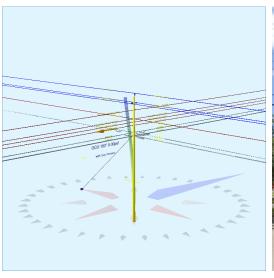
| Pole Num: | 113894367_P6 | Pole Length / | Class: | 40 / 5 | Code: | NESC | Structure Type: | | Junction |
|------------|--------------|---------------|----------------------|------------|----------------------|----------------|---------------------|--------|-------------|
| Aux Data 1 | A05366S | Species: | sou | THERN PINE | NESC Rule: | Rule 250B | Status G | uy Wir | es Adequate |
| Aux Data 2 | Unset | Setting Depth | n (ft): | 6.00 | Construction Grade: | C | Pole Strength Facto | r: | 0.85 |
| Aux Data 3 | Unset | G/L Circumfe | erence (in): | 31.00 | Loading District: | Light | Transverse Wind LF | : | 1.75 |
| Aux Data 4 | Unset | G/L Fiber Str | ess (psi): | 8,000 | Ice Thickness (in): | 0.00 | Wire Tension LF: | | 1.30 |
| Aux Data 5 | Unset | Allowable Str | ess (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: | | 26.20710 | 00 Deg Longit | ude: | | -80.115960 Deg | Elevation: | | 0 Feet |





| Pole Capacity Uti | lization (%) | Height (ft) | Wind Angle (deg) |
|-------------------|--------------|----------------|---------------------|
| Maximum | 57.5 | 0.0 | 180.0 |
| Groundline | 57.5 | 0.0 | 180.0 |
| Vertical | 3.1 | 20.5 | 90.0 |

| Pole Moments (ft- | b) | Load Angle (deg) | Wind Angle (deg) |
|-------------------|--------|---------------------|---------------------|
| Max Cap Util | 30,249 | 179.2 | 180.0 |
| Groundline | 30,249 | 179.2 | 180.0 |
| GL Allowable | 53,452 | | |

| Guy System Component Summary | | | | Load From Angle o | | Individual Ma | ximum Load |
|--------------------------------------|---------------------|---------------------|----------------|-------------------------|---------------------|--------------------------|---------------------|
| Description | Lead Length (ft) | Lead Angle (deg) | Height (ft) | Nominal Capacity (%) | Wind Angle (deg) | Max Load Capacity (%) | Wind Angle (deg) |
| Expanding - 10" 8-Way - Soil Class 4 | 25.0 | 270.0 | | 11.4 | 180.0 | 17.3 | 87.2 |
| EHS 3/8 (Down) | | | 22.0 | 14.8 | 180.0 | 24.7 | 87.2 |
| | | System Capaci | ty Summary: | Adeq | uate | Adeq | uate |

| Groundline Load Summar | y - Reporting A | Angle Mode: L | oad - Reportir | ng Angle: 179 | .2° | | | | | |
|------------------------|-------------------------|------------------------|------------------------------|--------------------------|-------------------------|--------------------------------|---------------------------|-----------------------------|--------------------------|-------------------------|
| | Shear Load* (Ibs) | 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 | 303 | 23.1 | 9,587 | 31.7 | 17.9 | 1,220 | 107 | 1 | 1,221 | 18.0 |
| Comms | 650 | 49.6 | 14,879 | 49.2 | 27.8 | 1,893 | 1,003 | 13 | 1,906 | 28.0 |
| GuyBraces | -13 | -1.0 | -294 | -1.0 | -0.6 | -37 | 2,053 | 27 | -11 | -0.2 |
| Pole | 355 | 27.1 | 5,553 | 18.4 | 10.4 | 707 | 1,364 | 18 | 724 | 10.7 |
| Insulators | 16 | 1.2 | 523 | 1.7 | 1.0 | 67 | 103 | 1 | 68 | 1.0 |
| Pole Load | 1,312 | 100.0 | 30,249 | 100.0 | 56.6 | 3,848 | 4,629 | 61 | 3,909 | 57.5 |
| Pole Reserve Capacity | | | 23,203 | | 43.4 | 2,952 | | | 2,891 | 42.5 |

| Load Summary by Owner | - Reporting An | gle Mode: Lo | ad - Reporting | Angle: 179.2 | 0 | | | | | |
|-------------------------|-------------------------|------------------------|------------------------------|--------------------------|-------------------------|--------------------------------|---------------------------|-----------------------------|--------------------------|-------------------------|
| | 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 | 658 | 50.2 | 15,141 | 50.1 | 28.3 | 1,926 | 1,471 | 19 | 1,945 | 28.6 |
| CATV | 273 | 20.8 | 6,442 | 21.3 | 12.1 | 820 | 500 | 7 | 826 | 12.1 |
| AT&T | 378 | 28.8 | 8,438 | 27.9 | 15.8 | 1,073 | 503 | 7 | 1,080 | 15.9 |
| <undefined></undefined> | 3 | 0.2 | 229 | 0.8 | 0.4 | 29 | 2,155 | 28 | 57 | 0.8 |
| Totals: | 1,312 | 100.0 | 30,249 | 100.0 | 56.6 | 3,848 | 4,629 | 61 | 3,909 | 57.5 |

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 | AAC 4 AWG 7 STRAND ROSE | FPL | 35.03 | 3.02 | 0.2320 | 2.58 | 0.039 | 267.0 | 90.0 | 267.0 | 291 | 184 | -2 | 1,424 | 1,605 |
| Primary | AAC 4 AWG 7 STRAND ROSE | FPL | 35.03 | 3.02 | 0.2320 | 2.32 | 0.039 | 250.0 | 270.0 | 250.0 | 291 | -184 | -2 | 1,333 | 1,147 |
| Primary | AAC 4 AWG 7 STRAND ROSE | FPL | 31.97 | 15.89 | 0.2320 | 2.58 | 0.039 | 267.0 | 90.0 | 267.0 | 291 | 168 | -3 | 1,299 | 1,464 |
| Primary | AAC 4 AWG 7 STRAND ROSE | FPL | 31.97 | 15.89 | 0.2320 | 2.32 | 0.039 | 250.0 | 270.0 | 250.0 | 291 | -168 | -2 | 1,217 | 1,047 |
| Primary | AAC 4 AWG 7 STRAND ROSE | FPL | 31.97 | 15.89 | 0.2320 | 2.58 | 0.039 | 267.0 | 90.0 | 267.0 | 291 | 168 | 3 | 1,299 | 1,470 |
| Primary | AAC 4 AWG 7 STRAND ROSE | FPL | 31.97 | 15.89 | 0.2320 | 2.32 | 0.039 | 250.0 | 270.0 | 250.0 | 291 | -168 | 2 | 1,217 | 1,052 |
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 29.97 | 5.75 | 0.1980 | 0.22 | 0.036 | 97.0 | 0.0 | 97.0 | 393 | -15,298 | 0 | 0 | -15,298 |

| | | | | | | | | | | | Totals: | 0 | -14 | 9,601 | 9,587 |
|-----------|--------------------------|-----|-------|------|--------|------|-------|-------|-------|-------|---------|---------|-----|-------|---------|
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 24.97 | 6.03 | 0.1980 | 0.41 | 0.036 | 133.0 | 180.0 | 133.0 | 393 | 12,745 | 0 | 0 | 12,745 |
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 24.97 | 6.03 | 0.1980 | 0.22 | 0.036 | 97.0 | 0.0 | 97.0 | 393 | -12,745 | 0 | 0 | -12,745 |
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 25.97 | 5.97 | 0.1980 | 0.41 | 0.036 | 133.0 | 180.0 | 133.0 | 393 | 13,256 | 0 | 0 | 13,256 |
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 25.97 | 5.97 | 0.1980 | 0.22 | 0.036 | 97.0 | 0.0 | 97.0 | 393 | -13,256 | 0 | 0 | -13,256 |
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 26.97 | 5.92 | 0.1980 | 0.41 | 0.036 | 133.0 | 180.0 | 133.0 | 393 | 13,766 | 0 | 0 | 13,766 |
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 26.97 | 5.92 | 0.1980 | 0.22 | 0.036 | 97.0 | 0.0 | 97.0 | 393 | -13,766 | 0 | 0 | -13,766 |
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 26.97 | 5.92 | 0.1980 | 1.38 | 0.036 | 250.0 | 270.0 | 250.0 | 393 | -191 | -4 | 876 | 681 |
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 26.97 | 5.92 | 0.1980 | 1.55 | 0.036 | 267.0 | 90.0 | 267.0 | 393 | 191 | -5 | 936 | 1,122 |
| Secondary | ACSR 6 AWG 6/1 TURKEY | FPL | 29.97 | 5.75 | 0.1980 | 0.41 | 0.036 | 133.0 | 180.0 | 133.0 | 393 | 15,298 | 0 | 0 | 15,298 |

| 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) |
|-------------------|-----------------|-------|----------------|--------------------------|---------------------------|-------------------------------|-----------------------------|-----------------------------|------------------------|------------------------|------------------|-------------------------------|------------------------------|----------------------------|-----------------------------|
| Overlashed Bundle | 6M STRAND | CATV | 23.00 | 6.14 | 0.2420 | 0.84 | 0.104 | 97.0 | 0.0 | 97.0 | 1,200 | -35,877 | 0 | 0 | -35,876 |
| CATV | CATV | CATV | 22.97 | 6.14 | 0.5700 | | 0.600 | 97.0 | 0.0 | 97.0 | | | 0 | 0 | 0 |
| Overlashed Bundle | 6M STRAND | CATV | 23.00 | 6.14 | 0.2420 | 1.54 | 0.104 | 133.0 | 180.0 | 133.0 | 1,200 | 35,877 | 0 | 0 | 35,877 |
| CATV | CATV | CATV | 22.97 | 6.14 | 0.5700 | | 0.600 | 133.0 | 180.0 | 133.0 | | | 1 | 0 | 1 |
| Overlashed Bundle | 6M STRAND | CATV | 23.00 | 6.14 | 0.2420 | 5.80 | 0.104 | 267.0 | 90.0 | 267.0 | 1,200 | 497 | 14 | 1,608 | 2,119 |
| CATV | CATV | CATV | 22.97 | 6.14 | 0.5700 | | 0.600 | 267.0 | 90.0 | 267.0 | | | 78 | 1,626 | 1,704 |
| Overlashed Bundle | 6M STRAND | CATV | 23.00 | 6.14 | 0.2420 | 5.12 | 0.104 | 250.0 | 270.0 | 250.0 | 1,200 | -497 | 13 | 1,506 | 1,021 |
| CATV | CATV | CATV | 22.97 | 6.14 | 0.5700 | | 0.600 | 250.0 | 270.0 | 250.0 | | | 73 | 1,524 | 1,597 |
| Overlashed Bundle | 6M STRAND | AT&T | 22.00 | 6.20 | 0.2420 | 1.23 | 0.104 | 97.0 | 0.0 | 97.0 | 1,200 | -34,317 | 0 | 0 | -34,317 |
| Fiber Irregular | FNAP-SBL-216EUC | AT&T | 21.98 | 5.90 | 0.5980 | | 0.052 | 97.0 | 0.0 | 97.0 | | | 0 | 0 | 0 |
| Telco | BKTA 400 PR. | AT&T | 21.95 | 6.73 | 1.3000 | | 0.910 | 97.0 | 0.0 | 97.0 | | | -1 | 0 | -1 |
| Overlashed Bundle | 6M STRAND | AT&T | 22.00 | 6.20 | 0.2420 | 2.24 | 0.104 | 133.0 | 180.0 | 133.0 | 1,200 | 34,317 | 0 | 0 | 34,317 |
| Fiber Irregular | FNAP-SBL-216EUC | AT&T | 21.98 | 5.90 | 0.5980 | | 0.052 | 133.0 | 180.0 | 133.0 | | | 0 | 0 | 0 |
| Telco | BKTA 400 PR. | AT&T | 21.95 | 6.73 | 1.3000 | | 0.910 | 133.0 | 180.0 | 133.0 | | | -1 | 0 | -1 |
| Overlashed Bundle | 6M STRAND | AT&T | 22.00 | 6.20 | 0.2420 | 8.44 | 0.104 | 267.0 | 90.0 | 267.0 | 1,200 | 476 | 14 | 2,444 | 2,933 |
| Fiber Irregular | FNAP-SBL-216EUC | AT&T | 21.98 | 6.33 | 0.5980 | | 0.052 | 267.0 | 90.0 | 267.0 | | | 7 | 2,946 | 2,953 |
| Telco | BKTA 400 PR. | AT&T | 21.95 | 6.00 | 1.3000 | | 0.910 | 267.0 | 90.0 | 267.0 | | | 115 | 2,438 | 2,553 |
| | | | | | | | | | | | Totals: | 476 | 312 | 14,092 | 14,879 |

| Insulator | | Owner | Height (ft) | Horiz. Offset | Offset Angle | Rotate Angle | Unit Weight | Unit Diameter | Unit Length | Offset Moment* | Wind Moment* | Moment at GL* |
|-----------|---------------------------|-------|----------------|------------------|-----------------|-----------------|----------------|------------------|----------------|-------------------|-----------------|---------------|
| | | | | (in) | (deg) | (deg) | (lbs) | (in) | (in) | (ft-lb) | (ft-lb) | (ft-lb) |
| Deadend | Deadend Insulator - 15 kV | | 34.00 | 0.00 | 0.0 | 0.0 | 3.00 | 3.80 | 12.75 | -1 | 180 | 179 |

| | | | | | | | | Totals: | 4 | 519 | 523 |
|---------|---------------------------|-------|------|-------|-------|------|------|---------|----|-----|-----|
| Bolt | Single Bolt | 22.00 | 0.00 | 180.0 | 90.0 | 5.00 | 3.00 | 0.00 | 5 | 0 | 5 |
| Bolt | Single Bolt | 22.00 | 0.00 | 90.0 | 0.0 | 5.00 | 3.00 | 0.00 | 0 | 0 | 0 |
| Bolt | Single Bolt | 23.00 | 0.00 | 180.0 | 90.0 | 5.00 | 3.00 | 0.00 | 5 | 0 | 5 |
| Bolt | Single Bolt | 23.00 | 0.00 | 90.0 | 0.0 | 5.00 | 3.00 | 0.00 | 0 | 0 | 0 |
| Bolt | Single Bolt | 25.00 | 0.00 | 270.0 | 270.0 | 5.00 | 3.00 | 0.00 | 0 | 0 | 0 |
| Bolt | Single Bolt | 26.00 | 0.00 | 270.0 | 270.0 | 5.00 | 3.00 | 0.00 | 0 | 0 | 0 |
| Bolt | Single Bolt | 27.00 | 0.00 | 270.0 | 270.0 | 5.00 | 3.00 | 0.00 | 0 | 0 | 0 |
| Bolt | Single Bolt | 27.00 | 0.00 | 0.0 | 0.0 | 5.00 | 3.00 | 0.00 | -5 | 0 | -5 |
| Bolt | Single Bolt | 30.00 | 0.00 | 90.0 | 90.0 | 5.00 | 3.00 | 0.00 | 0 | 0 | 0 |
| Deadend | Deadend Insulator - 15 kV | 32.00 | 0.00 | 180.0 | 180.0 | 3.00 | 3.80 | 12.75 | 8 | 170 | 177 |
| Deadend | Deadend Insulator - 15 kV | 32.00 | 0.00 | 0.0 | 0.0 | 3.00 | 3.80 | 12.75 | -8 | 170 | 162 |

| Guy Wire and Bra | ace | 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 | | 22.00 | 0.00 | 25.00 | 0.375 | 75.00 | 270.0 | 41.2 | 0.273 | 32.57 | 0.42 |

| Guy Wire and Brace (Loads and Reactions) | | Elastic Modulus (psi) | Rated Tensile Strength (lbs) | Guy 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 (Ibs) | Moment at GL³ (ft-lb) |
|---|------|-----------------------------|---------------------------------------|-----------------------------|--------|-----------------------------|--|--|--|---------------------------|-----------------------------------|---|-----------------------------|
| EHS 3/8 | Down | 2.30e+7 | 15,400 | 0.90 | 13,860 | 700 | 3,419 | 3,108 | 2,051 | 1,352 | 1,542 | -21 | -294 |
| | | | | | | | | | Totals: | 1,352 | 1,542 | -21 | -294 |

| 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 MCU ³ (lbs) | Max Required Capacity² (%) |
|--------------------------------------|-------|---------------------------|---------------------|---------------------|----------------------------------|----------------------------------|----------------------------|--------------------|---|----------------------------------|
| Expanding - 10" 8-Way - Soil Class 4 | | 6.00 | 25.00 | 270.0 | 18,000 | 1.00 | 18,000 | 3,108 | 2,051 | 17.3 |

| 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 | 20.53 | 33.51 | 9.09 | 9.24 | 6.05 | 9.87 | 1.60e+6 | 60.00 | 57.00 | 34.00 | 148,569 | 1493.33 | 32.26 |

| Notes | 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.