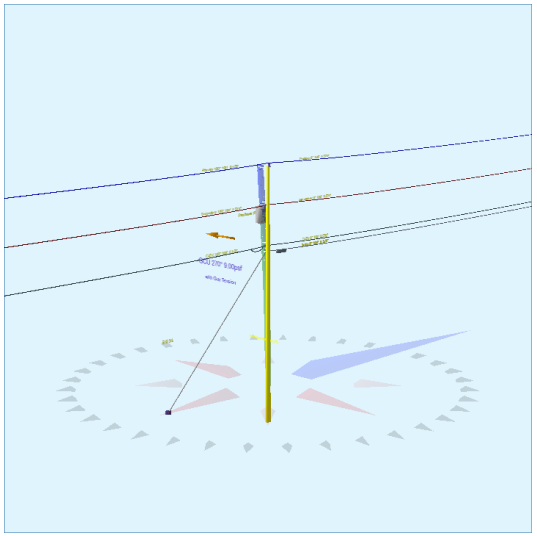
Pole Num:	**116877200_P75**	Pole Length / Class:	**45 / 4**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.50**	Construction Grade:	**C**	Pole Strength 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	270.0
Groundline	**29.8**	0.0	270.0
Vertical	**4.3**	23.4	0.0

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**21,704**	279.4	270.0
Groundline	**21,704**	279.4	270.0
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	180.0		**21.3**	270.0	**24.3**	357.2
EHS 3/8 (Down)			24.0	**30.7**	270.0	**38.5**	357.2
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 279.4°

	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	148	16.5	**5,155**	23.8	**6.8**	**463**	228	2	**465**	**6.8**
Comms	677	75.7	**16,184**	74.6	**21.4**	**1,453**	228	2	**1,455**	**21.4**
GuyBraces	-472	-52.7	**-11,492**	-53.0	**-15.2**	**-1,032**	4,651	48	**-983**	**-14.5**
PowerEquipments	81	9.0	**3,511**	16.2	**4.6**	**315**	636	7	**322**	**4.7**
Pole	443	49.5	**7,821**	36.0	**10.3**	**702**	1,928	20	**722**	**10.6**
Insulators	18	2.0	**526**	2.4	**0.7**	**47**	28	0	**47**	**0.7**
Pole Load	895	100.0	**21,704**	100.0	**28.7**	**1,948**	7,700	80	**2,028**	**29.8**
Pole Reserve Capacity			**54,046**		**71.3**	**4,852**			**4,772**	**70.2**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 279.4°

	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	590	66.0	**12,976**	59.8	**17.1**	**1,165**	2,156	22	**1,187**	**17.5**
CATV	75	8.4	**1,816**	8.4	**2.4**	**163**	114	1	**164**	**2.4**
AT&T	602	67.3	**14,368**	66.2	**19.0**	**1,290**	114	1	**1,291**	**19.0**
<Undefined>	-373	-41.6	**-7,456**	-34.4	**-9.8**	**-669**	5,316	55	**-614**	**-9.0**
Totals:	895	100.0	**21,704**	100.0	**28.7**	**1,948**	7,700	80	**2,028**	**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	39.03	3.37	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	9,990	-16	1,440	11,414
Primary	FPL	FPL	39.03	3.37	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-9,990	-16	1,440	-8,565
Secondary	FPL	FPL	31.97	5.71	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	8,182	-27	1,180	9,335
Secondary	FPL	FPL	31.97	5.71	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-8,182	-27	1,180	-7,029
											Totals:	**0**	**-85**	**5,240**	**5,155**

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	24.97	6.11	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	6,390	-29	921	7,283
CATV	CATV	CATV	24.97	6.11	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-6,390	-29	952	-5,467

Telco	AT&T	AT&T	23.97	6.17	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	6,134	-29	1,272	7,378
Telco	AT&T	AT&T	23.97	6.17	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	6,134	-29	884	6,990
											Totals:	**12,269**	**-115**	**4,030**	**16,184**

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		30.00	20.83	270.0	270.0	335.00	34.00	--	22.00	--	1,090	2,421	3,511
											Totals:	**1,090**	**2,421**	**3,511**

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"		38.00	0.00	90.0	90.0	3.00	3.80	12.75	-2	199	197
Bolt	Deadend 12.75"		32.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	104	101
Bolt	Deadend 12.75"		25.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	81	78
Bolt	Deadend 12.75"		24.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	78	75
Bolt	Deadend 12.75"		24.00	0.00	90.0	90.0	3.00	2.00	15.00	-3	78	75
									Totals:	**-13**	**539**	**526**

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		24.00	0.00	23.00	0.375	75.00	180.0	46.1	0.273	31.50	0.85

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	5,343	4,857	4,258	3,067	2,954	-485	-11,492
									Totals:	**3,067**	**2,954**	**-485**	**-11,492**

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	180.0	20,000	1.00	20,000	4,857	4,258	24.3

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	23.37	33.61	10.19	12.68	6.69	11.09	1.60e+6	60.00	57.00	38.50	180,414	**1790.65**	**23.26**

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.		