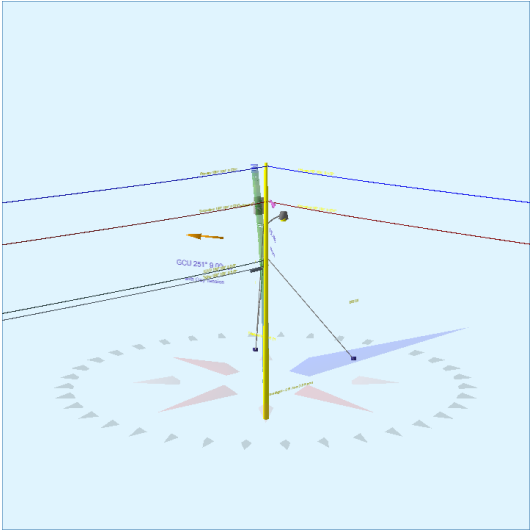


Pole Num:	116871817_P1	Pole Length / Class:	45 / 3	Code:	NESC	Structure Type:	Angle
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.50	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (in):	37.31	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	30.4	34.3	130.0
Groundline	13.5	0.0	251.2
Vertical	11.6	27.9	146.2

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	8,266	134.7	130.0
Groundline	10,318	264.0	251.2
GL Allowable	93,217		

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	310.0		35.0	130.0	45.4	125.6
EHS 3/8 (Down)			34.0	44.8	130.0	53.6	125.6
EHS 3/8 (Down)			26.0	5.9	130.0	18.6	80.0
Single Helix Anchor	23.0	0.0		29.6	130.0	30.3	220.0
EHS 3/8 (Down)			22.0	42.7	130.0	48.2	220.0
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 264.0°										
	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	-2,703	-411.1	-94,608	-916.9	-101.5	-6,902	228	2	-6,899	-101.5
Comms	416	63.3	8,857	85.8	9.5	646	114	1	647	9.5
GuyBraces	2,338	355.7	82,884	803.3	88.9	6,046	14,873	134	6,180	90.9
PowerEquipments	80	12.1	3,587	34.8	3.9	262	636	6	267	3.9
Pole	473	72.0	8,387	81.3	9.0	612	2,247	20	632	9.3
Streetlights	44	6.6	981	9.5	1.1	72	86	1	72	1.1
Insulators	10	1.5	229	2.2	0.3	17	23	0	17	0.2
Pole Load	657	100.0	10,318	100.0	11.1	753	18,207	164	917	13.5
Pole Reserve Capacity			82,899		88.9	6,047			5,883	86.5

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 264.0°										
	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	-2,230	-339.2	-86,221	-835.6	-92.5	-6,290	2,475	22	-6,267	-92.2
CATV	199	30.2	4,334	42.0	4.7	316	57	1	317	4.7
AT&T	217	33.0	4,523	43.8	4.9	330	57	1	330	4.9
<Undefined>	2,471	375.9	87,682	849.8	94.1	6,396	15,618	141	6,537	96.1
Totals:	657	100.0	10,318	100.0	11.1	753	18,207	164	917	13.5

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	37.97	3.69	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-58,905	-17	48	-58,874
Primary	FPL	FPL	37.97	3.69	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	6,207	-17	1,337	7,527
Secondary	FPL	FPL	31.97	6.05	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-49,596	-29	40	-49,584
Secondary	FPL	FPL	31.97	6.05	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	5,226	-29	1,126	6,323
Totals:												-97,068	-92	2,552	-94,608

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)
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CATV	CATV	CATV	21.97	6.64	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	3,591	-31	774	4,334
Telco	AT&T	AT&T	20.97	6.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	3,428	-32	1,127	4,523
Totals:												7,019	-63	1,901	8,857

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	31.00	21.10	270.0	270.0	335.00	34.00	--	22.00	--	1,113	2,474	3,587
Totals:												1,113	2,474	3,587

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	28.00	4.28	90.0	90.0	45.00	24.00	20.00	3.00	36.00	-238	1,219	981
Totals:												-238	1,219	981

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"		38.00	0.00	90.0	90.0	3.00	3.80	0.00	-2	0	-2
Bolt	Deadend 12.75"		32.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	102	100
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	70	67
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	67	64
									Totals:	-11	240	229

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	34.00	0.00	23.00	0.375	75.00	310.0	55.7	0.273	39.37	1.54
EHS 3/8		Down	26.00	0.00	23.00	0.375	75.00	310.0	48.4	0.273	32.97	0.17
EHS 3/8		Down	22.00	0.00	23.00	0.375	75.00	0.0	43.6	0.273	30.05	1.12

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	7,435	6,760	6,206	5,128	3,494	2,427	82,676
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	2,578	2,344	818	611	543	377	9,985
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	6,675	6,069	5,913	4,077	4,282	-449	-9,776
									Totals:	9,816	8,320	2,355	82,884

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 <sup>2</sup> (lbs)	Load at Pole MCU <sup>3</sup> (lbs)	Max Required Capacity <sup>2</sup> (%)
Single Helix Anchor		18.00	23.00	310.0	20,000	1.00	20,000	9,085	7,008	45.4
Single Helix Anchor		18.00	23.00	0.0	20,000	1.00	20,000	6,068	5,912	30.3

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	27.94	34.18	10.75	21.15	7.32	11.88	1.60e+6	60.00	57.00	38.50	156,414	1569.57	8.62

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.		