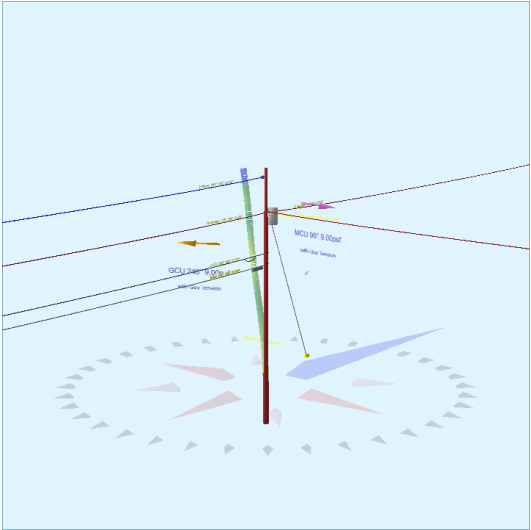


Pole Num:	91458491_P.OPP144	Pole Length / Class:	45 / 4	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.50	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	58.3	22.0
Groundline	52.2	0.0
Vertical	12.4	29.8

Pole Moments (ft-lb)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	19,395	3.9
Groundline	38,134	205.5
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		37.8	95.6	40.7	150.0
EHS 3/8 (Down)			32.0	54.5	95.6	64.5	150.0
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 205.5°

	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	793	32.6	33,067	86.7	43.7	2,968	228	2	2,971	43.7
Comms	4,275	175.5	96,728	253.7	127.7	8,683	171	2	8,685	127.7
GuyBraces	-3,055	-125.4	-99,084	-259.8	-130.8	-8,895	9,252	96	-8,799	-129.4
PowerEquipments	63	2.6	881	2.3	1.2	79	636	7	86	1.3
Pole	343	14.1	6,065	15.9	8.0	545	1,928	20	564	8.3
Insulators	17	0.7	476	1.3	0.6	43	34	0	43	0.6
Pole Load	2,437	100.0	38,134	100.0	50.3	3,423	12,250	127	3,550	52.2
Pole Reserve Capacity			37,616		49.7	3,377			3,250	47.8

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 205.5°

	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	1,137	46.7	39,133	102.6	51.7	3,513	2,156	22	3,535	52.0
CATV	1,423	58.4	34,091	89.4	45.0	3,060	57	1	3,061	45.0
AT&T	2,852	117.1	62,638	164.3	82.7	5,623	114	1	5,624	82.7
<Undefined>	-2,975	-122.1	-97,727	-256.3	-129.0	-8,773	9,923	103	-8,670	-127.5
Totals:	2,437	100.0	38,134	100.0	50.3	3,423	12,250	127	3,550	52.2

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	52,039	15	543	52,597
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-20,822	-25	431	-20,415
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-43,593	-12	455	-43,150
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	43,593	-12	455	44,036
											Totals:	31,217	-34	1,884	33,067

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	33,739	-13	364	34,090
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	30,924	-13	492	31,404

Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	30,924	-13	323	31,234
											Totals:	95,587	-38	1,179	96,728

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	--	-997	1,878	881
											Totals:	-997	1,878	881

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	150	157
Bolt	Deadend 12.75"		31.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	78	75
Bolt	Deadend 12.75"		31.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	78	77
Bolt	Deadend 12.75"		24.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	60	59
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	55	54
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	55	54
									Totals:	-1	476	476

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	1.80

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	8,944	8,131	7,556	6,121	4,429	-3,102	-99,083
									Totals:	6,121	4,429	-3,102	-99,083

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	8,130	7,556	40.7

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	29.84	34.61	9.90	17.93	6.69	11.09	1.60e+6	60.00	57.00	38.50	98,877	987.89	8.06

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.		