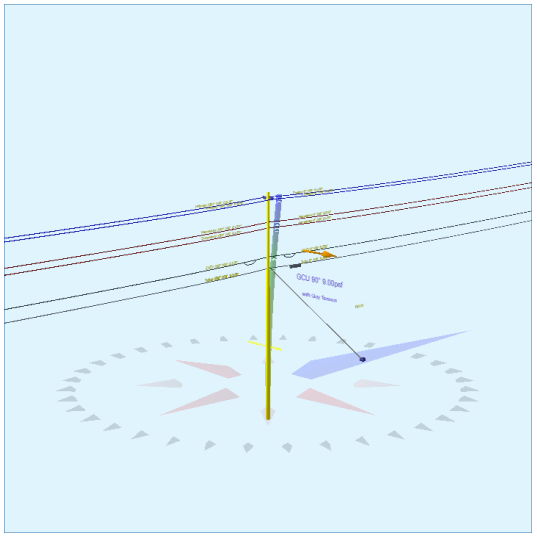
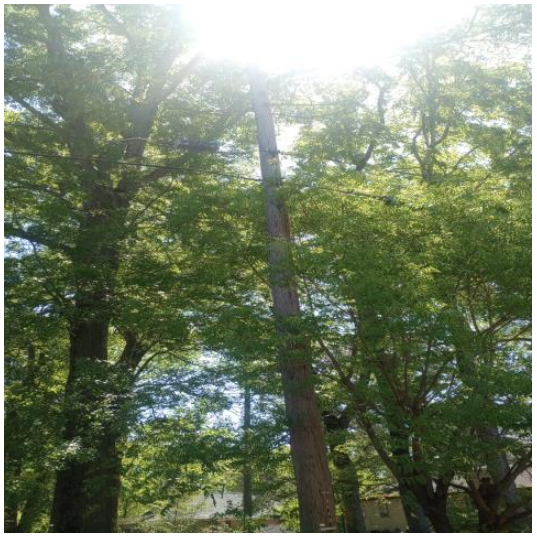
Pole Num:	**P.F941_116854998**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength 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	**39.1**	0.0	90.0
Groundline	**39.1**	0.0	90.0
Vertical	**2.8**	20.6	180.0

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**20,478**	92.7	90.0
Groundline	**20,478**	92.7	90.0
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	25.0	0.0		**9.8**	90.0	**11.5**	180.0
EHS 3/8 (Down)			21.0	**14.1**	90.0	**18.3**	180.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 92.7°

	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	299	33.2	**9,284**	45.3	**17.4**	**1,181**	456	6	**1,187**	**17.5**
Comms	282	31.3	**6,208**	30.3	**11.6**	**790**	285	4	**793**	**11.7**
GuyBraces	-62	-6.9	**-1,324**	-6.5	**-2.5**	**-168**	1,911	25	**-143**	**-2.1**
Pole	355	39.4	**5,548**	27.1	**10.4**	**706**	1,364	18	**724**	**10.6**
Insulators	27	3.0	**762**	3.7	**1.4**	**97**	40	1	**98**	**1.4**
Pole Load	901	100.0	**20,478**	100.0	**38.3**	**2,605**	4,056	53	**2,658**	**39.1**
Pole Reserve Capacity			**32,974**		**61.7**	**4,195**			**4,142**	**60.9**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 92.7°

	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	654	72.6	**14,832**	72.4	**27.8**	**1,887**	1,820	24	**1,911**	**28.1**
CATV	77	8.6	**1,827**	8.9	**3.4**	**232**	114	1	**234**	**3.4**
AT&T	205	22.8	**4,381**	21.4	**8.2**	**557**	171	2	**560**	**8.2**
<Undefined>	-35	-3.9	**-562**	-2.7	**-1.1**	**-71**	1,951	26	**-46**	**-0.7**
Totals:	901	100.0	**20,478**	100.0	**38.3**	**2,605**	4,056	53	**2,658**	**39.1**

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	-2,416	15	1,232	-1,169
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,416	15	1,232	3,662
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,416	-15	1,232	-1,199
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,416	-15	1,232	3,633
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,049	25	1,045	-979
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,049	25	1,045	3,120
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,123	25	1,082	-1,015
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,123	25	1,082	3,230
											Totals:	**0**	**101**	**9,182**	**9,284**

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	-1,683	27	887	-770
CATV	CATV	CATV	22.97	5.64	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,683	27	887	2,596
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-1,536	27	1,196	-313
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,536	27	783	2,347
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	1,536	27	783	2,347
											Totals:	**1,536**	**135**	**4,536**	**6,208**

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	8	175	182
Deadend	Deadend 12.75"		33.00	0.00	270.0	270.0	3.00	3.80	12.75	-8	175	167
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	3	92	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"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	3	69	72
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	3	69	72
Bolt	Deadend 12.75"		29.00	0.00	90.0	90.0	3.00	2.00	15.00	3	95	98
									Totals:	**13**	**749**	**762**

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	25.00	0.375	75.00	0.0	39.9	0.273	30.91	0.38

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	2,533	2,303	1,960	1,258	1,503	-71	-1,324
									Totals:	**1,258**	**1,503**	**-71**	**-1,324**

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	25.00	0.0	20,000	1.00	20,000	2,303	1,960	11.5

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	20.60	33.52	9.09	8.68	6.05	9.87	1.60e+6	60.00	57.00	34.00	147,421	**1448.63**	**35.71**

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.		