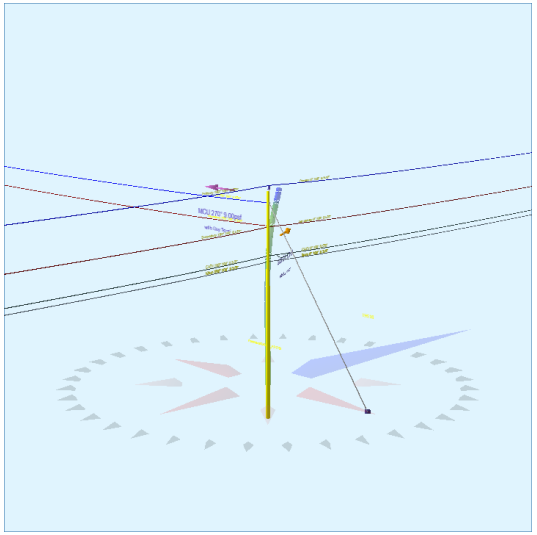
Pole Num:	**93353761_P.F1720**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength 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	**41.4**	28.0	270.0
Groundline	**23.6**	0.0	330.0
Vertical	**13.2**	29.3	270.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	**6,505**	89.5	270.0
Groundline	**11,768**	310.7	330.0
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	90.0		**24.6**	270.0	**26.2**	270.0
EHS 3/8 (Down)			32.0	**35.5**	270.0	**41.7**	270.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 310.7°

	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	2,465	327.9	**73,934**	628.3	**138.3**	**9,406**	342	4	**9,410**	**138.4**
Comms	86	11.4	**1,786**	15.2	**3.3**	**227**	342	4	**232**	**3.4**
GuyBraces	-2,158	-287.0	**-69,837**	-593.5	**-130.7**	**-8,885**	6,028	79	**-8,806**	**-129.5**
Pole	335	44.6	**5,241**	44.5	**9.8**	**667**	1,364	18	**685**	**10.1**
Insulators	24	3.1	**644**	5.5	**1.2**	**82**	40	1	**82**	**1.2**
Pole Load	752	100.0	**11,768**	100.0	**22.0**	**1,497**	8,116	106	**1,603**	**23.6**
Pole Reserve Capacity			**41,684**		**78.0**	**5,303**			**5,197**	**76.4**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 310.7°

	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	2,800	372.5	**79,175**	672.8	**148.1**	**10,073**	1,706	22	**10,095**	**148.5**
CATV	29	3.8	**622**	5.3	**1.2**	**79**	114	1	**81**	**1.2**
AT&T	57	7.5	**1,164**	9.9	**2.2**	**148**	228	3	**151**	**2.2**
<Undefined>	-2,134	-283.8	**-69,193**	-588.0	**-129.5**	**-8,803**	6,068	79	**-8,723**	**-128.3**
Totals:	752	100.0	**11,768**	100.0	**22.0**	**1,497**	8,116	106	**1,603**	**23.6**

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	35,621	-11	497	36,107
Primary	FPL	FPL	35.03	3.02	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-35,621	-11	497	-35,134
Primary	FPL	FPL	31.97	5.14	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	37,821	16	675	38,512
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	33,088	17	591	33,696
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	28,439	-19	397	28,817
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-28,439	-19	397	-28,062
											Totals:	**70,909**	**-27**	**3,053**	**73,934**

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	23,355	-20	337	23,671
CATV	CATV	CATV	22.97	5.64	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-23,355	-20	326	-23,050

Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	22,338	-21	312	22,629
Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-22,338	-21	312	-22,047
Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	22,338	-21	312	22,629
Telco	AT&T	AT&T	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-22,338	-21	312	-22,047
											Totals:	**0**	**-123**	**1,909**	**1,786**

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	170	169
Bolt	Deadend 12.75"		32.00	0.00	0.0	0.0	3.00	2.00	15.00	2	99	101
Bolt	Deadend 12.75"		28.00	0.00	0.0	0.0	3.00	2.00	15.00	2	87	88
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	87	85
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	71	69
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	68	66
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	68	66
									Totals:	**-6**	**650**	**644**

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	90.0	54.1	0.273	37.76	1.17

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	5,774	5,249	4,924	3,989	2,886	-2,189	-69,838
									Totals:	**3,989**	**2,886**	**-2,189**	**-69,838**

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	90.0	20,000	1.00	20,000	5,249	4,924	26.2

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	29.34	35.01	8.71	14.47	6.05	9.87	1.60e+6	60.00	57.00	34.00	61,306	**614.87**	**7.58**

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.		