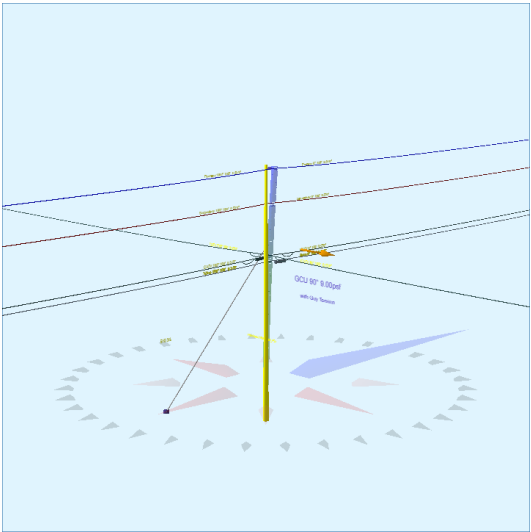


Pole Num:	116861796_P55	Pole Length / Class:	45 / 4	Code:	NESC	Structure Type:	Junction
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.50	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	29.2	0.0
Groundline	29.2	0.0
Vertical	1.1	20.0

Pole Moments (ft-lb)	Load Angle (deg)	Wind Angle (deg)
Max Cap Util	21,831	90.9
Groundline	21,831	90.9
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		0.1	90.0	2.9	0.0
EHS 3/8 (Down)			24.0	0.2	90.0	4.5	0.0
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 90.9°										
	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	150	15.5	5,318	24.4	7.0	477	228	2	480	7.1
Comms	335	34.7	7,688	35.2	10.2	690	570	6	696	10.2
GuyBraces	8	0.9	201	0.9	0.3	18	32	0	18	0.3
Pole	449	46.4	7,928	36.3	10.5	712	1,928	20	732	10.8
Insulators	25	2.6	696	3.2	0.9	63	40	0	63	0.9
Pole Load	967	100.0	21,831	100.0	28.8	1,960	2,798	29	1,989	29.2
Pole Reserve Capacity			53,919		71.2	4,840			4,811	70.8

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 90.9°										
	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	599	61.9	13,245	60.7	17.5	1,189	2,156	22	1,211	17.8
CATV	91	9.4	2,147	9.8	2.8	193	228	2	195	2.9
AT&T	244	25.2	5,541	25.4	7.3	498	342	4	501	7.4
<Undefined>	33	3.5	897	4.1	1.2	81	72	1	81	1.2
Totals:	967	100.0	21,831	100.0	28.8	1,960	2,798	29	1,989	29.2

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	37.97	16.12	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-921	16	1,420	516
Primary	FPL	FPL	37.97	16.12	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	921	16	1,420	2,357
Secondary	FPL	FPL	31.97	5.71	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-775	27	1,196	448
Secondary	FPL	FPL	31.97	5.71	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	775	27	1,196	1,998
Totals:											0	86	5,232	5,318	

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	6.23	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	35,826	0	0	35,826
CATV	CATV	CATV	22.97	6.23	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-35,826	0	0	-35,827
CATV	CATV	CATV	22.97	6.23	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-557	30	887	360
CATV	CATV	CATV	22.97	6.23	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	557	30	1,201	1,788

Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-533	30	1,254	751
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	533	30	822	1,384
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-533	30	822	319
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	533	30	822	1,384
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-533	30	822	319
Telco	AT&T	AT&T	21.97	6.28	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	533	30	822	1,384
Totals:												0	237	7,451	7,689

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	8	201	209
Bolt	Deadend 12.75"		32.00	0.00	90.0	90.0	3.00	2.00	15.00	3	105	108
Bolt	Deadend 12.75"		23.00	0.00	0.0	0.0	3.00	2.00	15.00	0	75	75
Bolt	Deadend 12.75"		23.00	0.00	90.0	90.0	3.00	2.00	15.00	3	75	78
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	3	72	75
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	3	72	75
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	3	72	75
									Totals:	22	674	696

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	0.01

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 Tension² (lbs)	Applied Tension³ (lbs)	Vertical Load (lbs)	Shear Load In Guy Dir (lbs)	Shear Load At Report Angle (lbs)	Moment at GL³ (ft-lb)
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	628	571	24	17	17	0	201
									Totals:	17	17	0	201

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	571	24	2.9

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	19.96	33.09	10.33	7.30	6.69	11.09	1.60e+6	60.00	57.00	38.50	261,367	2543.71	90.91

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.		