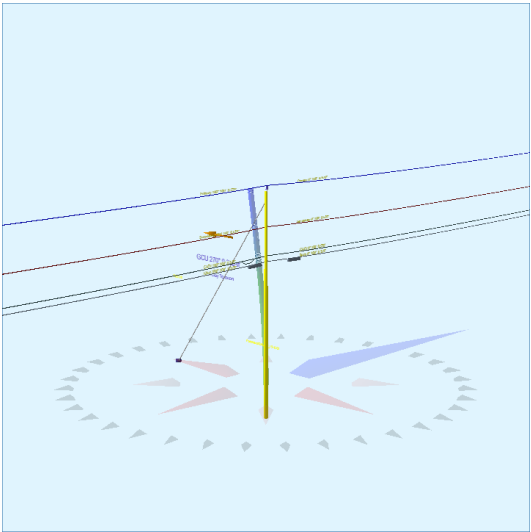


Pole Num:	93352845_P.F4521	Pole Length / Class:	40 / 5	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.00	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	28.2	0.0	270.0
Groundline	28.2	0.0	270.0
Vertical	1.0	18.7	90.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	14,890	270.0	270.0
Groundline	14,890	270.0	270.0
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	270.0		0.0	270.0	3.2	90.0
EHS 3/8 (Down)			32.0	0.0	270.0	5.0	90.0
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 270.0°										
	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	150	20.9	4,634	31.1	8.7	590	228	3	593	8.7
Comms	197	27.5	4,292	28.8	8.0	546	228	3	549	8.1
GuyBraces	0	0.0	0	0.0	0.0	0	7	0	0	0.0
Pole	355	49.5	5,554	37.3	10.4	707	1,364	18	724	10.7
Insulators	15	2.1	410	2.8	0.8	52	23	0	52	0.8
Pole Load	717	100.0	14,890	100.0	27.9	1,894	1,850	24	1,918	28.2
Pole Reserve Capacity			38,562		72.1	4,906			4,882	71.8

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 270.0°										
	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	505	70.4	10,188	68.4	19.1	1,296	1,592	21	1,317	19.4
CATV	76	10.6	1,693	11.4	3.2	215	114	1	217	3.2
AT&T	121	16.8	2,599	17.5	4.9	331	114	1	332	4.9
<Undefined>	15	2.1	410	2.8	0.8	52	30	0	53	0.8
Totals:	717	100.0	14,890	100.0	27.9	1,894	1,850	24	1,918	28.2

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	35.03	3.02	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	0	-14	1,310	1,296
Primary	FPL	FPL	35.03	3.02	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	0	-14	1,310	1,296
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	0	-25	1,046	1,021
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	0	-25	1,046	1,021
Totals:											0	-79	4,713	4,634	

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	0	-27	859	832
CATV	CATV	CATV	22.97	5.64	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	0	-27	888	861
Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	0	-27	1,326	1,299

Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	0	-27	1,326	1,299
											Totals:	0	-108	4,399	4,292

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	-1	180	179
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	92	89
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	75	73
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	72	69
									Totals:	-9	420	410

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	270.0	54.1	0.273	37.76	0.00

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 Tension ² (lbs)	Applied Tension ³ (lbs)	Vertical Load (lbs)	Shear Load In Guy Dir (lbs)	Shear Load At Report Angle (lbs)	Moment at GL ³ (ft-lb)
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	696	633	0	0	0	0	0
										Totals:	0	0	0

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 ² (lbs)	Load at Pole MCU ³ (lbs)	Max Required Capacity ² (%)
Single Helix Anchor			18.00	23.00	270.0	20,000	1.00	20,000	633	0	3.2

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	18.72	33.20	9.17	5.74	6.05	9.87	1.60e+6	60.00	57.00	34.00	184,547	1850.37	100.00

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.		

