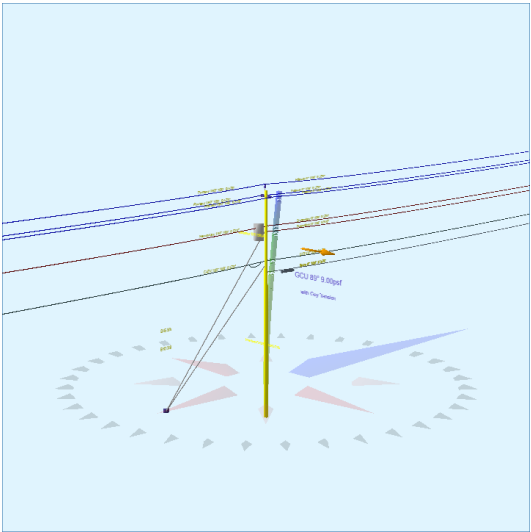


Pole Num:	P.F826 _116857736	Pole Length / Class:	40 / 5	Code:	NESC	Structure Type:	Guyed Tangent
Aux Data 1	Unset	Species:	SOUTHERN PINE	NESC Rule:	Rule 250B	Status	Guy Wires Adequate
Aux Data 2	Unset	Setting Depth (ft):	6.00	Construction Grade:	C	Pole Strength Factor:	0.85
Aux Data 3	Unset	G/L Circumference (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	46.6	0.0	89.3
Groundline	46.6	0.0	89.3
Vertical	8.4	23.3	0.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	23,984	78.7	89.3
Groundline	23,984	78.7	89.3
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	180.0		30.1	89.3	32.5	10.0
EHS 3/8 (Down)			27.0	16.4	89.3	19.2	10.0
EHS 3/8 (Down)			21.0	27.0	89.3	32.4	0.0
System Capacity Summary:				Adequate		Adequate	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 78.7°

	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	637	59.6	18,757	78.2	35.1	2,386	513	7	2,393	35.2
Comms	783	73.3	15,896	66.3	29.7	2,022	228	3	2,025	29.8
GuyBraces	-813	-76.1	-18,996	-79.2	-35.5	-2,417	6,448	84	-2,332	-34.3
PowerEquipments	80	7.5	1,958	8.2	3.7	249	636	8	257	3.8
Pole	349	32.7	5,459	22.8	10.2	695	1,364	18	712	10.5
Insulators	32	3.0	910	3.8	1.7	116	46	1	116	1.7
Pole Load	1,068	100.0	23,984	100.0	44.9	3,051	9,236	121	3,172	46.6
Pole Reserve Capacity			29,468		55.1	3,749			3,628	53.4

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 78.7°

	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	986	92.2	24,216	101.0	45.3	3,081	1,877	25	3,105	45.7
CATV	75	7.0	1,691	7.1	3.2	215	114	1	217	3.2
AT&T	709	66.3	14,205	59.2	26.6	1,807	114	1	1,809	26.6
<Undefined>	-700	-65.6	-16,128	-67.3	-30.2	-2,052	7,130	93	-1,959	-28.8
Totals:	1,068	100.0	23,984	100.0	44.9	3,051	9,236	121	3,172	46.6

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	10,734	-14	1,285	12,005
Primary	FPL	FPL	35.03	3.02	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-10,734	-14	1,285	-9,463
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	10,102	14	1,209	11,325
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-10,102	14	1,209	-8,878
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	10,102	-14	1,209	11,296
Primary	FPL	FPL	32.97	15.83	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-10,102	-14	1,209	-8,907
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	8,570	25	1,026	9,620
Secondary	FPL	FPL	27.97	5.36	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-8,570	25	1,026	-7,519
Secondary	FPL	FPL	26.97	5.42	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	8,263	25	989	9,278
Totals:											8,263	48	10,446	18,757	

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	6,731	27	806	7,563
CATV	CATV	CATV	21.97	5.70	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	-6,731	27	832	-5,872
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	6,118	27	1,182	7,327
Telco	AT&T	AT&T	19.97	5.81	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	6,118	27	732	6,878
Totals:												12,237	107	3,552	15,896

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		27.00	20.42	180.0	180.0	335.00	34.00	--	22.00	--	-213	2,171	1,958
Totals:												-213	2,171	1,958

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	270.0	270.0	3.00	3.80	12.75	-1	177	176
Deadend	Deadend 12.75"		33.00	0.00	90.0	90.0	3.00	3.80	12.75	7	172	179
Deadend	Deadend 12.75"		33.00	0.00	270.0	270.0	3.00	3.80	12.75	-7	172	165
Bolt	Deadend 12.75"		28.00	0.00	90.0	90.0	3.00	2.00	15.00	2	90	93
Bolt	Deadend 12.75"		27.00	0.00	90.0	90.0	3.00	2.00	15.00	3	87	90
Bolt	Deadend 12.75"		22.00	0.00	90.0	90.0	3.00	2.00	15.00	3	71	74
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	3	65	67
Bolt	Deadend 12.75"		20.00	0.00	90.0	90.0	3.00	2.00	15.00	3	65	67
									Totals:	12	898	910

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		27.00	0.00	23.00	0.375	75.00	180.0	49.4	0.273	33.78	0.49
EHS 3/8	Down		21.00	0.00	23.00	0.375	75.00	180.0	42.3	0.273	29.42	0.69

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	2,658	2,416	2,280	1,731	1,483	-291	-7,650
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	4,497	4,089	3,749	2,522	2,774	-545	-11,346
									Totals:	4,253	4,256	-836	-18,996

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 Load² (lbs)	Load at Pole MCU³ (lbs)	Max Required Capacity² (%)
Single Helix Anchor		18.00	23.00	180.0	20,000	1.00	20,000	6,492	6,016	32.5

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	23.26	33.97	8.98	13.76	6.05	9.87	1.60e+6	60.00	57.00	34.00	109,978	1099.47	11.90

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.		