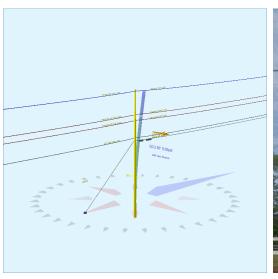
Pole Num:	116871799_P6	Pole Length /	Class:	45 / 4	Code:	NESC	Structure Type:	Gu	yed Tangent
Aux Data 1	Unset	Species:	sou	THERN PINE	NESC Rule:	Rule 250B	Status G	ay Wir	es Adequate
Aux Data 2	Unset	Setting Depth	n (ft):	6.50	Construction Grade:	C	Pole Strength Facto	r:	0.85
Aux Data 3	Unset	G/L Circumfe	rence (in):	34.82	Loading District:	Light	Transverse Wind LF	:	1.75
Aux Data 4	Unset	G/L Fiber Str	ess (psi):	8,000	Ice Thickness (in):	0.00	Wire Tension LF:		1.30
Aux Data 5	Unset	Allowable Str	ess (psi):	6,800	Wind Speed (mph):	59.29	Vertical LF:		1.90
Aux Data 6	Unset	Fiber Stress I	Ht. Reduc:	No	Wind Pressure (psf):	9.00			
Latitude:		0.00000	00 Deg Longit	ude:		0.000000 Deg	Elevation:		0 Feet





Pole Capacity Uti	lization (%)	Height (ft)	Wind Angle (deg)
Maximum	27.7	0.0	90.0
Groundline	27.7	0.0	90.0
Vertical	2.7	20.5	0.0

Pole Moments (ft-	b)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	20,218	79.0	90.0
Groundline	20,218	79.0	90.0
GL Allowable	75,750		

Guy System Component Summary				Load From Angle o		Individual Ma	ximum 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	180.0		19.7	90.0	22.2	0.0	
EHS 3/8 (Down)			21.0	28.4	90.0	35.2	0.0	
	System Cap				_l uate	Adequate		

Groundline Load Summar	y - Reporting A	Angle Mode: L	oad - Reporti	ng Angle: 79.0)°					
	Shear Load* (Ibs)	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	220	24.2	7,184	35.5	9.5	645	342	4	648	9.5
Comms	776	85.4	16,470	81.5	21.7	1,478	228	2	1,481	21.8
GuyBraces	-545	-60.0	-11,626	-57.5	-15.4	-1,044	4,020	42	-1,002	-14.7
Pole	441	48.5	7,782	38.5	10.3	699	1,928	20	719	10.6
Insulators	16	1.8	409	2.0	0.5	37	34	0	37	0.5
Pole Load	909	100.0	20,218	100.0	26.7	1,815	6,552	68	1,883	27.7
Pole Reserve Capacity			55,532		73.3	4,985			4,917	72.3

Load Summary by Owner	- Reporting An	gle Mode: Lo	ad - Reporting	Angle: 79.0°						
	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	661	72.7	14,966	74.0	19.8	1,343	2,270	24	1,367	20.1
CATV	73	8.1	1,672	8.3	2.2	150	114	1	151	2.2
AT&T	703	77.4	14,798	73.2	19.5	1,328	114	1	1,330	19.6
<undefined></undefined>	-529	-58.2	-11,218	-55.5	-14.8	-1,007	4,054	42	-965	-14.2
Totals:	909	100.0	20,218	100.0	26.7	1,815	6,552	68	1,883	27.7

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	3.37	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	11,339	16	1,394	12,748
Primary	FPL	FPL	37.97	3.37	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-11,339	16	1,394	-9,929
Secondary	FPL	FPL	29.97	5.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	8,950	27	1,100	10,077
Secondary	FPL	FPL	29.97	5.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-8,950	27	1,100	-7,822
Secondary	FPL	FPL	27.97	5.94	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	8,352	28	1,027	9,407
Secondary	FPL	FPL	27.97	5.94	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-8,352	28	1,027	-7,298
											Totals:	0	141	7,042	7,183

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	6.28	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	6,560	29	807	7,396
CATV	CATV	CATV	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-6,560	29	807	-5,725

User:Giulliana DESKTOP-80LQLSV OCP:5.02

*Includes Load Factor(s)

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² Worst Wind Per Guy Wire

³ Wind At 90°

Telco	AT&T	AT&T	20.97	6.34	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	6,262	30	1,040	7,331
Telco	AT&T	AT&T	20.97	6.34	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	6,262	30	1,175	7,466
										ſ	Totals:	12,524	118	3,828	16,469

Insulator		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (Ibs)	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"		30.00	0.00	90.0	90.0	3.00	2.00	15.00	3	97	99
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	3	90	93
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	3	71	74
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	3	68	71
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	3	68	71
									Totals:	16	393	409

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		21.00	0.00	23.00	0.375	75.00	180.0	42.3	0.273	29.38	0.73

Guy Wire and Bra (Loads and Reac		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 GL³ (ft-lb)
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	4,874	4,431	3,935	2,647	2,912	-557	-11,626
									Totals:	2,647	2,912	-557	-11,626

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 MCU ³ (lbs)	Max Required Capacity² (%)
Single Helix Anchor		18.00	23.00	180.0	20,000	1.00	20,000	4,431	3,935	22.2

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	20.53	33.17	10.31	11.04	6.69	11.09	1.60e+6	60.00	57.00	38.50	244,905	2426.67	37.04

Notes							
Date	Author	Description					
1/27/2021		Power Company Request					
Power company load data has been requested. Email sent to Elmer Pole							

Pole ID:Pole_116871799_P6_pplx.pplx

O-Calc® Pro Analysis Report

Monday, May 20, 2024 2:13 PM

1/27/2021 General Description

General Statement: Non-AT&T facilities may not be accurately identified pending attachment information from attaching party.