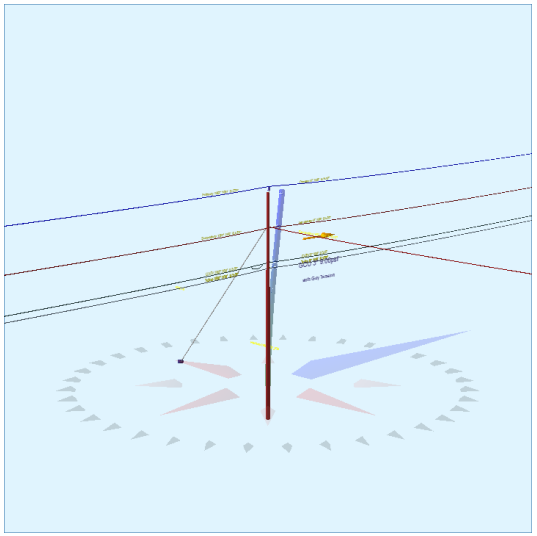
Pole Num:	**116859932_P30**	Pole Length / Class:	**40 / 5**	Code:	**NESC**	Structure Type:	**Guyed Tangent**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**6.00**	Construction Grade:	**C**	Pole Strength 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	**15.0**	0.0	3.4
Groundline	**15.0**	0.0	3.4
Vertical	**5.1**	24.7	90.0

Pole Moments (ft-lb)		**Load Angle (deg)**	**Wind Angle (deg)**
Max Cap Util	**7,535**	9.2	3.4
Groundline	**7,535**	9.2	3.4
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		**12.2**	3.4	**15.7**	87.2
EHS 3/8 (Down)			28.0	**17.6**	3.4	**24.9**	87.2
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 9.2°

	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	288	67.4	**8,097**	107.5	**15.2**	**1,030**	285	4	**1,034**	**15.2**
Comms	2	0.5	**71**	1.0	**0.1**	**9**	342	4	**14**	**0.2**
GuyBraces	-237	-55.5	**-6,733**	-89.4	**-12.6**	**-857**	2,850	37	**-819**	**-12.0**
Pole	353	82.6	**5,525**	73.3	**10.3**	**703**	1,364	18	**721**	**10.6**
Insulators	22	5.1	**575**	7.6	**1.1**	**73**	34	0	**74**	**1.1**
Pole Load	428	100.0	**7,535**	100.0	**14.1**	**959**	4,875	64	**1,022**	**15.0**
Pole Reserve Capacity			**45,917**		**85.9**	**5,841**			**5,778**	**85.0**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 9.2°

	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	641	150.0	**13,622**	180.8	**25.5**	**1,733**	1,649	22	**1,754**	**25.8**
CATV	1	0.2	**24**	0.3	**0.1**	**3**	114	1	**5**	**0.1**
AT&T	1	0.3	**47**	0.6	**0.1**	**6**	228	3	**9**	**0.1**
<Undefined>	-216	-50.5	**-6,158**	-81.7	**-11.5**	**-783**	2,884	38	**-746**	**-11.0**
Totals:	428	100.0	**7,535**	100.0	**14.1**	**959**	4,875	64	**1,022**	**15.0**

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	53,944	2	12	53,958
Primary	FPL	FPL	35.03	3.02	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-53,944	2	12	-53,929
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	6,984	25	1,031	8,040
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	43,068	4	10	43,082
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-43,068	4	10	-43,054
											Totals:	**6,984**	**38**	**1,075**	**8,096**

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	33,829	4	8	33,841
CATV	CATV	CATV	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-33,829	4	8	-33,816
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	32,289	4	7	32,301

Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-32,289	4	7	-32,277
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	32,289	4	7	32,301
Telco	AT&T	AT&T	20.97	5.75	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-32,289	4	7	-32,277
											Totals:	**0**	**26**	**45**	**71**

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	179	179
Bolt	Deadend 12.75"		28.00	0.00	0.0	0.0	3.00	2.00	15.00	3	91	94
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	0	91	92
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"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	0	69	69
Bolt	Deadend 12.75"		21.00	0.00	90.0	90.0	3.00	2.00	15.00	0	69	69
									Totals:	**4**	**571**	**575**

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	23.00	0.375	75.00	270.0	50.4	0.273	34.56	0.53

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	3,452	3,138	2,441	1,882	1,555	-249	-6,733
									Totals:	**1,882**	**1,555**	**-249**	**-6,733**

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	3,138	2,441	15.7

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	24.67	34.21	8.92	10.34	6.05	9.87	1.60e+6	60.00	57.00	34.00	95,185	**955.97**	**19.61**

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.		