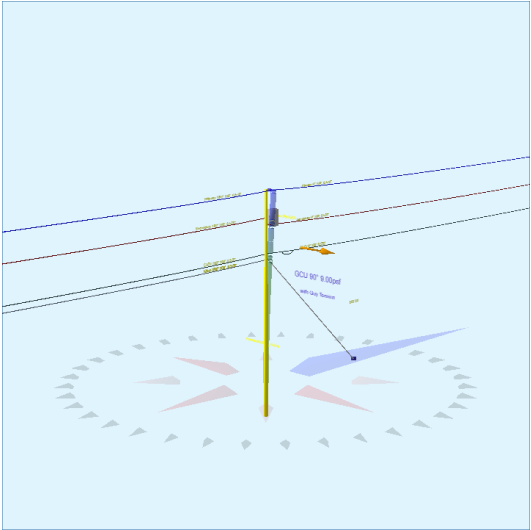


Pole Num:	93338401_P.F1110	Pole Length / Class:	40 / 5	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.00	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	33.2	0.0
Groundline	33.2	0.0
Vertical	5.4	21.9

Pole Moments (ft-lb)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	17,023	96.9
Groundline	17,023	96.9
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	0.0		20.9	90.0	23.4	177.2
EHS 3/8 (Down)			22.0	30.2	90.0	37.1	177.2
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 96.9°										
	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	149	19.2	4,854	28.5	9.1	618	228	3	620	9.1
Comms	527	67.9	11,748	69.0	22.0	1,495	228	3	1,498	22.0
GuyBraces	-355	-45.8	-7,916	-46.5	-14.8	-1,007	4,373	57	-950	-14.0
PowerEquipments	81	10.5	2,225	13.1	4.2	283	636	8	291	4.3
Pole	353	45.5	5,513	32.4	10.3	701	1,364	18	719	10.6
Insulators	22	2.8	598	3.5	1.1	76	34	0	77	1.1
Pole Load	775	100.0	17,023	100.0	31.9	2,166	6,864	90	2,255	33.2
Pole Reserve Capacity			36,429		68.2	4,634			4,545	66.8

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 96.9°										
	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	501	64.6	10,367	60.9	19.4	1,319	1,592	21	1,340	19.7
CATV	76	9.7	1,787	10.5	3.3	227	114	1	229	3.4
AT&T	451	58.2	9,961	58.5	18.6	1,267	114	1	1,269	18.7
<Undefined>	-252	-32.5	-5,092	-29.9	-9.5	-648	5,044	66	-582	-8.6
Totals:	775	100.0	17,023	100.0	31.9	2,166	6,864	90	2,255	33.2

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	33.97	15.77	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-6,398	14	1,261	-5,122
Primary	FPL	FPL	33.97	15.77	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	6,398	14	1,261	7,674
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	5,456	-25	1,076	6,507
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-5,268	25	1,039	-4,204
Totals:											188	29	4,637	4,854	

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	22.97	5.64	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-4,326	27	881	-3,418
CATV	CATV	CATV	22.97	5.64	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	4,326	27	853	5,206

Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	4,138	27	816	4,980
Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	4,138	27	816	4,980
Totals:												8,275	107	3,365	11,748

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	0.0	0.0	335.00	34.00	--	22.00	--	-130	2,355	2,225
Totals:												-130	2,355	2,225

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	7	179	186
Bolt	Deadend 12.75"		29.00	0.00	270.0	270.0	3.00	2.00	15.00	-3	94	92
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	3	91	94
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	3	75	78
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	3	72	74
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	3	72	74
									Totals:	15	583	598

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	22.00	0.00	23.00	0.375	75.00	0.0	43.6	0.273	30.11	0.79

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	5,147	4,679	4,183	2,885	3,029	-366	-7,916
									Totals:	2,885	3,029	-366	-7,916

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	0.0	20,000	1.00	20,000	4,679	4,183	23.4

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	21.91	33.74	9.04	11.55	6.05	9.87	1.60e+6	60.00	57.00	34.00	127,124	1271.19	18.52

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.		