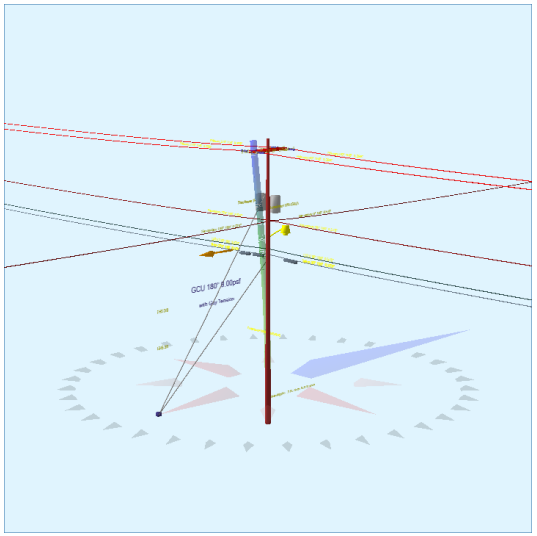
Pole Num:	**P.R809_116859845**	Pole Length / Class:	**50 / 4**	Code:	**NESC**	Structure Type:	**Junction**
Aux Data 1	**Unset**	Species:	**SOUTHERN PINE**	NESC Rule:	**Rule 250B**	Status	**Guy Wires Adequate**
Aux Data 2	**Unset**	Setting Depth (ft):	**7.00**	Construction Grade:	**C**	Pole Strength Factor:	**0.85**
Aux Data 3	**Unset**	G/L Circumference (in):	**36.15**	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	**40.4**	0.0	180.0
Groundline	**40.4**	0.0	180.0
Vertical	**2.7**	25.9	0.0

Pole Moments (ft-lb)		Load Angle (deg)	Wind Angle (deg)
Max Cap Util	**33,719**	179.5	180.0
Groundline	**33,719**	179.5	180.0
GL Allowable	**84,746**		

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	25.0	180.0		**0.0**	180.0	**8.7**	0.0
EHS 3/8 (Down)			34.0	**0.0**	180.0	**8.8**	0.0
EHS 3/8 (Down)			22.0	**0.0**	180.0	**5.1**	0.0
			System Capacity Summary:	**Adequate**		**Adequate**	

Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 179.5°

	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	232	17.8	**8,534**	25.3	**10.1**	**685**	311	3	**688**	**10.1**
Comms	287	22.0	**6,478**	19.2	**7.6**	**520**	342	3	**523**	**7.7**
GuyBraces	0	0.0	**0**	0.0	**0.0**	**0**	14	0	**0**	**0.0**
PowerEquipments	164	12.6	**5,236**	15.5	**6.2**	**420**	1,273	12	**432**	**6.4**
Pole	513	39.5	**10,061**	29.8	**11.9**	**807**	2,264	22	**829**	**12.2**
Crossarms	6	0.4	**226**	0.7	**0.3**	**18**	190	2	**20**	**0.3**
Streetlights	45	3.4	**1,162**	3.5	**1.4**	**93**	86	1	**94**	**1.4**
Insulators	56	4.3	**2,022**	6.0	**2.4**	**162**	97	1	**163**	**2.4**
Pole Load	1,301	100.0	**33,719**	100.0	**39.8**	**2,706**	4,575	44	**2,750**	**40.4**
Pole Reserve Capacity			**51,027**		**60.2**	**4,094**			**4,050**	**59.6**

Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 179.5°

	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 (%)
<Undefined>	426	32.8	**15,071**	44.7	**17.8**	**1,209**	1,742	17	**1,226**	**18.0**
FPL	588	45.2	**12,170**	36.1	**14.4**	**977**	2,492	24	**1,000**	**14.7**
CATV	75	5.7	**1,732**	5.1	**2.0**	**139**	114	1	**140**	**2.1**
AT&T	212	16.3	**4,746**	14.1	**5.6**	**381**	228	2	**383**	**5.6**
Totals:	1,301	100.0	**33,719**	100.0	**39.8**	**2,706**	4,575	44	**2,750**	**40.4**

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	ACSR 1/0 AWG 6/1 RAVEN		41.00	56.35	0.3980	0.23	0.145	150.0	90.0	150.0	2,628	1,246	5	1,606	2,857
Primary	ACSR 1/0 AWG 6/1 RAVEN		41.00	56.35	0.3980	0.23	0.145	150.0	90.0	150.0	2,628	1,246	-5	1,606	2,848
Primary	ACSR 1/0 AWG 6/1 RAVEN		41.00	56.35	0.3980	0.23	0.145	150.0	270.0	150.0	2,628	-1,246	-5	1,606	355
Primary	ACSR 1/0 AWG 6/1 RAVEN		41.00	56.35	0.3980	0.23	0.145	150.0	270.0	150.0	2,628	-1,246	5	1,606	365
Secondary	FPL	FPL	28.97	6.13	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	402	-29	1,084	1,457
Secondary	FPL	FPL	28.97	6.13	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-402	-29	1,084	652

Secondary	FPL	FPL	28.97	6.13	0.5700	1.19	0.600	100.0	0.0	100.0	1,200	-45,189	0	0	-45,189
Secondary	FPL	FPL	28.97	6.13	0.5700	1.19	0.600	100.0	180.0	100.0	1,200	45,189	0	0	45,189
											Totals:	**0**	**-58**	**8,592**	**8,534**

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	23.97	6.41	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	333	-30	897	1,199
CATV	CATV	CATV	23.97	6.41	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-333	-30	897	533
Telco	AT&T	AT&T	22.97	6.46	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	319	-31	859	1,147
Telco	AT&T	AT&T	22.97	6.46	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-319	-31	1,311	962
Telco	AT&T	AT&T	22.97	6.46	0.5700	1.19	0.600	100.0	90.0	100.0	1,200	319	-31	1,387	1,675
Telco	AT&T	AT&T	22.97	6.46	0.5700	1.19	0.600	100.0	270.0	100.0	1,200	-319	-31	1,311	962
											Totals:	**0**	**-184**	**6,661**	**6,478**

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		32.00	20.96	90.0	90.0	335.00	34.00	--	22.00	--	10	2,618	2,628
Transformer	1PH-15KVA		32.00	20.96	270.0	270.0	335.00	34.00	--	22.00	--	-10	2,618	2,608
											Totals:	**0**	**5,236**	**5,236**

Crossarm		**Owner**	**Height (ft)**	**Horiz. Offset (in)**	**Offset Angle (deg)**	**Rotate Angle (deg)**	**Unit Weight (lbs)**	**Unit Height (in)**	**Unit Depth (in)**	**Unit Length (in)**	**Offset Moment* (ft-lb)**	**Wind Moment* (ft-lb)**	**Moment at GL* (ft-lb)**
Normal	8' x 3.5" x 4.5" SP - 3 Deadend		41.00	5.20	90.0	90.0	50.00	4.50	3.50	96.00	0	113	113
Normal	8' x 3.5" x 4.5" SP - 3 Deadend		41.00	5.20	270.0	270.0	50.00	4.50	3.50	96.00	0	113	113
										Totals:	**0**	**226**	**226**

Streetlight		**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)**
General	Streetlight - 3 ft. Arm		26.00	4.30	90.0	90.0	45.00	24.00	20.00	3.00	36.00	2	1,160	1,162
											Totals:	**2**	**1,160**	**1,162**

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 Insulator		41.00	44.00	173.3	0.0	8.99	3.00	30.00	63	404	467
Deadend	Deadend Insulator		41.00	-44.00	6.7	0.0	8.99	3.00	30.00	-62	404	341
Deadend	Deadend Insulator		41.00	44.00	353.3	0.0	8.99	3.00	30.00	-63	404	341
Deadend	Deadend Insulator		41.00	-44.00	186.7	0.0	8.99	3.00	30.00	62	404	466
Bolt	Deadend 12.75"		29.00	0.00	0.0	0.0	3.00	2.00	15.00	-3	95	92
Bolt	Deadend 12.75"		29.00	0.00	90.0	90.0	3.00	2.00	15.00	0	95	95

Bolt	Deadend 12.75"	24.00	0.00	0.0	0.0	3.00	2.00	15.00	-3	79	76
Bolt	Deadend 12.75"	23.00	0.00	0.0	0.0	3.00	2.00	15.00	-3	75	72
Bolt	Deadend 12.75"	23.00	0.00	0.0	0.0	3.00	2.00	15.00	-3	75	72
								Totals:	**-12**	**2,034**	**2,022**

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		34.00	0.00	25.00	0.375	75.00	180.0	53.5	0.273	40.51	0.00
EHS 3/8	Down		22.00	0.00	25.00	0.375	75.00	180.0	41.2	0.273	31.52	0.00

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	1,222	1,111	0	0	0	0	0
EHS 3/8	Down	2.30e+7	15,400	0.90	13,860	700	705	641	0	0	0	0	0
									Totals:	**0**	**0**	**0**	**0**

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	25.00	180.0	20,000	1.00	20,000	1,742	0	8.7

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	25.86	33.78	10.53	10.41	6.69	11.51	1.60e+6	60.00	57.00	43.00	168,099	**1694.54**	**37.04**

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.		