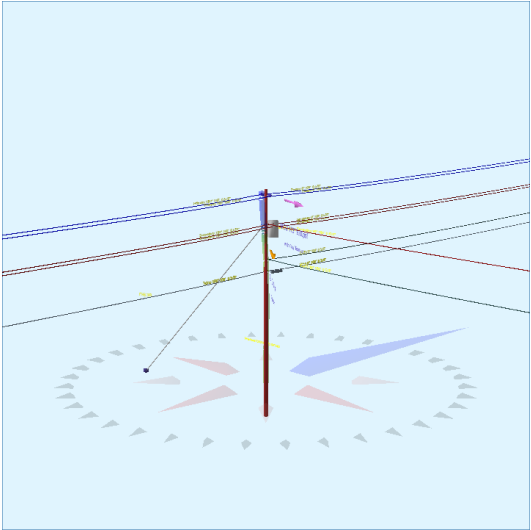


Pole Num:	93101469_P.OPP3461	Pole Length / Class:	40 / 5	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.00	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	46.4	22.0	112.8
Groundline	35.5	0.0	130.0
Vertical	10.4	26.1	65.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	9,863	214.6	112.8
Groundline	18,076	117.7	130.0
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	23.0	245.0		24.4	112.8	26.3	80.0
EHS 3/8 (Down)			28.0	35.2	112.8	41.7	80.0
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 117.7°

	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	1,596	159.3	45,192	250.0	84.6	5,749	513	7	5,756	84.6
Comms	809	80.7	17,679	97.8	33.1	2,249	342	4	2,254	33.1
GuyBraces	-1,859	-185.6	-52,696	-291.5	-98.6	-6,704	5,693	74	-6,629	-97.5
PowerEquipments	80	8.0	1,655	9.2	3.1	211	636	8	219	3.2
Pole	347	34.6	5,426	30.0	10.2	690	1,364	18	708	10.4
Insulators	30	3.0	819	4.5	1.5	104	46	1	105	1.5
Pole Load	1,002	100.0	18,076	100.0	33.8	2,300	8,595	112	2,412	35.5
Pole Reserve Capacity			35,376		66.2	4,500			4,388	64.5

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 117.7°

	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	1,943	193.9	50,618	280.0	94.7	6,440	1,877	25	6,464	95.1
CATV	694	69.2	15,288	84.6	28.6	1,945	114	1	1,946	28.6
AT&T	115	11.5	2,392	13.2	4.5	304	228	3	307	4.5
<Undefined>	-1,750	-174.6	-50,222	-277.8	-94.0	-6,389	6,375	83	-6,306	-92.7
Totals:	1,002	100.0	18,076	100.0	33.8	2,300	8,595	112	2,412	35.5

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	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-23,883	13	837	-23,033
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	23,883	13	837	24,733
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-23,883	-13	837	-23,059
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	23,883	-13	837	24,707
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-20,261	23	710	-19,529
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	20,261	23	710	20,993
Secondary	FPL	FPL	27.47	5.39	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-19,899	23	697	-19,179
Secondary	FPL	FPL	27.47	5.39	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	19,899	23	697	20,618
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	38,641	-12	312	38,941
Totals:											38,641	79	6,473	45,192	

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	-15,914	24	558	-15,333
CATV	CATV	CATV	21.97	5.70	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	30,351	24	245	30,621
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-14,466	24	507	-13,934
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	14,466	24	507	14,997
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-14,466	24	773	-13,668
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	14,466	24	507	14,997
Totals:												14,437	146	3,097	17,679

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		27.00	20.42	0.0	0.0	335.00	34.00	--	22.00	--	-503	2,158	1,655
Totals:												-503	2,158	1,655

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	7	171	177
Deadend	Deadend 12.75"		33.00	0.00	270.0	270.0	3.00	3.80	12.75	-7	171	164
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	2	90	92
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	2	71	73
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	2	64	67
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	2	64	67
Bolt	Deadend 12.75"		27.50	0.00	90.0	90.0	3.00	2.00	15.00	2	88	90
Bolt	Deadend 12.75"		28.00	0.00	0.0	0.0	3.00	2.00	15.00	-1	90	89
									Totals:	11	808	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		28.00	0.00	23.00	0.375	75.00	245.0	50.4	0.273	34.56	1.06

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	5,785	5,259	4,882	3,764	3,109	-1,886	-52,695
									Totals:	3,764	3,109	-1,886	-52,695

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	245.0	20,000	1.00	20,000	5,259	4,882	26.3

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	26.10	34.46	8.86	14.05	6.05	9.87	1.60e+6	60.00	57.00	34.00	82,689	826.40	9.62

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.		