	225.0	20,000	1.00	20,000	4,757	3,717	23.8

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	28.09	34.34	9.98	13.75	6.69	11.09	1.60e+6	60.00	57.00	38.50	115,070	**1149.07**	**15.15**

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.		