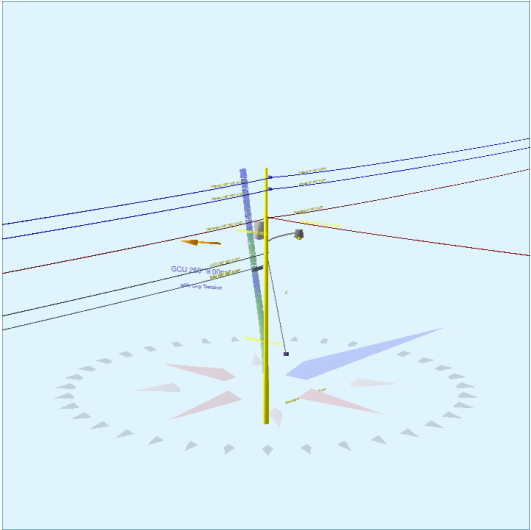


Pole Num:	91458527_P.F125	Pole Length / Class:	45 / 4	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.50	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	46.5	0.0	250.0
Groundline	46.5	0.0	250.0
Vertical	5.7	23.5	150.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	34,073	230.9	250.0
Groundline	34,073	230.9	250.0
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	330.0		31.2	250.0	38.0	135.6
EHS 3/8 (Down)			24.0	45.0	250.0	60.3	135.6
System Capacity Summary:				Adequate		Adequate	

**Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 230.9°**

	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	-1,039	-54.1	-30,604	-89.8	-40.4	-2,747	399	4	-2,743	-40.3
Comms	3,046	158.6	68,868	202.1	90.9	6,182	171	2	6,184	90.9
GuyBraces	-667	-34.7	-16,248	-47.7	-21.5	-1,459	6,805	71	-1,388	-20.4
PowerEquipments	77	4.0	2,865	8.4	3.8	257	636	7	264	3.9
Pole	424	22.1	7,494	22.0	9.9	673	1,928	20	693	10.2
Streetlights	53	2.8	964	2.8	1.3	87	114	1	88	1.3
Insulators	26	1.3	735	2.2	1.0	66	40	0	66	1.0
Pole Load	1,921	100.0	34,073	100.0	45.0	3,059	10,094	105	3,163	46.5
Pole Reserve Capacity			41,677		55.0	3,741			3,637	53.5

**Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 230.9°**

	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	-615	-32.0	-23,111	-67.8	-30.5	-2,075	2,327	24	-2,050	-30.2
CATV	1,011	52.6	24,198	71.0	32.0	2,172	57	1	2,173	32.0
AT&T	2,035	106.0	44,669	131.1	59.0	4,010	114	1	4,011	59.0
<Undefined>	-511	-26.6	-11,684	-34.3	-15.4	-1,049	7,596	79	-970	-14.3
<b>Totals:</b>	1,921	100.0	34,073	100.0	45.0	3,059	10,094	105	3,163	46.5

**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	36.97	16.18	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-36,349	-13	1,009	-35,353
Primary	FPL	FPL	36.97	16.18	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	36,349	-13	1,009	37,345
Primary	FPL	FPL	34.97	16.29	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-34,383	-13	954	-33,441
Primary	FPL	FPL	34.97	16.29	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	34,383	-13	954	35,324
Secondary	FPL	FPL	29.97	5.83	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-36,295	-17	242	-36,071
Secondary	FPL	FPL	29.97	5.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-29,466	-21	818	-28,670
Secondary	FPL	FPL	29.97	5.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	29,466	-21	818	30,263
Totals:											-36,295	-112	5,804	-30,604	

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	6.17	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	23,567	-23	654	24,198
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	21,600	-23	915	22,492
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	21,600	-23	600	22,177
Totals:												66,767	-69	2,169	68,867

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	20.94	180.0	180.0	335.00	34.00	--	22.00	--	700	2,165	2,865
Totals:												700	2,165	2,865

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 - 6 ft. Arm		26.00	4.06	90.0	90.0	60.00	24.00	20.00	3.00	72.00	-423	1,387	964
Totals:												-423	1,387	964

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"		37.00	0.00	90.0	90.0	3.00	3.80	12.75	-6	185	179
Deadend	Deadend 12.75"		35.00	0.00	90.0	90.0	3.00	3.80	12.75	-6	175	169
Bolt	Deadend 12.75"		30.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	93	91
Bolt	Deadend 12.75"		30.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	93	91
Bolt	Deadend 12.75"		24.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	74	72
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	68	66
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	68	66
									Totals:	-23	758	735

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		24.00	0.00	23.00	0.375	75.00	330.0	46.1	0.273	31.50	1.24

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* <sup>2</sup> (lbs)	Maximum Tension <sup>2</sup> (lbs)	Applied Tension <sup>3</sup> (lbs)	Vertical Load (lbs)	Shear Load In Guy Dir (lbs)	Shear Load At Report Angle (lbs)	Moment at GL <sup>3</sup> (ft-lb)
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	8,354	7,595	6,233	4,489	4,324	-682	-16,248
									Totals:	4,489	4,324	-682	-16,248

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	23.00	330.0	20,000	1.00	20,000	7,594	6,233	38.0

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	23.49	33.63	10.18	14.51	6.69	11.09	1.60e+6	60.00	57.00	38.50	178,230	1770.81	17.54

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.		