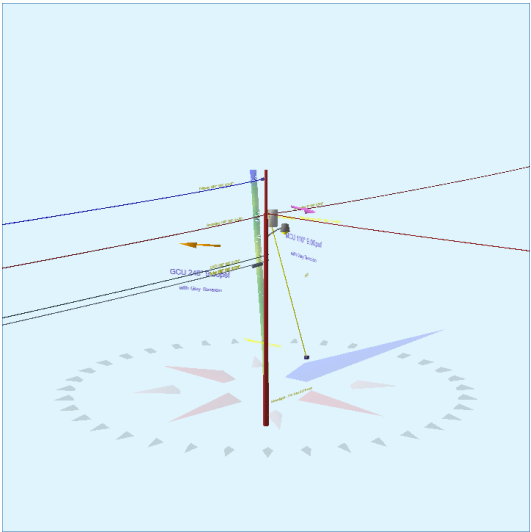


Pole Num:	914460113_P.F531	Pole Length / Class:	45 / 4	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.50	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	61.0	23.0 110.0
Groundline	53.2	0.0 247.9
Vertical	12.8	29.9 160.0

Pole Moments (ft-lb)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	19,482	1.4 110.0
Groundline	38,838	209.3 247.9
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	340.0		38.8	110.0	42.0	155.6
EHS 3/8 (Down)			32.0	56.0	110.0	66.7	155.6
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 209.3°										
	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	661	28.2	28,699	73.9	37.9	2,576	228	2	2,579	37.9
Comms	4,142	176.5	96,468	248.4	127.4	8,660	171	2	8,662	127.4
GuyBraces	-2,922	-124.5	-94,794	-244.1	-125.1	-8,510	9,507	99	-8,411	-123.7
PowerEquipments	64	2.7	954	2.5	1.3	86	636	7	92	1.4
Pole	351	14.9	6,195	16.0	8.2	556	1,928	20	576	8.5
Streetlights	35	1.5	825	2.1	1.1	74	86	1	75	1.1
Insulators	17	0.7	490	1.3	0.7	44	34	0	44	0.7
Pole Load	2,347	100.0	38,838	100.0	51.3	3,486	12,590	130	3,617	53.2
Pole Reserve Capacity			36,912		48.7	3,314			3,183	46.8

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 209.3°										
	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	1,012	43.1	34,894	89.8	46.1	3,132	2,156	22	3,155	46.4
CATV	1,378	58.7	33,006	85.0	43.6	2,963	57	1	2,964	43.6
AT&T	2,764	117.8	63,462	163.4	83.8	5,697	114	1	5,698	83.8
<Undefined>	-2,807	-119.6	-92,524	-238.2	-122.1	-8,306	10,263	106	-8,199	-120.6
Totals:	2,347	100.0	38,838	100.0	51.3	3,486	12,590	130	3,617	53.2

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	36.97	16.18	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	50,304	14	627	50,945
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-23,626	-24	380	-23,269
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-42,140	-13	525	-41,628
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	42,140	-13	525	42,651
Totals:												26,679	-37	2,057	28,699

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	32,615	-14	406	33,006

Telco	AT&T	AT&T	22.97	6.23	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	31,254	-14	594	31,833
Telco	AT&T	AT&T	22.97	6.23	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	31,254	-14	389	31,629
Totals:												95,122	-43	1,390	96,468

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	30.00	20.83	0.0	0.0	335.00	34.00	--	22.00	--	-964	1,918	954	
Totals:												-964	1,918	954	

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	90.0	90.0	45.00	24.00	20.00	3.00	36.00	-116	941	825	
Totals:												-116	941	825	

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	180.0	180.0	3.00	3.80	12.75	7	153	160
Bolt	Deadend 12.75"		31.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	79	77
Bolt	Deadend 12.75"		31.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	79	78
Bolt	Deadend 12.75"		24.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	62	60
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	59	58
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	59	58
									Totals:	-1	492	490

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	32.00	0.00	23.00	0.375	75.00	340.0	54.1	0.273	37.73	1.85

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 Tension² (lbs)	Applied Tension³ (lbs)	Vertical Load (lbs)	Shear Load In Guy Dir (lbs)	Shear Load At Report Angle (lbs)	Moment at GL³ (ft-lb)
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	9,248	8,407	7,764	6,290	4,551	-2,969	-94,794
									Totals:	6,290	4,551	-2,969	-94,794

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	340.0	20,000	1.00	20,000	8,407	7,764	42.0

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	29.87	34.62	9.90	18.19	6.69	11.09	1.60e+6	60.00	57.00	38.50	98,588	983.58	7.81

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.		