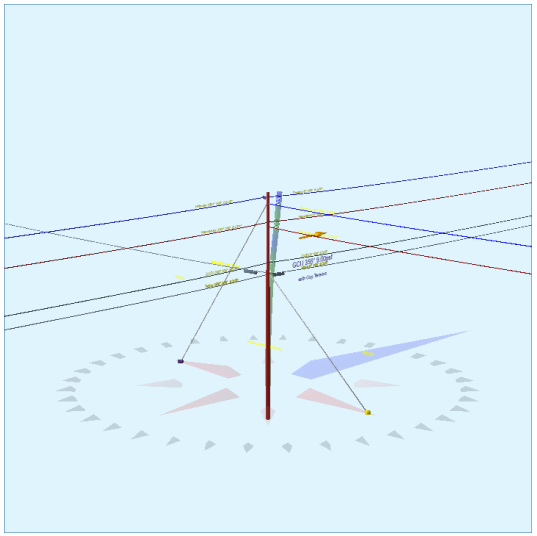
Pole Num:	**93102169_P.OPP375**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Junction**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength 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	**27.2**	20.0	356.3
Groundline	**24.5**	0.0	356.3
Vertical	**11.1**	26.6	0.0

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**6,069**	70.9	356.3
Groundline	**12,189**	335.6	356.3
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		**18.1**	356.3	**19.8**	90.0
EHS 3/8 (Down)			32.0	**26.1**	356.3	**31.5**	90.0
Single Helix Anchor	23.0	90.0		**10.7**	356.3	**13.0**	270.0
EHS 3/8 (Down)			20.0	**15.4**	356.3	**20.6**	270.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 335.6°

	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	-1,216	-162.3	**-36,412**	-298.7	**-68.1**	**-4,632**	342	4	**-4,628**	**-68.1**
Comms	1,384	184.6	**27,616**	226.6	**51.7**	**3,513**	456	6	**3,519**	**51.8**
GuyBraces	220	29.4	**15,032**	123.3	**28.1**	**1,912**	6,553	86	**1,998**	**29.4**
Pole	332	44.3	**5,195**	42.6	**9.7**	**661**	1,364	18	**679**	**10.0**
Insulators	30	3.9	**758**	6.2	**1.4**	**96**	51	1	**97**	**1.4**
Pole Load	749	100.0	**12,189**	100.0	**22.8**	**1,551**	8,767	115	**1,665**	**24.5**
Pole Reserve Capacity			**41,263**		**77.2**	**5,249**			**5,135**	**75.5**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 335.6°

	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	-884	-118.0	**-31,217**	-256.1	**-58.4**	**-3,971**	1,706	22	**-3,949**	**-58.1**
CATV	2	0.3	**21**	0.2	**0.0**	**3**	114	1	**4**	**0.1**
AT&T	1,382	184.4	**27,595**	226.4	**51.6**	**3,510**	342	4	**3,515**	**51.7**
<Undefined>	250	33.3	**15,790**	129.6	**29.5**	**2,009**	6,604	86	**2,095**	**30.8**
Totals:	749	100.0	**12,189**	100.0	**22.8**	**1,551**	8,767	115	**1,665**	**24.5**

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	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	46,841	6	33	46,880
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-46,841	6	33	-46,803
Primary	FPL	FPL	31.97	5.14	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-20,592	22	1,087	-19,483
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	41,158	-10	29	41,176
Secondary	FPL	FPL	28.97	5.30	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-41,158	-10	29	-41,140
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	-18,016	23	951	-17,042
											Totals:	**-38,608**	**37**	**2,160**	**-36,411**

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	31,213	-11	22	31,223
CATV	CATV	CATV	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-31,213	-11	22	-31,202

Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	12,863	25	1,096	13,983
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	12,863	25	679	13,567
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	28,371	-11	20	28,379
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-28,371	-11	20	-28,363
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	28,371	-11	30	28,390
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-28,371	-11	20	-28,363
											Totals:	**25,725**	**-18**	**1,908**	**27,615**

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	270.0	270.0	3.00	3.80	12.75	3	164	167
Bolt	Deadend 12.75"		32.00	0.00	0.0	0.0	3.00	2.00	15.00	2	98	100
Bolt	Deadend 12.75"		29.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	89	88
Bolt	Deadend 12.75"		28.00	0.00	0.0	0.0	3.00	2.00	15.00	2	86	88
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	68	66
Bolt	Deadend 12.75"		20.00	0.00	0.0	0.0	3.00	2.00	15.00	3	61	64
Bolt	Deadend 12.75"		20.00	0.00	0.0	0.0	3.00	2.00	15.00	3	61	64
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	61	60
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	-1	61	60
									Totals:	**8**	**750**	**758**

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	0.86
EHS 3/8	Down		20.00	0.00	23.00	0.375	75.00	90.0	40.9	0.273	28.74	0.39

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	4,364	3,967	3,619	2,932	2,121	876	28,294
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	2,851	2,592	2,133	1,396	1,612	-666	-13,262
									Totals:	**4,328**	**3,733**	**210**	**15,032**

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	3,967	3,618	19.8
Single Helix Anchor		18.00	23.00	90.0	20,000	1.00	20,000	2,592	2,133	13.0

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	26.62	34.55	8.83	14.33	6.05	9.87	1.60e+6	60.00	57.00	34.00	78,643	**789.81**	**9.01**

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.		