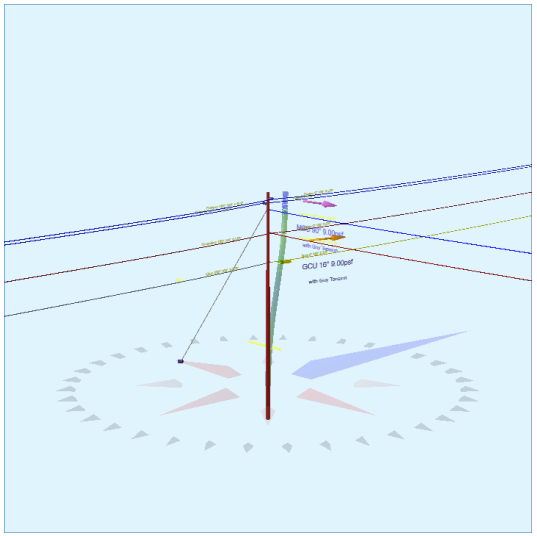
Pole Num:	**93100027_P.F3745**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength 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	**37.2**	27.0	90.0
Groundline	**22.5**	0.0	15.8
Vertical	**11.7**	28.6	90.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	**6,114**	270.5	90.0
Groundline	**11,258**	41.5	15.8
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		**23.5**	90.0	**26.0**	90.0
EHS 3/8 (Down)			31.0	**33.9**	90.0	**41.2**	90.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 41.5°

	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	2,160	315.3	**62,712**	557.1	**117.3**	**7,978**	456	6	**7,984**	**117.4**
Comms	17	2.5	**410**	3.6	**0.8**	**52**	114	1	**54**	**0.8**
GuyBraces	-1,834	-267.6	**-57,503**	-510.8	**-107.6**	**-7,316**	5,692	74	**-7,241**	**-106.5**
Pole	320	46.7	**5,005**	44.5	**9.4**	**637**	1,364	18	**655**	**9.6**
Insulators	21	3.1	**634**	5.6	**1.2**	**81**	34	0	**81**	**1.2**
Pole Load	685	100.0	**11,258**	100.0	**21.1**	**1,432**	7,661	100	**1,532**	**22.5**
Pole Reserve Capacity			**42,194**		**78.9**	**5,368**			**5,268**	**77.5**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 41.5°

	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	2,480	362.0	**67,718**	601.5	**126.7**	**8,615**	1,820	24	**8,639**	**127.0**
AT&T	17	2.5	**410**	3.6	**0.8**	**52**	114	1	**54**	**0.8**
<Undefined>	-1,812	-264.5	**-56,869**	-505.2	**-106.4**	**-7,235**	5,726	75	**-7,160**	**-105.3**
Totals:	685	100.0	**11,258**	100.0	**21.1**	**1,432**	7,661	100	**1,532**	**22.5**

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	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	38,543	10	222	38,775
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-38,543	10	222	-38,311
Primary	FPL	FPL	31.97	15.89	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	37,374	-10	215	37,579
Primary	FPL	FPL	31.97	15.89	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-37,374	-10	215	-37,168
Primary	FPL	FPL	30.97	5.19	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	31,987	18	835	32,840
Secondary	FPL	FPL	26.97	5.42	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	27,855	19	728	28,602
Secondary	FPL	FPL	26.97	5.42	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	31,528	17	182	31,727
Secondary	FPL	FPL	26.97	5.42	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-31,528	17	182	-31,330
											Totals:	**59,842**	**71**	**2,801**	**62,714**

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)
Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	25,683	18	226	25,927

Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-25,683	18	148	-25,517
											Totals:	**0**	**36**	**374**	**410**

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"		33.00	0.00	90.0	90.0	3.00	3.80	12.75	5	158	163
Deadend	Deadend 12.75"		32.00	0.00	270.0	270.0	3.00	3.80	12.75	-5	153	148
Bolt	Deadend 12.75"		31.00	0.00	0.0	0.0	3.00	2.00	15.00	2	92	94
Bolt	Deadend 12.75"		27.00	0.00	0.0	0.0	3.00	2.00	15.00	2	80	82
Bolt	Deadend 12.75"		27.00	0.00	90.0	90.0	3.00	2.00	15.00	2	80	82
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	2	65	67
									Totals:	**7**	**627**	**634**

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		31.00	0.00	23.00	0.375	75.00	270.0	53.3	0.273	36.94	1.09

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	5,712	5,193	4,700	3,766	2,812	-1,862	-57,505
									Totals:	**3,766**	**2,812**	**-1,862**	**-57,505**

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	5,193	4,700	26.0

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	28.57	34.88	8.75	13.88	6.05	9.87	1.60e+6	60.00	57.00	34.00	65,656	**654.76**	**8.55**

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.