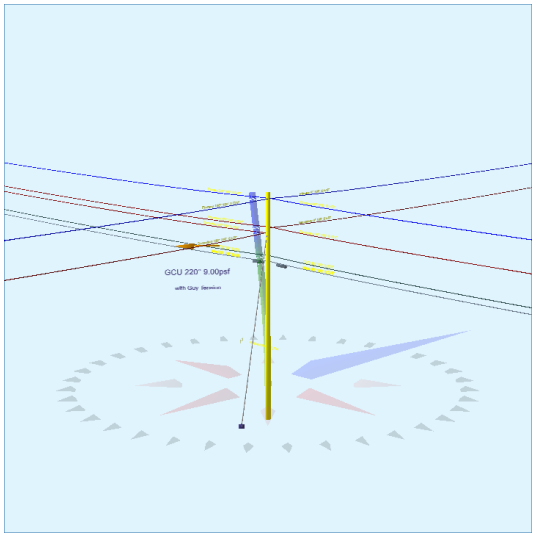
Pole Num:	**116861823_P59**	Pole Length / Class:	**40 / 2**	Code:	**NESC**	Structure Type:	**Junction**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength Factor:	**0.85**
Aux Data 3	**Unset**	G/L Circumference (in):	**38.50**	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	**48.5**	0.0	220.0
Groundline	**48.5**	0.0	220.0
Vertical	**1.4**	22.0	325.0

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**49,143**	233.0	220.0
Groundline	**49,143**	233.0	220.0
GL Allowable	**102,391**		

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	24.0	145.0		**5.2**	220.0	**10.9**	340.0
EHS 3/8 (Down)			28.0	**7.4**	220.0	**17.4**	340.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 233.0°

	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	1,409	68.5	**37,488**	76.3	**36.6**	**2,490**	513	4	**2,494**	**36.7**
Comms	155	7.5	**3,276**	6.7	**3.2**	**218**	456	4	**221**	**3.3**
GuyBraces	32	1.5	**900**	1.8	**0.9**	**60**	1,190	10	**70**	**1.0**
Pole	439	21.4	**6,941**	14.1	**6.8**	**461**	2,192	19	**480**	**7.1**
Insulators	22	1.1	**538**	1.1	**0.5**	**36**	51	0	**36**	**0.5**
Pole Load	2,057	100.0	**49,143**	100.0	**48.0**	**3,264**	4,402	37	**3,301**	**48.5**
Pole Reserve Capacity			**53,248**		**52.0**	**3,536**			**3,499**	**51.5**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 233.0°

	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	1,849	89.9	**44,429**	90.4	**43.4**	**2,951**	2,705	23	**2,974**	**43.7**
CATV	35	1.7	**754**	1.5	**0.7**	**50**	114	1	**51**	**0.8**
AT&T	120	5.8	**2,522**	5.1	**2.5**	**168**	342	3	**170**	**2.5**
<Undefined>	54	2.6	**1,438**	2.9	**1.4**	**96**	1,241	11	**106**	**1.6**
Totals:	2,057	100.0	**49,143**	100.0	**48.0**	**3,264**	4,402	37	**3,301**	**48.5**

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	32.97	4.04	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-41,081	-12	568	-40,524
Primary	FPL	FPL	32.97	4.04	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	41,081	-12	568	41,638
Primary	FPL	FPL	32.97	4.04	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-30,943	-15	633	-30,325
Primary	FPL	FPL	32.97	4.04	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	30,943	-15	633	31,561
Secondary	FPL	FPL	27.97	6.36	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-34,851	-18	482	-34,387
Secondary	FPL	FPL	27.97	6.36	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	34,851	-18	482	35,315
Secondary	FPL	FPL	27.97	6.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-26,250	-24	537	-25,737
Secondary	FPL	FPL	26.97	6.42	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	25,311	24	518	25,854
Secondary	FPL	FPL	26.97	6.42	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	33,605	24	465	34,094
											Totals:	**32,666**	**-66**	**4,887**	**37,488**

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	22.97	6.67	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-28,620	-19	396	-28,243
CATV	CATV	CATV	22.97	6.67	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	28,620	-19	396	28,997
Telco	AT&T	AT&T	21.97	6.74	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-27,374	-19	545	-26,849
Telco	AT&T	AT&T	21.97	6.74	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	27,374	-19	578	27,933
Telco	AT&T	AT&T	21.97	6.74	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-27,374	-19	379	-27,015
Telco	AT&T	AT&T	21.97	6.74	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	27,374	-19	379	27,734
Telco	AT&T	AT&T	21.97	6.74	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-27,374	-19	379	-27,015
Telco	AT&T	AT&T	21.97	6.74	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	27,374	-19	379	27,734
											Totals:	**0**	**-154**	**3,430**	**3,276**

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"		33.00	0.00	0.0	0.0	3.00	3.80	0.00	-1	0	-1
Deadend	Deadend 12.75"		33.00	0.00	90.0	90.0	3.00	3.80	0.00	-2	0	-2
Bolt	Deadend 12.75"		28.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	90	88
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	-2	90	87
Bolt	Deadend 12.75"		27.00	0.00	270.0	270.0	3.00	2.00	15.00	2	86	89
Bolt	Deadend 12.75"		23.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	74	72
Bolt	Deadend 12.75"		22.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	70	68
Bolt	Deadend 12.75"		22.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	70	68
Bolt	Deadend 12.75"		22.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	70	68
									Totals:	**-12**	**550**	**538**

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	24.00	0.375	75.00	145.0	49.2	0.273	35.14	0.23

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	2,408	2,189	1,032	782	674	23	900
									Totals:	**782**	**674**	**23**	**900**

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	24.00	145.0	20,000	1.00	20,000	2,189	1,032	10.9

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	21.99	33.40	11.33	9.39	7.96	12.26	1.60e+6	60.00	57.00	34.00	311,559	**3144.00**	**71.43**

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.		