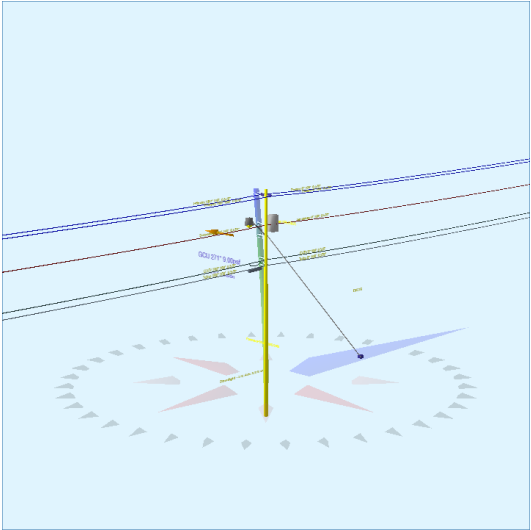


Pole Num:	P.R928_116852460	Pole Length / Class:	40 / 5	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.00	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	39.2	0.0	271.2
Groundline	39.2	0.0	271.2
Vertical	2.1	22.0	180.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	20,666	273.6	271.2
Groundline	20,666	273.6	271.2
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	0.0		0.0	271.2	1.9	180.0
EHS 3/8 (Down)			26.0	0.0	271.2	2.9	180.0
System Capacity Summary:				Adequate		Adequate	

**Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 273.6°**

	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	24.7	6,959	33.7	13.0	885	342	4	890	13.1
Comms	173	19.1	3,604	17.4	6.7	459	228	3	462	6.8
GuyBraces	9	1.0	229	1.1	0.4	29	7	0	29	0.4
PowerEquipments	82	9.0	2,356	11.4	4.4	300	636	8	308	4.5
Pole	355	39.1	5,549	26.9	10.4	706	1,364	18	724	10.6
Streetlights	45	4.9	1,394	6.7	2.6	177	86	1	178	2.6
Insulators	20	2.3	574	2.8	1.1	73	28	0	73	1.1
Pole Load	908	100.0	20,666	100.0	38.7	2,629	2,691	35	2,664	39.2
Pole Reserve Capacity			32,786		61.3	4,171			4,136	60.8

**Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 273.6°**

	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	63.8	12,508	60.5	23.4	1,591	1,706	22	1,614	23.7
CATV	76	8.4	1,613	7.8	3.0	205	114	1	207	3.0
AT&T	98	10.7	1,991	9.6	3.7	253	114	1	255	3.7
<Undefined>	156	17.1	4,553	22.0	8.5	579	757	10	589	8.7
<b>Totals:</b>	908	100.0	20,666	100.0	38.7	2,629	2,691	35	2,664	39.2

**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	3,208	-15	1,231	4,424
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-3,208	-15	1,231	-1,992
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	3,208	15	1,231	4,453
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-3,208	15	1,231	-1,963
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	2,722	-25	1,044	3,740
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-2,722	-25	1,044	-1,703
Totals:											0	-51	7,010	6,959	

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	21.97	5.70	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	2,138	-27	820	2,931
CATV	CATV	CATV	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-2,138	-27	847	-1,318
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	2,040	-27	783	2,796
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-2,040	-27	1,263	-805
Totals:												0	-109	3,713	3,604

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	0.0	0.0	335.00	34.00	--	22.00	--	67	2,289	2,356
Totals:												67	2,289	2,356

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		26.00	3.47	270.0	270.0	45.00	24.00	20.00	3.00	36.00	235	1,159	1,394
Totals:												235	1,159	1,394

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"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	92	89
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	72	69
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	69	66
									Totals:	-8	582	574

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		26.00	0.00	25.00	0.375	75.00	0.0	46.0	0.273	34.37	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 <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	407	370	0	0	0	0	229
Totals:											0	0	229

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	0.0	20,000	1.00	20,000	370	0	1.8

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	22.03	33.76	9.03	7.35	6.05	9.87	1.60e+6	60.00	57.00	34.00	125,538	1281.65	47.62

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.		