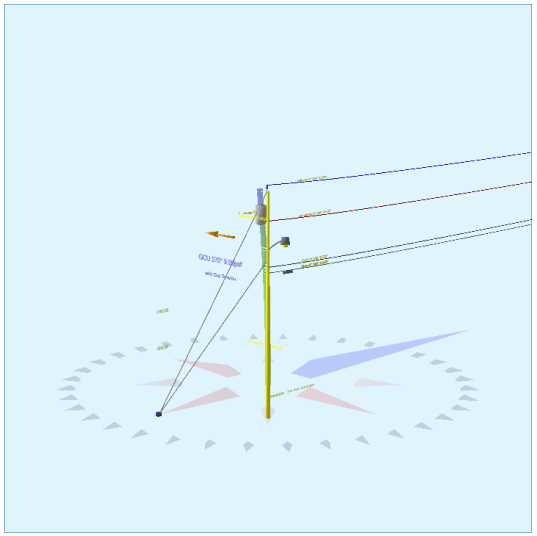
Pole Num:	**P.F1210_116854066**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Deadend**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength Factor:	**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	**40.8**	0.0	270.0
Groundline	**40.8**	0.0	270.0
Vertical	**17.8**	26.5	0.0

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**20,337**	296.0	270.0
Groundline	**20,337**	296.0	270.0
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	180.0		**51.5**	270.0	**54.7**	0.0
EHS 3/8 (Down)			34.0	**25.5**	270.0	**29.4**	0.0
EHS 3/8 (Down)			22.0	**49.2**	270.0	**57.9**	6.9
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 296.0°

	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 (%)
Powers	1,436	144.0	**45,941**	225.9	**86.0**	**5,845**	114	1	**5,846**	**86.0**
Comms	2,169	217.5	**43,950**	216.1	**82.2**	**5,591**	171	2	**5,593**	**82.3**
GuyBraces	-3,130	-313.9	**-80,620**	-396.4	**-150.8**	**-10,256**	11,105	145	**-10,111**	**-148.7**
PowerEquipments	147	14.7	**4,905**	24.1	**9.2**	**624**	1,273	17	**641**	**9.4**
Pole	319	32.0	**4,991**	24.5	**9.3**	**635**	1,364	18	**653**	**9.6**
Streetlights	40	4.0	**751**	3.7	**1.4**	**96**	86	1	**97**	**1.4**
Insulators	17	1.7	**419**	2.1	**0.8**	**53**	28	0	**54**	**0.8**
Pole Load	997	100.0	**20,337**	100.0	**38.1**	**2,587**	14,141	185	**2,772**	**40.8**
Pole Reserve Capacity			**33,115**		**62.0**	**4,213**			**4,028**	**59.2**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 296.0°

	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	1,755	176.0	**50,932**	250.4	**95.3**	**6,480**	1,478	19	**6,499**	**95.6**
CATV	718	72.0	**15,031**	73.9	**28.1**	**1,912**	57	1	**1,913**	**28.1**
AT&T	1,451	145.5	**28,919**	142.2	**54.1**	**3,679**	114	1	**3,681**	**54.1**
<Undefined>	-2,927	-293.5	**-74,545**	-366.6	**-139.5**	**-9,483**	12,492	163	**-9,320**	**-137.1**
Totals:	997	100.0	**20,337**	100.0	**38.1**	**2,587**	14,141	185	**2,772**	**40.8**

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	23,974	13	1,178	25,165
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	19,825	-23	974	20,777
											Totals:	**43,800**	**-10**	**2,151**	**45,941**

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	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	14,350	-25	705	15,031
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	13,666	-25	671	14,312

Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	13,666	-25	966	14,607
											Totals:	**41,682**	**-74**	**2,342**	**43,950**

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		30.00	20.25	180.0	180.0	335.00	34.00	--	22.00	--	-471	2,206	1,734
Transformer	1PH-15KVA		30.00	20.25	270.0	270.0	335.00	34.00	--	22.00	--	965	2,206	3,171
											Totals:	**494**	**4,411**	**4,905**

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		24.00	3.59	90.0	90.0	45.00	24.00	20.00	3.00	36.00	-212	962	751
											Totals:	**-212**	**962**	**751**

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	270.0	270.0	3.00	3.80	12.75	1	162	163
Bolt	Deadend 12.75"		29.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	86	83
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	62	59
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	59	56
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	59	56
									Totals:	**-8**	**427**	**419**

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		34.00	0.00	25.00	0.375	75.00	180.0	53.5	0.273	40.55	0.90
EHS 3/8	Down		22.00	0.00	25.00	0.375	75.00	180.0	41.2	0.273	31.57	1.36

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	4,069	3,700	3,530	2,837	2,099	-921	-30,981
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	8,028	7,299	6,826	4,499	5,133	-2,252	-49,639
									Totals:	**7,336**	**7,233**	**-3,173**	**-80,620**

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	180.0	20,000	1.00	20,000	10,935	10,296	54.7

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	26.51	34.53	8.84	18.13	6.05	9.87	1.60e+6	60.00	57.00	34.00	79,492	**794.46**	**5.62**

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.		