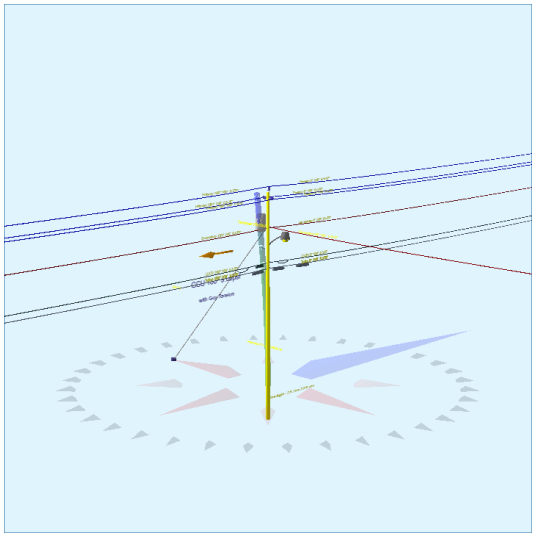
Pole Num:	**P.F1415_116858716**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength 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	**24.2**	0.0	180.0
Groundline	**24.2**	0.0	180.0
Vertical	**6.4**	25.5	90.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	**12,338**	176.8	180.0
Groundline	**12,338**	176.8	180.0
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	270.0		**11.6**	180.0	**17.8**	91.2
EHS 3/8 (Down)			28.0	**16.7**	180.0	**28.3**	91.2
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 176.8°

	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	126	22.4	**3,488**	28.3	**6.5**	**444**	513	7	**450**	**6.6**
Comms	0	0.0	**9**	0.1	**0.0**	**1**	342	4	**6**	**0.1**
GuyBraces	-78	-13.8	**-2,196**	-17.8	**-4.1**	**-279**	2,612	34	**-245**	**-3.6**
PowerEquipments	82	14.6	**3,444**	27.9	**6.4**	**438**	636	8	**446**	**6.6**
Pole	355	63.2	**5,545**	44.9	**10.4**	**705**	1,364	18	**723**	**10.6**
Streetlights	45	7.9	**1,127**	9.1	**2.1**	**143**	86	1	**145**	**2.1**
Insulators	32	5.7	**920**	7.5	**1.7**	**117**	46	1	**118**	**1.7**
Pole Load	561	100.0	**12,338**	100.0	**23.1**	**1,570**	5,599	73	**1,643**	**24.2**
Pole Reserve Capacity			**41,114**		**76.9**	**5,230**			**5,157**	**75.8**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 176.8°

	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	480	85.6	**9,033**	73.2	**16.9**	**1,149**	1,877	25	**1,174**	**17.3**
CATV	0	0.0	**3**	0.0	**0.0**	**0**	114	1	**2**	**0.0**
AT&T	0	0.0	**6**	0.1	**0.0**	**1**	228	3	**4**	**0.1**
<Undefined>	81	14.4	**3,295**	26.7	**6.2**	**419**	3,380	44	**463**	**6.8**
Totals:	561	100.0	**12,338**	100.0	**23.1**	**1,570**	5,599	73	**1,643**	**24.2**

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	-54,561	1	0	-54,560
Primary	FPL	FPL	35.03	3.02	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	54,561	1	0	54,562
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-51,348	1	0	-51,348
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	51,348	1	0	51,349
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-51,348	-1	0	-51,349
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	51,348	-1	0	51,348
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	2,465	-25	1,045	3,484
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-43,561	1	0	-43,559
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	43,561	1	0	43,562
											Totals:	**2,465**	**-21**	**1,045**	**3,488**

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	5.70	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-34,216	2	0	-34,214
CATV	CATV	CATV	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	34,216	2	0	34,217
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-32,658	2	0	-32,657
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	32,658	2	0	32,660
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-32,658	2	0	-32,657
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	32,658	2	0	32,660
											Totals:	**0**	**9**	**0**	**9**

PowerEquipment		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
Transformer	1PH-15KVA		29.00	20.30	180.0	180.0	335.00	34.00	--	22.00	--	1,075	2,369	3,444
											Totals:	**1,075**	**2,369**	**3,444**

Streetlight		Owner	Height (ft)	Horiz. Offset (in)	Offset Angle (deg)	Rotate Angle (deg)	Unit Weight (lbs)	Unit Height (in)	Unit Depth (in)	Unit Diameter (in)	Unit Length (in)	Offset Moment* (ft-lb)	Wind Moment* (ft-lb)	Moment at GL* (ft-lb)
General	Streetlight - 3 ft. Arm		25.00	3.53	90.0	90.0	45.00	24.00	20.00	3.00	36.00	13	1,114	1,127
											Totals:	**13**	**1,114**	**1,127**

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	0	180	180
Deadend	Deadend 12.75"		33.00	0.00	90.0	90.0	3.00	3.80	12.75	0	175	175
Deadend	Deadend 12.75"		33.00	0.00	270.0	270.0	3.00	3.80	12.75	0	175	174
Bolt	Deadend 12.75"		28.00	0.00	0.0	0.0	3.00	2.00	15.00	-3	92	89
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	0	92	92
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	0	72	72
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	0	69	69
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	0	69	69
									Totals:	**-2**	**922**	**920**

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		28.00	0.00	25.00	0.375	75.00	270.0	48.1	0.273	35.85	0.52

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	3,923	3,566	2,317	1,724	1,548	-87	-2,196
									Totals:	**1,724**	**1,548**	**-87**	**-2,196**

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	25.00	270.0	20,000	1.00	20,000	3,566	2,317	17.8

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	25.46	34.35	8.89	11.24	6.05	9.87	1.60e+6	60.00	57.00	34.00	87,990	**874.88**	**15.63**

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.		