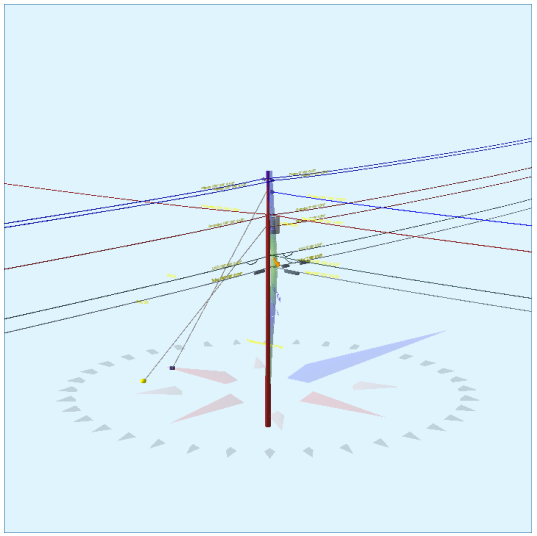
Pole Num:	**914463737_P.F129**	Pole Length / Class:	**45 / 4**	Code:	**NESC**	Structure Type:	**Junction**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.50**	Construction Grade:	**C**	Pole Strength Factor:	**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	**35.0**	22.3	130.0
Groundline	**25.3**	0.0	134.1
Vertical	**12.0**	29.2	77.5

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**11,091**	271.5	130.0
Groundline	**17,704**	99.7	134.1
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		**12.8**	130.0	**12.9**	140.0
EHS 3/8 (Down)			35.0	**18.5**	130.0	**20.4**	140.0
Single Helix Anchor	23.0	245.0		**24.0**	130.0	**34.6**	10.0
EHS 3/8 (Down)			29.0	**34.7**	130.0	**54.9**	10.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 99.7°

	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	1,473	103.2	**52,983**	299.3	**69.9**	**4,756**	570	6	**4,762**	**70.0**
Comms	3,285	230.1	**75,522**	426.6	**99.7**	**6,779**	456	5	**6,784**	**99.8**
GuyBraces	-3,803	-266.4	**-120,172**	-678.8	**-158.6**	**-10,787**	8,921	92	**-10,695**	**-157.3**
PowerEquipments	68	4.7	**1,772**	10.0	**2.3**	**159**	636	7	**166**	**2.4**
Pole	371	26.0	**6,546**	37.0	**8.6**	**588**	1,928	20	**608**	**8.9**
Insulators	35	2.4	**1,053**	6.0	**1.4**	**95**	63	1	**95**	**1.4**
Pole Load	1,428	100.0	**17,704**	100.0	**23.4**	**1,589**	12,574	130	**1,720**	**25.3**
Pole Reserve Capacity			**58,046**		**76.6**	**5,211**			**5,080**	**74.7**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 99.7°

	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	1,844	129.2	**59,529**	336.3	**78.6**	**5,344**	2,498	26	**5,370**	**79.0**
CATV	1,597	111.9	**38,329**	216.5	**50.6**	**3,441**	171	2	**3,442**	**50.6**
AT&T	1,688	118.2	**37,193**	210.1	**49.1**	**3,339**	285	3	**3,342**	**49.1**
<Undefined>	-3,701	-259.3	**-117,347**	-662.8	**-154.9**	**-10,534**	9,620	100	**-10,434**	**-153.4**
Totals:	1,428	100.0	**17,704**	100.0	**23.4**	**1,589**	12,574	130	**1,720**	**25.3**

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	-9,733	16	979	-8,738
Primary	FPL	FPL	36.97	16.18	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	9,733	16	979	10,729
Primary	FPL	FPL	36.97	16.18	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-9,733	-16	979	-8,770
Primary	FPL	FPL	36.97	16.18	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	9,733	-16	979	10,697
Primary	FPL	FPL	34.97	16.29	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	53,768	17	154	53,938
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	47,618	-5	136	47,749
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-47,618	-5	136	-47,486
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-8,153	27	820	-7,306
Secondary	FPL	FPL	30.97	5.77	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	8,153	27	820	9,001
Secondary	FPL	FPL	28.97	5.89	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-7,627	28	767	-6,832
											Totals:	**46,141**	**89**	**6,752**	**52,982**

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	23.97	6.17	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	36,854	-5	109	36,958
CATV	CATV	CATV	23.97	6.17	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-6,310	29	656	-5,626
CATV	CATV	CATV	23.97	6.17	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	6,310	29	656	6,995
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	33,779	-5	156	33,930
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-5,784	29	786	-4,968
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	5,784	29	888	6,702
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-5,784	29	888	-4,866
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	5,784	29	582	6,395
											Totals:	**70,633**	**165**	**4,721**	**75,520**

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	0.0	0.0	335.00	34.00	--	22.00	--	-187	1,959	1,772
											Totals:	**-187**	**1,959**	**1,772**

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	162	169
Deadend	Deadend 12.75"		37.00	0.00	270.0	270.0	3.00	3.80	12.75	-8	162	154
Deadend	Deadend 12.75"		35.00	0.00	90.0	90.0	3.00	3.80	12.75	8	153	161
Bolt	Deadend 12.75"		31.00	0.00	0.0	0.0	3.00	2.00	15.00	0	84	84
Bolt	Deadend 12.75"		31.00	0.00	90.0	90.0	3.00	2.00	15.00	3	84	87
Bolt	Deadend 12.75"		29.00	0.00	90.0	90.0	3.00	2.00	15.00	3	79	81
Bolt	Deadend 12.75"		24.00	0.00	0.0	0.0	3.00	2.00	15.00	0	65	65
Bolt	Deadend 12.75"		24.00	0.00	90.0	90.0	3.00	2.00	15.00	3	65	68
Bolt	Deadend 12.75"		22.00	0.00	0.0	0.0	3.00	2.00	15.00	-1	60	59
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	3	60	63
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	3	60	63
									Totals:	**20**	**1,032**	**1,053**

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		35.00	0.00	23.00	0.375	75.00	270.0	56.5	0.273	40.22	0.65
EHS 3/8	Down		29.00	0.00	23.00	0.375	75.00	245.0	51.4	0.273	35.31	1.07

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	2,829	2,572	2,563	2,137	1,415	-1,394	-48,703
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	7,612	6,920	4,808	3,758	2,999	-2,465	-71,466
									Totals:	**5,896**	**4,413**	**-3,859**	**-120,169**

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	2,572	2,563	12.9
Single Helix Anchor		18.00	23.00	245.0	20,000	1.00	20,000	6,920	4,808	34.6

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	29.20	34.51	9.93	17.98	6.69	11.09	1.60e+6	60.00	57.00	38.50	104,481	**1047.84**	**8.33**

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.		