



Specifications for Licensee's Attachments to Provo City Power Poles

Licensee, when making Attachments to Provo City Power Poles, will adhere to the following engineering and construction practices.

## A. Clearances

1. **Attachment and Cable Clearances:** Licensee's Attachments on Provo City Power Poles, including metal attachment clamps and bolts, metal cross-arm supports, bolts and other equipment, must be attached so as to maintain the minimum separations specified in the National Electrical Safety Code ("NESC") and in drawings and specifications Provo City Power may from time to time furnish Licensee.
2. **Service Drop Clearance:** The parallel minimum separation between Provo City Power's service drops and communications service drops shall be twelve (12) inches, and the crossover separation between the drops shall be twenty-four (24) inches.
3. **Sag and Mid-Span Clearances:** Licensee will be particularly careful to leave proper sag in its lines and cables and shall observe the established sag of power line conductors and other cables so that minimum clearances are (a) achieved at poles located on both ends of the span; and (b) retained throughout the span. At mid-span, a minimum of twelve (12) inches of separation must be maintained between any other cables. At the pole support, a twelve (12) inch separation must be maintained between Licensee and any other communications connection/attachment.
4. **Vertical Risers:** All Risers, including those providing 120/240 volt power for Licensee's equipment enclosure, shall be placed on the quarter faces of the Pole and must be installed in conduit with weatherhead attached to the Pole with stand-off brackets. A two (2) inch clearance in any direction from cable, bolts, clamps, metal supports and other equipment shall be maintained.
5. **Climbing Space:** A clear Climbing Space must be maintained at all times on the face of the Pole. All Attachments must be placed so as to allow and maintain a clear and proper Climbing Space on the face of the Utility Pole. Licensee's cable/wire Attachments shall be placed on the same side of the Pole as those of other Attaching Entities. In general, all other Attachments and Risers should be placed on Pole quarter faces.
6. **Pedestals and Enclosures:** Every effort should be made to install Pedestals, vaults and/or Enclosures a minimum of four (4) feet from Poles or other Utility Facilities.

## B. Down Guys and Anchors

1. Licensee shall be responsible for procuring and installing all anchors and guy wires to support the additional stress placed on Provo City Power's Poles by Licensee's Attachments. Anchors must be guyed adequately.
2. Anchors and guy wires must be installed on each Provo City Power Pole where an angle or a dead-end occurs. Licensee shall make guy attachments to Poles at or below its cable Attachment. No proposed anchor can be within four (4) feet of an existing anchor without written consent of Provo City Power.
3. Licensee may not attach guy wires to the anchors of Provo City Power or third-party user without the anchor owner's specific prior written consent.
4. No Attachment may be installed on a Provo City Power Pole until all required guys and anchors are installed. No Attachment may be modified, added to or relocated in such a way as will materially increase the stress or loading on Provo City Power Poles until all required guys and anchors are installed.
5. Licensee's down guys, if needed, shall be bonded to ground wires of Provo City Power's Pole. The connections to the system neutral are to be made by the Provo City Power as an item of Make-Ready Work. Provo City Power will determine if guys should be grounded or insulated.

### C. Certification of Licensee's Design

1. Licensee's Attachment Permit application must be signed and sealed by a professional engineer, registered in Utah, certifying that Licensee's aerial cable design fully complies with the NESC and Provo City Power's Construction Standards and any other applicable federal, state or local codes and/or requirements.
2. This certification shall include the confirmation that the design is in accordance with pole strength requirements of the NESC, taking into account the effects of Provo City Power's Facilities and other Attaching Entities' facilities that exist on the Poles without regard to the condition of the existing facilities.

### D. Miscellaneous Requirements

1. **Cable Bonding:** Licensee's messenger cable shall be bonded to Provo City Power's Pole ground wire at each Pole that has a ground wire. If no ground exists on a Pole, Licensee shall install a Pole ground in accordance with the attached detail drawing.
2. **Customer Premises:** Licensee's service drop into customer premises shall be protected as required by the most current edition of the NEC.
3. **Communication Cables:** All Communications cables/wires not owned by Provo City Power shall be attached within the Communications space that is located 40 inches below the lowest Provo City Power conductors.
4. **Riser Installations:** All Licensee's Riser installations shall be in utility-approved conduit materials and placed on stand-off brackets. Ground wires may be attached directly to Pole.
5. **Tagging:** All Licensee's cables shall be identified with a band-type communications cable tag or other identification acceptable to Provo City Power at each Attachment within twelve (12) inches of the Pole. The communications tag shall be consistent with communication industry standards and shall include at least the following: Licensee name, emergency contact number and cable type.

### E. Small Cell Wireless

1. Licensee shall not attach to power poles supporting uninsulated conductor greater than 600 Volts.
2. Licensee may request attachment to power poles with secondary voltages less than 600 Volts that are easily accessible from the road which can be either approved or denied by Provo City Power.
3. Licensee shall not attach to existing street light poles.
4. Licensee may submit an engineered design of street lights that resemble and will replace existing street light poles and meet the Small Cell Infrastructure Design Standards. Design shall be approved by Provo City Power. A minimum of one backup light with a minimum of 4% shall be supplied to Provo City for each approved design.
5. All connection fees including hook up, impact, and aid to construction shall be paid before power to the site will be connected.
6. A maximum electrical load calculation shall be submitted to Provo City Power for each proposed site. A meter and meter base shall be included for each site but may not be used for loads that are less than 250 kWh/month. If the load is greater than 250 kWh, a meter shall be installed. The meter location shall be approved by Provo City Power.

### F. Provo City Power Construction Drawings and Specifications

1. Refer to Provo City Power Construction Drawings, Small Cell Infrastructure Design Standards and obtain additional construction specifications from Provo City Power in accordance with its requirements.
2. Apply the Provo City Power's construction drawings and specifications in accordance with the NESC, NEC and any other federal, state or local code requirements.