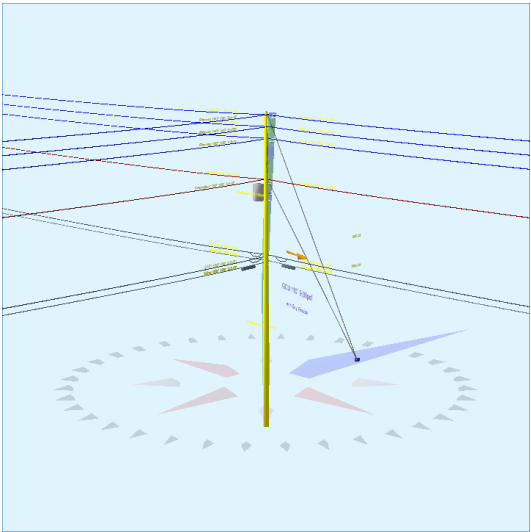


Pole Num:	116877076_P48	Pole Length / Class:	55 / 3	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	7.50	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (in):	39.96	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	45.8	0.0	110.0
Groundline	45.8	0.0	110.0
Vertical	27.6	38.6	180.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	48,979	148.1	110.0
Groundline	48,979	148.1	110.0
GL Allowable	114,523		

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	0.0		82.9	110.0	87.6	185.6
EHS 3/8 (Down)			47.0	47.7	110.0	54.1	185.6
EHS 3/8 (Down)			36.0	72.1	110.0	85.2	181.4
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 148.1°

	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	5,460	183.4	233,109	475.9	203.6	13,841	684	5	13,847	203.6
Comms	4,114	138.2	91,634	187.1	80.0	5,441	513	4	5,445	80.1
GuyBraces	-7,174	-241.0	-290,065	-592.2	-253.3	-17,223	21,403	168	-17,055	-250.8
PowerEquipments	64	2.2	3,153	6.4	2.8	187	636	5	192	2.8
Pole	492	16.5	10,625	21.7	9.3	631	3,038	24	655	9.6
Insulators	21	0.7	523	1.1	0.5	31	80	1	32	0.5
Pole Load	2,977	100.0	48,979	100.0	42.8	2,908	26,354	207	3,116	45.8
Pole Reserve Capacity			65,544		57.2	3,892			3,684	54.2

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 148.1°

	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	5,952	199.9	243,734	497.6	212.8	14,472	3,722	29	14,501	213.3
CATV	1,366	45.9	31,343	64.0	27.4	1,861	171	1	1,862	27.4
AT&T	2,748	92.3	60,291	123.1	52.7	3,580	342	3	3,583	52.7
<Undefined>	-7,089	-238.1	-286,389	-584.7	-250.1	-17,005	22,119	174	-16,831	-247.5
Totals:	2,977	100.0	48,979	100.0	42.8	2,908	26,354	207	3,116	45.8

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	46.97	3.69	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	38,696	-15	510	39,191
Primary	FPL	FPL	46.97	3.69	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-38,696	-15	510	-38,201
Primary	FPL	FPL	46.97	3.69	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	62,219	9	872	63,100
Primary	FPL	FPL	44.97	3.80	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	37,048	-15	489	37,521
Primary	FPL	FPL	44.97	3.80	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-37,048	-15	489	-36,575
Primary	FPL	FPL	44.97	3.80	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	59,570	10	835	60,414
Primary	FPL	FPL	42.97	3.92	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	35,400	-16	467	35,851
Primary	FPL	FPL	42.97	3.92	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-35,400	-16	467	-34,949
Primary	FPL	FPL	42.97	3.92	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	56,920	10	798	57,728
Secondary	FPL	FPL	35.97	6.31	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	29,633	-25	391	29,999
Secondary	FPL	FPL	35.97	6.31	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-29,633	-25	391	-29,268

Secondary	FPL	FPL	35.97	6.31	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	47,647	-16	668	48,299
											Totals:	226,356	-130	6,885	233,111

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	7.05	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	18,923	-28	258	19,152
CATV	CATV	CATV	22.97	7.05	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-18,923	-28	258	-18,694
CATV	CATV	CATV	22.97	7.05	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	30,426	18	440	30,884
Telco	AT&T	AT&T	21.97	7.11	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	18,099	-29	385	18,456
Telco	AT&T	AT&T	21.97	7.11	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-18,099	-29	239	-17,889
Telco	AT&T	AT&T	21.97	7.11	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	18,099	-29	239	18,309
Telco	AT&T	AT&T	21.97	7.11	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-18,099	-29	239	-17,889
Telco	AT&T	AT&T	21.97	7.11	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	29,101	18	658	29,778
Telco	AT&T	AT&T	21.97	7.11	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	29,101	18	408	29,527
											Totals:	88,629	-118	3,123	91,634

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		34.00	21.43	180.0	180.0	335.00	34.00	--	22.00	--	965	2,188	3,153
											Totals:	965	2,188	3,153

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"		47.00	0.00	0.0	0.0	3.00	3.80	0.00	-1	0	-1
Deadend	Deadend 12.75"		47.00	0.00	90.0	90.0	3.00	3.80	0.00	1	0	1
Deadend	Deadend 12.75"		45.00	0.00	0.0	0.0	3.00	3.80	0.00	-2	0	-2
Deadend	Deadend 12.75"		45.00	0.00	90.0	90.0	3.00	3.80	0.00	1	0	1
Deadend	Deadend 12.75"		43.00	0.00	0.0	0.0	3.00	3.80	0.00	-2	0	-2
Deadend	Deadend 12.75"		43.00	0.00	90.0	90.0	3.00	3.80	0.00	1	0	1
Bolt	Deadend 12.75"		36.00	0.00	0.0	0.0	3.00	2.00	15.00	-3	93	90
Bolt	Deadend 12.75"		36.00	0.00	270.0	270.0	3.00	2.00	15.00	-2	93	91
Bolt	Deadend 12.75"		23.00	0.00	0.0	0.0	3.00	2.00	15.00	-3	59	57
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	2	59	61
Bolt	Deadend 12.75"		22.00	0.00	0.0	0.0	3.00	2.00	15.00	-3	57	54
Bolt	Deadend 12.75"		22.00	0.00	0.0	0.0	3.00	2.00	15.00	-3	57	54
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	2	57	59
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	2	57	59
									Totals:	-9	532	523

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		47.00	0.00	24.00	0.375	75.00	0.0	62.7	0.273	51.13	2.13
EHS 3/8	Down		36.00	0.00	24.00	0.375	75.00	0.0	56.1	0.273	41.57	2.62

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	7,496	6,815	6,608	5,874	3,027	-2,571	-119,954
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	11,813	10,739	9,997	8,300	5,573	-4,732	-170,113
Totals:										14,174	8,600	-7,303	-290,066

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	0.0	20,000	1.00	20,000	17,524	16,577	87.6

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	38.64	35.18	11.18	29.88	7.32	12.73	1.60e+6	60.00	57.00	47.50	95,617	954.85	3.62

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.		