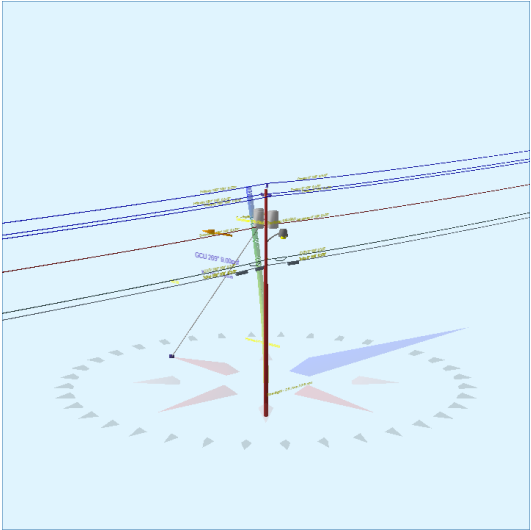


Pole Num:	P.F1203_116855001	Pole Length / Class:	40 / 5	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.00	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	56.6	0.0	268.6
Groundline	56.6	0.0	268.6
Vertical	4.5	24.9	90.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	29,806	267.2	268.6
Groundline	29,806	267.2	268.6
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	270.0		0.0	268.6	7.4	90.0
EHS 3/8 (Down)			29.0	0.0	268.6	11.7	90.0
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 267.2°

	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	299	23.8	9,553	32.1	17.9	1,215	456	6	1,221	18.0
Comms	282	22.5	5,833	19.6	10.9	742	342	4	746	11.0
GuyBraces	0	0.0	0	0.0	0.0	0	7	0	0	0.0
PowerEquipments	245	19.5	7,168	24.1	13.4	912	1,910	25	937	13.8
Pole	355	28.3	5,552	18.6	10.4	706	1,364	18	724	10.7
Streetlights	45	3.6	880	3.0	1.7	112	86	1	113	1.7
Insulators	29	2.3	819	2.8	1.5	104	40	1	105	1.5
Pole Load	1,255	100.0	29,806	100.0	55.8	3,792	4,204	55	3,847	56.6
Pole Reserve Capacity			23,646		44.2	3,008			2,953	43.4

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 267.2°

	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	654	52.1	15,105	50.7	28.3	1,922	1,820	24	1,945	28.6
CATV	77	6.1	1,641	5.5	3.1	209	114	1	210	3.1
AT&T	205	16.3	4,192	14.1	7.8	533	228	3	536	7.9
<Undefined>	319	25.4	8,868	29.8	16.6	1,128	2,042	27	1,155	17.0
Totals:	1,255	100.0	29,806	100.0	55.8	3,792	4,204	55	3,847	56.6

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	35.03	3.02	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,645	-14	1,308	-1,350
Primary	FPL	FPL	35.03	3.02	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,645	-14	1,308	3,939
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,489	-15	1,231	-1,272
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,489	-15	1,231	3,706
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,489	15	1,231	-1,243
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,489	15	1,231	3,735
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,111	-25	1,045	-1,092
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,111	-25	1,045	3,131
											Totals:	0	-79	9,632	9,553

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	-1,659	-27	848	-838
CATV	CATV	CATV	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,659	-27	848	2,479
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-1,583	-27	1,195	-415
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,583	-27	1,127	2,682
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-1,583	-27	783	-827
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,583	-27	1,195	2,751
Totals:												0	-163	5,996	5,833

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		29.00	20.30	90.0	90.0	335.00	34.00	--	22.00	--	-1,076	2,372	1,296
Transformer	1PH-15KVA		29.00	20.30	180.0	180.0	335.00	34.00	--	22.00	--	52	2,372	2,424
Transformer	1PH-15KVA		29.00	20.30	270.0	270.0	335.00	34.00	--	22.00	--	1,076	2,372	3,448
											Totals:	52	7,116	7,168

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		25.00	3.53	90.0	90.0	45.00	24.00	20.00	3.00	36.00	-235	1,115	880	
												Totals:	-235	1,115	880

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"		34.00	0.00	90.0	90.0	3.00	3.80	12.75	-1	180	179
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
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	69	66
									Totals:	-12	832	819

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		29.00	0.00	25.00	0.375	75.00	270.0	49.1	0.273	36.61	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 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	1,620	1,473	0	0	0	0	0
									Totals:	0	0	0	0

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	270.0	20,000	1.00	20,000	1,473	0	7.4

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	24.91	34.25	8.91	9.66	6.05	9.87	1.60e+6	60.00	57.00	34.00	92,905	934.28	22.22

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.		