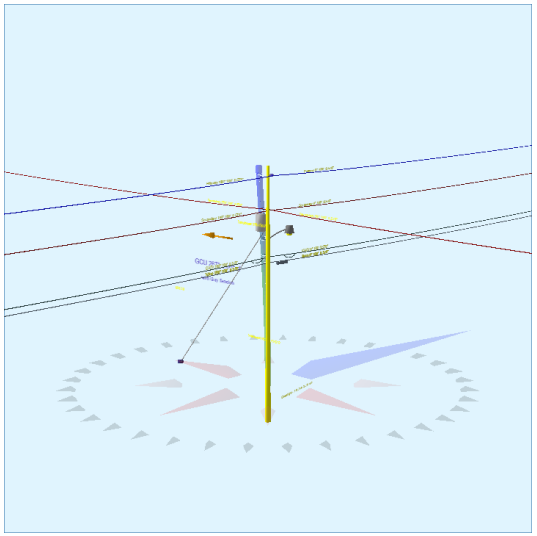
Pole Num:	**91458509_P.F2717**	Pole Length / Class:	**45 / 4**	Code:	**NESC**	Structure Type:	**Junction**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.50**	Construction Grade:	**C**	Pole Strength Factor:	**0.85**
Aux Data 3	**Unset**	G/L Circumference (in):	**34.82**	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	**29.8**	0.0	267.0
Groundline	**29.8**	0.0	267.0
Vertical	**1.7**	22.3	90.0

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**22,181**	265.5	267.0
Groundline	**22,181**	265.5	267.0
GL Allowable	**75,750**		

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		**0.0**	267.0	**5.9**	92.7
EHS 3/8 (Down)			28.0	**0.0**	267.0	**9.4**	92.7
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 265.5°

	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	149	15.1	**4,978**	22.4	**6.6**	**447**	342	4	**450**	**6.6**
Comms	246	24.8	**5,292**	23.9	**7.0**	**475**	342	4	**479**	**7.0**
GuyBraces	0	0.0	**1**	0.0	**0.0**	**0**	7	0	**0**	**0.0**
PowerEquipments	82	8.2	**2,459**	11.1	**3.3**	**221**	636	7	**227**	**3.3**
Pole	449	45.3	**7,926**	35.7	**10.5**	**712**	1,928	20	**731**	**10.8**
Streetlights	45	4.5	**926**	4.2	**1.2**	**83**	86	1	**84**	**1.2**
Insulators	22	2.2	**600**	2.7	**0.8**	**54**	34	0	**54**	**0.8**
Pole Load	992	100.0	**22,181**	100.0	**29.3**	**1,991**	3,375	35	**2,026**	**29.8**
Pole Reserve Capacity			**53,569**		**70.7**	**4,809**			**4,774**	**70.2**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 265.5°

	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	598	60.3	**12,903**	58.2	**17.0**	**1,158**	2,270	24	**1,182**	**17.4**
CATV	77	7.8	**1,708**	7.7	**2.3**	**153**	114	1	**155**	**2.3**
AT&T	169	17.0	**3,584**	16.2	**4.7**	**322**	228	2	**324**	**4.8**
<Undefined>	148	14.9	**3,986**	18.0	**5.3**	**358**	763	8	**366**	**5.4**
Totals:	992	100.0	**22,181**	100.0	**29.3**	**1,991**	3,375	35	**2,026**	**29.8**

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	36.97	16.18	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-4,543	-16	1,377	-3,182
Primary	FPL	FPL	36.97	16.18	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	4,543	-16	1,377	5,903
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-48,160	-2	5	-48,158
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	48,160	-2	5	48,163
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-3,805	-27	1,153	-2,679
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	3,805	-27	1,153	4,931
											Totals:	**0**	**-91**	**5,069**	**4,978**

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	6.23	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,822	-29	884	-1,968
CATV	CATV	CATV	22.97	6.23	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,822	-29	884	3,676
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,699	-30	1,249	-1,481
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,699	-30	818	3,488
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-2,699	-30	818	-1,911
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	2,699	-30	818	3,488
											Totals:	**0**	**-178**	**5,470**	**5,292**

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	20.89	180.0	180.0	335.00	34.00	--	22.00	--	87	2,372	2,459
											Totals:	**87**	**2,372**	**2,459**

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		26.00	4.06	75.0	75.0	45.00	24.00	20.00	3.00	36.00	-234	1,160	926
											Totals:	**-234**	**1,160**	**926**

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"		37.00	0.00	90.0	90.0	3.00	3.80	12.75	-8	196	188
Bolt	Deadend 12.75"		31.00	0.00	0.0	0.0	3.00	2.00	15.00	0	102	101
Bolt	Deadend 12.75"		31.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	102	99
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	75	72
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	72	69
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	72	69
									Totals:	**-20**	**619**	**600**

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	23.00	0.375	75.00	270.0	50.4	0.273	34.53	0.00

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	1,301	1,183	0	0	0	0	1
									Totals:	**0**	**0**	**0**	**1**

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	1,183	0	5.9

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	22.26	33.44	10.23	8.35	6.69	11.09	1.60e+6	60.00	57.00	38.50	202,520	**1985.15**	**58.82**

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.		