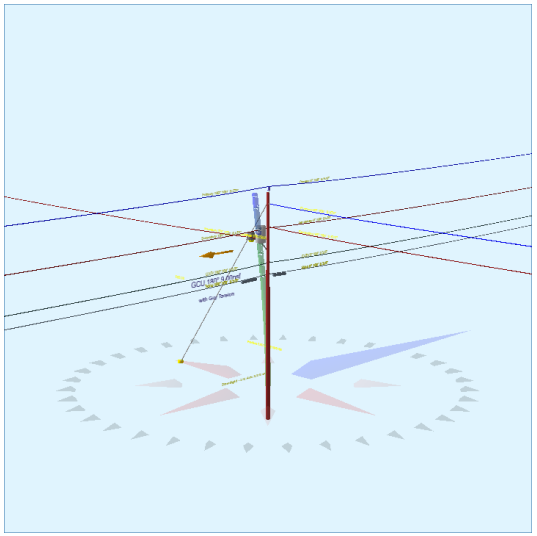
Pole Num:	**93072583_P.OPP109**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Junction**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength Factor:	**0.85**
Aux Data 3	**Unset**	G/L Circumference (in):	**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	**27.8**	0.0	180.0
Groundline	**27.8**	0.0	180.0
Vertical	**9.1**	27.8	90.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	**14,210**	184.3	180.0
Groundline	**14,210**	184.3	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	23.0	270.0		**14.4**	180.0	**18.3**	87.2
EHS 3/8 (Down)			32.0	**20.8**	180.0	**29.1**	87.2
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 184.3°

	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	-5	-0.7	**-779**	-5.5	**-1.5**	**-99**	399	5	**-94**	**-1.4**
Comms	0	0.0	**-12**	-0.1	**0.0**	**-2**	342	4	**3**	**0.0**
GuyBraces	134	21.0	**4,342**	30.6	**8.1**	**552**	3,534	46	**599**	**8.8**
PowerEquipments	82	12.8	**3,283**	23.1	**6.1**	**418**	636	8	**426**	**6.3**
Pole	354	55.5	**5,538**	39.0	**10.4**	**705**	1,364	18	**722**	**10.6**
Streetlights	45	7.0	**1,086**	7.6	**2.0**	**138**	86	1	**139**	**2.0**
Insulators	28	4.4	**752**	5.3	**1.4**	**96**	46	1	**96**	**1.4**
Pole Load	638	100.0	**14,210**	100.0	**26.6**	**1,808**	6,407	84	**1,892**	**27.8**
Pole Reserve Capacity			**39,242**		**73.4**	**4,992**			**4,908**	**72.2**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 184.3°

	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	350	54.8	**4,760**	33.5	**8.9**	**606**	1,763	23	**629**	**9.2**
CATV	0	0.0	**-4**	0.0	**0.0**	**-1**	114	1	**1**	**0.0**
AT&T	0	0.0	**-8**	-0.1	**0.0**	**-1**	228	3	**2**	**0.0**
<Undefined>	289	45.2	**9,463**	66.6	**17.7**	**1,204**	4,301	56	**1,260**	**18.5**
Totals:	638	100.0	**14,210**	100.0	**26.6**	**1,808**	6,407	84	**1,892**	**27.8**

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	-54,496	-1	0	-54,497
Primary	FPL	FPL	35.03	3.02	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	54,496	-1	0	54,495
Primary	FPL	FPL	31.97	5.14	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-3,721	-24	1,192	-2,553
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-3,255	-25	1,043	-2,237
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-43,509	-2	0	-43,511
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	43,509	-2	0	43,507
Secondary	FPL	FPL	25.97	5.47	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	3,022	26	969	4,017
											Totals:	**-3,953**	**-30**	**3,204**	**-779**

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	-34,175	-2	0	-34,177
CATV	CATV	CATV	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	34,175	-2	0	34,173
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-31,064	-2	0	-31,066
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	31,064	-2	0	31,062
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-31,064	-2	0	-31,066
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	31,064	-2	0	31,062
											Totals:	**0**	**-12**	**0**	**-12**

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		27.00	20.42	180.0	180.0	335.00	34.00	--	22.00	--	1,080	2,203	3,283
											Totals:	**1,080**	**2,203**	**3,283**

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	270.0	270.0	45.00	24.00	20.00	3.00	36.00	18	1,068	1,086
											Totals:	**18**	**1,068**	**1,086**

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
Bolt	Deadend 12.75"		32.00	0.00	0.0	0.0	3.00	2.00	15.00	-2	105	102
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	91
Bolt	Deadend 12.75"		26.00	0.00	180.0	180.0	3.00	2.00	15.00	3	85	88
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"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	0	65	65
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	0	65	65
									Totals:	**-3**	**756**	**752**

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		32.00	0.00	23.00	0.375	75.00	270.0	54.1	0.273	37.76	0.69

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	4,035	3,668	2,884	2,337	1,690	126	4,342
									Totals:	**2,337**	**1,690**	**126**	**4,342**

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	3,668	2,884	18.3

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	27.83	34.75	8.78	12.54	6.05	9.87	1.60e+6	60.00	57.00	34.00	70,272	**704.02**	**10.99**

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.		