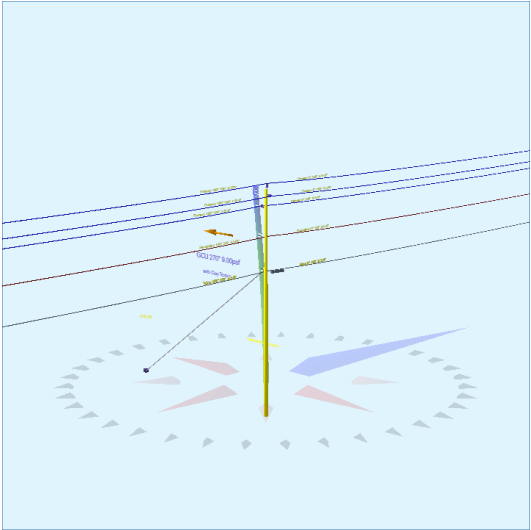


| | | | | | | | |
|------------|-----------------|-------------------------|---------------|----------------------|-----------|-----------------------|--------------------|
| Pole Num: | 93101044_P.F614 | Pole Length / Class: | 40 / 5 | Code: | NESC | Structure Type: | Guyed Tangent |
| Aux Data 1 | 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 | 35.8 | 0.0 | 270.0 |
| Groundline | 35.8 | 0.0 | 270.0 |
| Vertical | 1.3 | 20.2 | 65.0 |

| Pole Moments (ft-lb) | | Load Angle (deg) | Wind Angle (deg) |
|----------------------|--------|------------------|------------------|
| Max Cap Util | 18,911 | 270.2 | 270.0 |
| Groundline | 18,911 | 270.2 | 270.0 |
| 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 | 245.0 | | 0.0 | 270.0 | 6.2 | 85.6 |
| EHS 3/8 (Down) | | | 20.0 | 0.0 | 270.0 | 9.8 | 85.6 |
| System Capacity Summary: | | | | Adequate | | Adequate | |

| Groundline Load Summary - Reporting Angle Mode: Load - Reporting Angle: 270.2° | | | | | | | | | | |
|--|-------------------|------------------|------------------------|--------------------|-------------------|--------------------------|---------------------|-----------------------|--------------------|-------------------|
| | 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 | 299 | 35.0 | 9,268 | 49.0 | 17.3 | 1,179 | 456 | 6 | 1,185 | 17.4 |
| Comms | 173 | 20.2 | 3,336 | 17.6 | 6.2 | 424 | 228 | 3 | 427 | 6.3 |
| GuyBraces | 1 | 0.2 | 27 | 0.1 | 0.1 | 3 | 6 | 0 | 3 | 0.1 |
| Pole | 355 | 41.6 | 5,554 | 29.4 | 10.4 | 707 | 1,364 | 18 | 724 | 10.7 |
| Insulators | 26 | 3.0 | 726 | 3.8 | 1.4 | 92 | 34 | 0 | 93 | 1.4 |
| Pole Load | 854 | 100.0 | 18,911 | 100.0 | 35.4 | 2,406 | 2,088 | 27 | 2,433 | 35.8 |
| Pole Reserve Capacity | | | 34,541 | | 64.6 | 4,394 | | | 4,367 | 64.2 |

| Load Summary by Owner - Reporting Angle Mode: Load - Reporting Angle: 270.2° | | | | | | | | | | |
|--|-------------------|------------------|------------------------|--------------------|-------------------|--------------------------|---------------------|-----------------------|--------------------|-------------------|
| | 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 | 654 | 76.6 | 14,822 | 78.4 | 27.7 | 1,886 | 1,820 | 24 | 1,909 | 28.1 |
| AT&T | 173 | 20.2 | 3,336 | 17.6 | 6.2 | 424 | 228 | 3 | 427 | 6.3 |
| <Undefined> | 27 | 3.2 | 753 | 4.0 | 1.4 | 96 | 40 | 1 | 96 | 1.4 |
| Totals: | 854 | 100.0 | 18,911 | 100.0 | 35.4 | 2,406 | 2,088 | 27 | 2,433 | 35.8 |

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 | 35.03 | 3.02 | 0.5700 | 1.19 | 0.600 | 100.0 | 0.0 | 100.0 | 1,200 | 165 | -14 | 1,310 | 1,461 |
| Primary | FPL | FPL | 35.03 | 3.02 | 0.5700 | 1.19 | 0.600 | 100.0 | 180.0 | 100.0 | 1,200 | -165 | -14 | 1,310 | 1,132 |
| Primary | FPL | FPL | 32.97 | 15.83 | 0.5700 | 1.19 | 0.600 | 100.0 | 0.0 | 100.0 | 1,200 | 155 | -15 | 1,233 | 1,374 |
| Primary | FPL | FPL | 32.97 | 15.83 | 0.5700 | 1.19 | 0.600 | 100.0 | 180.0 | 100.0 | 1,200 | -155 | -15 | 1,233 | 1,064 |
| Primary | FPL | FPL | 30.97 | 15.94 | 0.5700 | 1.19 | 0.600 | 100.0 | 0.0 | 100.0 | 1,200 | 146 | 15 | 1,158 | 1,319 |
| Primary | FPL | FPL | 30.97 | 15.94 | 0.5700 | 1.19 | 0.600 | 100.0 | 180.0 | 100.0 | 1,200 | -146 | 15 | 1,158 | 1,028 |
| Secondary | FPL | FPL | 25.97 | 5.47 | 0.5700 | 1.19 | 0.600 | 100.0 | 0.0 | 100.0 | 1,200 | 122 | -26 | 971 | 1,068 |
| Secondary | FPL | FPL | 25.97 | 5.47 | 0.5700 | 1.19 | 0.600 | 100.0 | 180.0 | 100.0 | 1,200 | -122 | -26 | 971 | 823 |
| Totals: | | | | | | | | | | | 0 | -79 | 9,347 | 9,268 | |

| 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) |
|-------|------|-------|-------------|--------------------|---------------------|----------------------|-----------------------|-----------------------|------------------|------------------|---------------|-------------------------|------------------------|----------------------|-----------------------|
| Telco | AT&T | AT&T | 19.97 | 5.81 | 0.5700 | 1.19 | 0.600 | 100.0 | 0.0 | 100.0 | 1,200 | 94 | -28 | 747 | 813 |

| | | | | | | | | | | | | | | | |
|---------|------|------|-------|------|--------|------|-------|-------|-------|-------|-------|-----|------|-------|-------|
| Telco | AT&T | AT&T | 19.97 | 5.81 | 0.5700 | 1.19 | 0.600 | 100.0 | 180.0 | 100.0 | 1,200 | -94 | -28 | 747 | 625 |
| Telco | AT&T | AT&T | 19.97 | 5.81 | 0.5700 | 1.19 | 0.600 | 100.0 | 0.0 | 100.0 | 1,200 | 94 | -28 | 1,206 | 1,272 |
| Telco | AT&T | AT&T | 19.97 | 5.81 | 0.5700 | 1.19 | 0.600 | 100.0 | 180.0 | 100.0 | 1,200 | -94 | -28 | 747 | 625 |
| Totals: | | | | | | | | | | | | 0 | -110 | 3,446 | 3,336 |

| 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 | -1 | 180 | 179 |
| Deadend | Deadend 12.75" | | 33.00 | 0.00 | 90.0 | 90.0 | 3.00 | 3.80 | 12.75 | -8 | 175 | 167 |
| Deadend | Deadend 12.75" | | 31.00 | 0.00 | 270.0 | 270.0 | 3.00 | 3.80 | 12.75 | 8 | 164 | 172 |
| Bolt | Deadend 12.75" | | 26.00 | 0.00 | 90.0 | 90.0 | 3.00 | 2.00 | 15.00 | -3 | 85 | 83 |
| Bolt | Deadend 12.75" | | 20.00 | 0.00 | 90.0 | 90.0 | 3.00 | 2.00 | 15.00 | -3 | 66 | 63 |
| Bolt | Deadend 12.75" | | 20.00 | 0.00 | 90.0 | 90.0 | 3.00 | 2.00 | 15.00 | -3 | 66 | 63 |
| | | | | | | | | | Totals: | -10 | 736 | 726 |

| 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 | | 20.00 | 0.00 | 23.00 | 0.375 | 75.00 | 245.0 | 40.9 | 0.273 | 28.74 | 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 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 | 1,361 | 1,237 | 0 | 0 | 0 | 0 | 27 |
| Totals: | | | | | | | | | | | 0 | 0 | 27 |

| 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 | 245.0 | 20,000 | 1.00 | 20,000 | 1,237 | 0 | 6.2 |

| 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 | 20.18 | 33.45 | 9.11 | 6.27 | 6.05 | 9.87 | 1.60e+6 | 60.00 | 57.00 | 34.00 | 154,800 | 1606.26 | 76.92 |

| 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. | | |