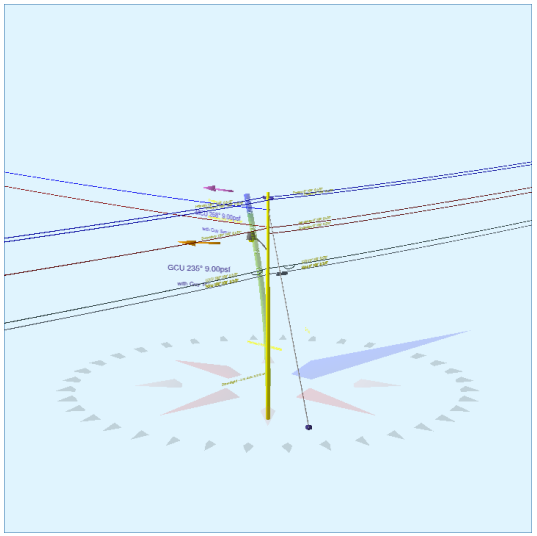
Pole Num:	**P.R1006_116858699**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength 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	**50.9**	27.0	267.9
Groundline	**47.9**	0.0	234.8
Vertical	**13.0**	28.5	300.0

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**8,530**	151.6	267.9
Groundline	**24,701**	231.2	234.8
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	120.0		**26.5**	267.9	**27.8**	280.0
EHS 3/8 (Down)			31.0	**38.2**	267.9	**44.1**	280.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 231.2°

	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	1,646	156.7	**51,069**	206.8	**95.5**	**6,497**	513	7	**6,504**	**95.6**
Comms	157	14.9	**3,054**	12.4	**5.7**	**389**	342	4	**393**	**5.8**
GuyBraces	-1,185	-112.7	**-37,126**	-150.3	**-69.5**	**-4,723**	6,217	81	**-4,642**	**-68.3**
Pole	354	33.7	**5,543**	22.4	**10.4**	**705**	1,364	18	**723**	**10.6**
Streetlights	45	4.2	**1,252**	5.1	**2.3**	**159**	86	1	**160**	**2.4**
Insulators	34	3.2	**909**	3.7	**1.7**	**116**	51	1	**116**	**1.7**
Pole Load	1,051	100.0	**24,701**	100.0	**46.2**	**3,142**	8,573	112	**3,255**	**47.9**
Pole Reserve Capacity			**28,751**		**53.8**	**3,658**			**3,545**	**52.1**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 231.2°

	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	2,001	190.4	**56,612**	229.2	**105.9**	**7,202**	1,877	25	**7,227**	**106.3**
CATV	49	4.7	**989**	4.0	**1.9**	**126**	114	1	**127**	**1.9**
AT&T	108	10.3	**2,065**	8.4	**3.9**	**263**	228	3	**266**	**3.9**
<Undefined>	-1,107	-105.3	**-34,965**	-141.6	**-65.4**	**-4,448**	6,354	83	**-4,365**	**-64.2**
Totals:	1,051	100.0	**24,701**	100.0	**46.2**	**3,142**	8,573	112	**3,255**	**47.9**

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	-32,245	-11	785	-31,471
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	32,245	-11	785	33,018
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-32,245	11	785	-31,449
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	32,245	11	785	33,041
Primary	FPL	FPL	30.97	5.19	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	37,637	-15	419	38,040
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	33,991	-16	378	34,353
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-27,354	-20	666	-26,709
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	27,354	-20	666	28,000
Secondary	FPL	FPL	26.97	5.42	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-26,376	-20	642	-25,755
											Totals:	**45,251**	**-91**	**5,910**	**51,069**

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	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-20,508	-21	516	-20,014
CATV	CATV	CATV	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	20,508	-21	516	21,002
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-19,530	-22	725	-18,826
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	19,530	-22	475	19,984
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-19,530	-22	475	-19,076
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	19,530	-22	475	19,984
											Totals:	**0**	**-129**	**3,183**	**3,054**

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		24.00	3.59	270.0	270.0	45.00	24.00	20.00	3.00	36.00	183	1,069	1,252
											Totals:	**183**	**1,069**	**1,252**

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	-6	175	169
Deadend	Deadend 12.75"		33.00	0.00	270.0	270.0	3.00	3.80	12.75	6	175	180
Bolt	Deadend 12.75"		31.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	102	100
Bolt	Deadend 12.75"		28.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	92	90
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	92	90
Bolt	Deadend 12.75"		27.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	88	86
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	69	67
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	65	63
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	65	63
									Totals:	**-14**	**922**	**909**

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	25.00	0.375	75.00	120.0	51.0	0.273	38.16	1.27

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	6,108	5,553	5,296	4,113	3,336	-1,205	-37,126
									Totals:	**4,113**	**3,336**	**-1,205**	**-37,126**

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	25.00	120.0	20,000	1.00	20,000	5,553	5,296	27.8

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	28.49	34.87	8.75	14.65	6.05	9.87	1.60e+6	60.00	57.00	34.00	66,113	**659.47**	**7.69**

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.		