**SOL** 

# **Garland Power & Light**

**Pole Attachment Guidelines and Procedures** 

Updated: October 11, 2017

# Table of Contents

Section 1 - Purpose	
Section 2 - Pole Attachment Terminology	5
Section 3 - Safety Notice: Working Near Overhead Electrical Distribution System	
Section 4 - Distribution Planning for Future Use of Distribution Poles	11
Section 5 - Structure of the Distribution Pole and Working Zones	
Section 6 - Worker Qualifications	
Section 7 - Application to Attach - Process and Procedures	14
Section 8 - Inspections	
Section 9 - Pole Loading Analysis	19
Section 10 - Design and Engineering	
Section 11 - Identification Guidelines for Communication Cables	25
Section 12 - Make Ready Work and Construction	
Section 13 - Wireless Facilities	27
Section 14 - Maintenance of Attachments	
Section 15 - Operational Notices	
Section 16 - Pole Line Modifications	
Section 17 - Property Rights	
Section 18 - Foreign Poles	
Section 19 - Communication Attachments in Transmission ROW	
Section 20 - Communications Attachments on Streetlight Poles	
Section 21 - GP&L Representatives	
Section 22 - Reference Drawings	
APPENDIX A – APPLICATION TO ATTACH	57
APPENDIX B – NOTIFICATION OF ATTACHMENT REMOVAL	

In order to meet the demands for Pole use by communication providers in the service area of Garland Power & Light ("GP&L") these Pole Attachment Guidelines and Procedures ("Guidelines and Procedures") have been developed to administer the access to and use of Poles. The Guidelines and Procedures are intended to provide for a non-discriminatory, uniform, and consistent approach for the access and use of Poles in a manner that is consistent with the safe and reliable operation of GP&L facilities. The Guidelines and Procedures support GP&L and communication providers attaching to Poles in complying with applicable laws, standards, regulations, and ordinances.

GP&L implements the Guidelines and Procedures in accordance with the Public Utility Regulatory Act ("PURA") Section 54.204 in order to allow communications service providers, nondiscriminatory access to its Poles for the sole purpose of attaching facilities used to deliver cable television and/or telecommunications services. The Guidelines and Procedures set forth:

- The general terms, conditions, and processes pursuant to which GP&L shall accommodate such attachments in the course of conducting GP&L's core operating business, and
- The required design, construction, and engineering standards and practices that must be followed by entities attaching to Poles.

GP&L shall have the right, in its sole discretion, to reject Licensee's Application to Attach in whole or in part at any time and for any reason related to safety, reliability, insufficient capacity, generally applicable engineering standards, GP&L's Reserved Space, or failure to comply with the terms and conditions of the Agreement.

The Guidelines and Procedures are intended to assist Licensees in facilitating Pole Attachment requests. In addition to following the Guidelines and Procedures, prospective Licensees are required to:

- 1) Sign the Agreement;
- 2) When applicable, sign the Wireless Addendum;
- 3) Remain in full compliance with applicable GP&L insurance and creditworthiness requirements; and
- 4) Satisfy any other local, state, or federal laws, codes, regulations, or policies.

Strict adherence to the Guidelines and Procedures will ensure a smooth application and approval process and will allow completion of construction with minimal delay and conflict.

The Licensee is responsible for compliance and shall at all times maintain its facilities in conformity with all requirements, standards and Specifications indicated in the Agreement, including:

1. The requirements of the National Electrical Safety Code ("NESC") and subsequent revisions thereof;

- 2. The Blue Book Manual of Construction Procedures and subsequent revisions thereof;
- 3. The Society of Cable Television Engineer's ("SCTE") Recommended Practices for Coaxial Cable Construction and Testing and subsequent revisions thereof;
- 4. SCTE Recommended Practices for Optical Fiber Cable Construction and subsequent revisions thereof;
- 5. The Guidelines and Procedures;
- 6. All applicable local, state, or federal laws, codes, and regulations; and
- 7. The additional requirements that may be prudent or required for good practice under the given local conditions.

Where there is a disagreement between any referenced Specification or standard, the more stringent shall apply.

GP&L reserves the right to amend these Guidelines and Procedures at any time and manner in response to market conditions and as necessary to comply with changes in applicable engineering and/or safety standards or changes in local, state or federal law. Any such changes will be applied in a non-discriminatory manner with respect to similarly situated entities and facilities.

To the extent that issues arise that have not been contemplated by these Guidelines and Procedures, GP&L will work with the Licensees to find a solution that effectively addresses the issue consistently with these Guidelines and Procedures.

These Guidelines and Procedures supersede all prior GP&L Pole Attachment rules and regulations. Amendments to these Guidelines and Procedures will become effective following a notice period as provided in this document.

### **General Construction and Safety Considerations**

GP&L's Service Standards as pertaining to Pole Attachments will be made available at GP&L's website (www.gpltexas.org).

These specifications are intended to provide useful references for all Licensees during the design and construction phases and ongoing maintenance of their communication plant attached to Poles.

The information provided herein is intended to be used in conjunction with the NESC, and does not in any way minimize or replace the requirements of the NESC. The NESC should always be followed when making clearance determinations with regard to communication cable installations.

In all situations, it is the continuing responsibility of each Licensee to be familiar with, and adhere, to the NESC during the installation, maintenance, and related activities involving their facilities attached to Poles.

# **Section 2 - Pole Attachment Terminology**

The following terms appear throughout the Guidelines and Procedures. Many of the terms that relate to operational matters may also appear in the Agreement and/or the Wireless Addendum. The Agreement and/or Wireless Addendum will contain additional terms not found in these Guidelines and Procedures.

**Agreement** – The Pole Attachment License Agreement executed by GP&L and Licensee setting forth the terms and conditions pursuant to which Licensee may obtain access to Poles, the applicable pole attachment rate(s) or rate formulas(s) and the process whereby Licensee may obtain permission to use any individual Pole.

**Application to Attach** – The most current version of Appendix A as found in these Guidelines and Procedures which must be completed by Licensee and approved by GP&L before Licensee may attach to or make use of any of Poles for any proposed overheard (aerial) and wireless facilities. Licensee design and construction data shall be included with the Application to Attach.

**Attachment** – Any wire, line, apparatus, or appurtenances attached to a Pole, including, but not limited to, cables, service drops, power supplies, amplifiers, pedestals, equipment, bonding wires, Overlashings, Guy Wires, and anchors required to support unbalanced loads. This includes all cable television system, telecommunication system facilities, and Wireless Facilities.

**Application Processing Fee** – The fee that Licensee must provide with each Application to Attach submitted to GP&L to cover administrative costs.

**Cable Markers** – A tag or marker for the physical identification of each Licensee's facilities attached to GP&L's poles.

**Communications Space** – The Communications Space is the portion of the Usable Space, available below the Supply Space, in which communications wires and devices are traditionally located and that can be accessed by a Qualified Communications Worker.

**Communication Workers Safety Zone** – The clearances specified by the NESC between the facilities located in the Supply Space and the facilities located in the Communications Space, both at the Pole and in the span between Poles.

**Distribution System** – The portion of an electric power system that distributes electricity to consumers from a bulk power location such as a substation.

**Drop/Lift Pole** – An ancillary Pole necessary to extend service to a customer; any Licensee Attachment to such Pole shall, for purposes of this Agreement, be included in Licensee's inventory of Attachments.

**Horizontal Extension Arm** – A bracket extension arm attached at the Pole for the purpose of suspending cables or conductors at a distance from the Pole.

**Licensee** – A party having a valid Agreement with GP&L granting certain non-exclusive rights to use Poles.

**Make Ready or Make Ready Work** – All work necessary to make space for or otherwise accommodate new, additional or changed Attachments, including, but not limited to, Rearrangements, removal and replacement of the Pole(s), Transfers and other work incident thereto required to ensure that the Pole(s) continues to comply with the Specifications, is safe, reliable, and in suitable condition to support Licensee's proposed attachment.

**Make Ready Costs** – All costs necessary for GP&L to prepare its Poles for Licensee's Attachments, including the costs of materials, labor, inspections, engineering, supervision, overheads, and Tree Trimming. Engineering includes design, proper conductor spacing and bonding, calculations to determine proper ground clearances and Pole down guy and anchor strength requirements for horizontal and transverse loading, and compliance with all applicable requirements. Also included among Make Ready Costs are the costs of installing or changing out primary Poles, secondary Poles and Drop/Lift Poles, including the cost of installation and/or removal of guys, anchors, stub Poles, materials and equipment, temporary, and all other construction in accordance with the Specifications.

**Make Ready Estimate** – The estimate of the Make Ready Costs prepared by GP&L for all Make Ready Work that may be required by GP&L to accommodate Poles for affixing of Attachments for Licensee.

**Mid-Span Clearance** – The NESC or jurisdictional authority's requirements for vertical clearance of wires, conductors, cables, and equipment above ground, roads, rails, water, and other surfaces under the appropriate conductor temperature and loading conditions which produce the largest final sag.

**Mid-Span Separation** – The NESC or jurisdictional authority's requirements for vertical separation between power and communications conductors midway between two distribution poles. Mid-Span Clearance is the controlling factor in determining separation requirements between power and communication lines attached at the Pole.

**National Electrical Safety Code (NESC)** – Sets the ground rules for practical safeguarding of persons during the installation, operation, or maintenance of electric supply and communication line and associated equipment. The NESC contains the basic provisions that are considered necessary for the safety of utility workers and the public under the specified conditions. The NESC is not intended as a design specification or as an instruction manual.

**Noncompliant Attachment –** An Attachment that does not comply with the Specifications.

**Nonfunctional Attachment** – An Attachment, or any part thereof, that becomes no longer fit for service, nonfunctional, or in any way abandoned by Licensee.

**Notification of Attachment Removal** – GP&L's form contained within most recently updated version of Appendix B of the Guidelines & Procedures, which must be completed by Licensee in order to notify GP&L of the removal of Licensee's facilities from Poles.

**Neutral** – The conductor used to carry unbalanced current. In Single-phase systems, the conductor used for a return current path.

**Non-Guyed Service Drop** – A service drop requiring no guys under standard industry design practices or applicable Specifications.

**Overlash(ing)** – A specific method of affixing an additional cable or wire owned and operated by Licensee to a cable or wire owned by Licensee already attached to a Pole.

**Permit** – All documents associated with an approved Application to Attach, including work directives and pole mapping, which authorize the Licensee to proceed with the installation as approved.

**Pole** – A structure owned by GP&L made of wood, concrete, steel, aluminum, fiberglass, composite or other material owned and normally used by GP&L to support lines and related facilities of GP&L, including Drop/Lift Poles.

**Pole Loading Analysis** – The engineering review of the forces on a pole to ensure the structural integrity of the pole is sufficient to support existing and additional proposed facilities, per the NESC requirements.

**Pole-Top Zone** – The Pole-top Zone is the pole space located at the top of the pole above the energized portion of the pole and should also be considered a part of the Electrical Supply Zone or Supply Space. This space may only be accessed by a Qualified Electrical Worker.

**Post Installation Inspection** – Inspection performed by GP&L to ensure that Licensee's installation conforms to the design data approved in Licensee's Application to Attach, and fully complies with the NESC, the Guidelines and Procedures, and applicable regulations, codes, and laws.

**Primary** – A primary voltage distribution circuit delivering electric power through electrically charged conductors usually considered to be between a substation or point of supply and the distribution Transformers.

**Rearrangement** – The moving of Attachments from one position to a different position on the same Pole.

**Reserved Space** – The space on Poles reserved for GP&L's future needs.

**Riser** – The vertical transition of supply or communications cables from underground to overhead, which may include U-guards and/or conduits that are attached to a Pole via stand-off brackets.

**Service Standards** – GP&L's electric service standard practices compiled for the benefit and guidance of customers, contractors, electricians, architects, and engineers.

**Single-phase** – The distribution of electric power using a system in which the voltage is taken from only one phase of the Three-phase source.

**Specifications** – The most stringent requirements of (1) the National Electrical Safety Code ("NESC") and subsequent revisions thereof; (2) The Blue Book - Manual of Construction Procedures and subsequent revisions thereof; (3) the Society of Cable Television Engineer's ("SCTE") Recommended Practices for Coaxial Cable Construction and Testing and subsequent revisions thereof; (4) SCTE Recommended Practices for Optical Fiber Cable Construction and subsequent revisions thereof; (5) GP&L's Pole Attachment Guidelines and Procedures and subsequent revisions thereof; and (6) the lawful requirements of public authorities.

**Stand-Off Bracket** – An 8-inch piece of hardware used to extend conduit Risers away from Pole to provide safer climbing space.

**Supply Space** (also Electrical Supply Zone) – The Electrical Supply Zone or Supply Space is the area above the Communications Worker's Safety Zone (as defined by the NESC) on any given Pole that is reserved for the placement of electric supply lines, electrical equipment, and other GP&L facilities, including the space above the top of the Pole. This space may only be accessed by a Qualified Electrical Worker.

**Three-phase** – A circuit consisting of three energized conductors.

**Transfer** – The removal of an Attachment from one Pole and the placement of it or a substantially identical Attachment upon another pole.

**Transformer** – An electro-magnetic device used to change the voltage in an alternating current electrical circuit.

**Transmission** – Normally, the highest voltage network of an electric utility system, that carries power over the longest distances, typically operating at voltages of 69 kV (69,000 volts) or greater.

**Unauthorized Attachment** – Any affixation of any Licensee Attachment of any nature to any property of GP&L, including Poles, which has not been authorized by GP&L.

**Wireless Addendum** – Addendum 1 to the Agreement executed by GP&L and Licensee setting forth the terms and conditions pursuant to which Licensee may obtain access to Poles for the purpose of attaching Wireless Facilities.

**Wireless Facilities** – Any antenna, transmitter, receiver, hardware, equipment, apparatus, power supplies, device or other equipment used or useful to receive or to generate and/or emit radio frequency ("RF") energy, and cables or wires connecting such antenna to such equipment, apparatus, device or other hardware placed on the same Pole.

# Section 3 - Safety Notice: Working Near Overhead Electrical Distribution System

Licensees and all attaching companies are on notice that Poles are part of an overhead electrical Distribution System. The power lines attached to these Poles should be presumed energized at all times and all persons, including attaching companies' employees and contractors, must exercise caution and take all reasonable precautions when working on or near electric utility poles and/or near high-voltage lines.

GP&L has determined that Poles constructed of steel are unsafe for climbing, and for that reason, prohibits its own employees and independent contractors, as well as employees and independent contractors of Licensees from climbing such Poles for any reason. GP&L therefore must reject any request to attach to steel Poles unless the requesting Licensee demonstrates that such Poles may be accessed safely through some means other than climbing.

Certain federal regulations and Texas statues directly address contractor activity in the vicinity of overhead electric lines, and violators are subject to criminal penalties and civil liabilities. These laws apply to employers, contractors, owners, and any other parties or personnel responsible for or engaged in construction activities.

#### **Emergency Situations**

In the event of contact by construction equipment with overhead or underground electric lines, call 911 to provide information as to the location of the incident and whether the situation is life threatening. After calling 911, please also notify GP&L's dispatch operator at 972-205-3000.

# Section 4 - Distribution Planning for Future Use of Distribution Poles

GP&L's Service Standards only allow for the attachment of communication facilities to the extent GP&L has sufficient capability to install Transformers and other electrical equipment on its Poles. Licensee's existing and future Attachments are in spaces on Poles that are reserved for GP&L's future use in accordance with GP&L's Development Plan. Licensee is permitted to use the Reserved Space until such time as GP&L has a need for the space to support additional facilities of GP&L, or GP&L's subsidiary or affiliate, for the provision of its utility services. In the event any electrical space, temporarily used by the communication Attachments, is needed in the future to install electrical facilities, all affected Licensees will be required to relocate their facilities from such Reserved Space.

Licensees have the option of removing an applicable Attachment or making payment of GP&L's cost of expansion within sixty (60) days of receiving written notice of GP&L's requirement to use Reserved Space, except where Licensee has paid for additional height for their Attachments in accordance with Article 6 of the Agreement.

### **Development Plan**

Based on historical experience, GP&L is required to add equipment to existing Poles in order to fulfill GP&L's obligations to its customers. Given the ongoing changing needs of GP&L's customers and the potential future expansion in GP&L's service area, GP&L is projecting that the need to add additional equipment to Poles will continue in the foreseeable future.

GP&L is projecting that the following types of equipment will be added to existing Poles in the foreseeable future:

- Conductors
- Service Wires
- Transformers
- Reclosers
- Switches
- Regulated Outdoor Lighting
- Capacitor Equipment
- Reconductoring Equipment
- Approved Budget Items

# Section 5 - Structure of the Distribution Pole and Working Zones

In all situations it is the ongoing responsibility of the Licensee to be familiar with and adhere to the NESC definitions, rules, Specifications, and criteria related to all sections of a Pole. (See also Section 10 – Design and Engineering in these Guidelines and Procedures.

Pole includes:

### Pole-top Zone

The Pole-top Zone is the pole space located at the top of the Pole above the energized portion of the Pole and should also be considered a part of the Electrical Supply Zone or Supply Space. This space may only be accessed by a Qualified Electrical Worker.

#### The Electrical Supply Zone or Supply Space

The Electrical Supply Zone or Supply Space is the area above the Communications Worker's Safety Zone (as defined by the NESC) on any given Pole that is reserved for the placement of electric supply lines, electrical equipment, and other GP&L facilities, including the space above the top of the Pole. This space may only be accessed by a Qualified Electrical Worker. The term Supply Space has the equivalent meaning as that used in the NESC. Most Supply Space wiring consists of uninsulated conductors. The Supply Space may include separate facilities operating at different voltages; for safety reasons, the highest voltages are located uppermost on the pole.

#### **Communication Workers Safety Zone**

The Communication Workers Safety Zone consists of clearances specified by the NESC between the facilities located in the Supply Space and the facilities located in the Communications Space, both at the Pole and in the span between Poles.

#### **Communications Space**

The Communications Space is the portion of the Usable Space, available below the Supply Space, in which communications wires and devices are traditionally located and that can be accessed by a Qualified Communications Worker.

Licensees are responsible for determining the qualifications of the communications workers retained to install, maintain, or repair their Attachments. Licensees are responsible for complying with all NESC and other requirements related to the communication worker. GP&L, in its sole discretion, reserves the right to prohibit any communications worker found performing in an unsafe manner, or whom GP&L otherwise determines is not qualified, to perform the work for which they were retained.

# **Communications Workers**

A Licensee may use its own qualified work crews or independent contractors of its own choice to perform work within the Communications Space; provided, however, that GP&L may prohibit any such independent contractor from working within the Communications Space if GP&L concludes, in its sole discretion, that such contractor is not qualified to perform the work specified.

# **Qualified Electrical Workers**

All work performed within or above the Electrical Supply Zone (including in the Pole-top Zone), including work related to the construction, installation, maintenance, or repair of Licensee's facilities, must be performed by GP&L's authorized Electrical Workers. Electrical Workers are those specially trained electrical linemen with the skillset to work with and around electrical wire in or above the Electric Supply Space. These workers may only be employees of GP&L or GP&L-authorized independent contractors.

# **Authorized Electrical Contractors**

Should there be any need for the Licensee of Wireless Facilities to utilize a contractor to perform work within or above the Electrical Supply Space on the GP&L system, they shall establish a separate contractual relationship with a GP&L contractor that is approved as a Qualified Electrical Worker.

# Section 7 - Application to Attach - Process and Procedures

Before Licensee makes any Attachment to Poles, including Wireless Facilities, or performs any Overlashing to existing Attachments, Licensee shall request permission, in writing, using the Application to Attach, Part I. GP&L, or GP&L's Representative, will approve, conditionally approve, or reject (in whole or in part), using the Application to Attach, Part II.

Licensee may request a pre-construction survey or routing analysis to be perform by GP&L, or GP&L's Representative, at Licensee's expense to review routing or clearance related issues on a Pole(s) to accommodate the installations to be proposed in Licensee's Application to Attach.

Licensee shall be responsible for the actual costs or fees associated with the review and inspection of the Poles covered by the Application to Attach. These costs and/or fees may include among others, administrative costs, engineering review, determination of Make Ready Costs, coordination, Pole Loading Analysis, inspections, or other related costs and expenses.

Licensee will be billed directly by the GP&L Representative, for their responsible costs whether unit, hourly and/or expense based as detailed in Section 21.

### **Application Fees**

Licensee shall submit to GP&L, or GP&L's Representative, an application fee to cover the administrative costs of processing each Application to Attach.

Failure to include payment of Application Processing Fee with the Application to Attach may result, in:

- The return of the Application to Attach to the Licensee as unapproved; or
- The placement of the Application to Attach on hold until payment is received.

Note: *GP&L may, at its sole discretion, require Licensee to provide a per Pole <u>deposit</u> for each Pole included on the Application to Attach form to <u>offset</u> the costs/fees associated with the review and inspection of the Poles covered by the Application to Attach.* 

### Wireline Attachments

### Information Required

- Detailed construction plans and drawings for each Pole line where Licensee desires to make Attachments as necessary to identify and locate the Poles where Licensee desires to attach.
- The number and character (includes type, outside diameter and associated weight per foot of the messenger and cable) of the Attachments to be placed on such Poles. Also required is the initial stringing tension of the messenger or the sag of the communications bundle as a percent of the span length.

- Number of Poles and Attachments requested.
  - A single Application to Attach form may be submitted for multiple Poles in a Pole line or continuous area of operations.
  - If one or more of the Poles will have more than one Attachment, then each separate Attachment must be denoted on the Application to Attach form.
  - No Application to Attach form shall include more than fifty (50) Poles unless prior written permission is obtained from GP&L.
- Licensee's desired start date.
- Licensee's contact information.
- Licensee will provide additional information as required by GP&L for verification of compliance with Specifications.

### **Overlash Requests**

Overlashing is subject to the Application to Attach process. Licensee shall provide all appropriate information as indicated above including information regarding the existing facilities being overlashed.

### Non-Guyed Service Drops

Licensee may attach a Non-Guyed Service Drop to a Pole prior to submitting an Application to Attach, provided the Non-Guyed Service Drop is installed in accordance with Specifications, and that Licensee submits the Application to Attach within thirty (30) days after installation.

### **Response Times**

Field Inspection and Analysis: GP&L, or GP&L's Representative, shall use their best efforts to respond to each Application to Attach within forty-five (45) days of the date received. Failure to respond within forty-five (45) days shall not constitute an automatic approval.

Make Ready Estimate: If Make Ready Work is required, GP&L, or GP&L's Representative, shall use their best efforts to furnish Licensee, via Application to Attach, Part II, a Make Ready Estimate within fourteen (14) days of the completion of the Field Inspection and Analysis. The Make Ready Estimate shall also include an anticipated timeframe as to when the required changes shall be completed if such timeframe is expected to exceed eight (8) weeks from receipt of the Make Ready Costs.

Licensee's Acceptance: If Licensee decides to make the requested Attachments, it shall respond in writing via Application to Attach, Part III, of said decision and pay the estimated costs for the Make Ready Work. Licensee shall be responsible for all Make Ready Costs associated with Licensee attaching to Poles.

Make Ready Work: Make Ready Work will not begin until written acceptance and payment of the estimated costs are received. GP&L shall use their best efforts to complete the Make Ready Work within the estimated timeframe and budget provided.

Approval: Upon completion of any required changes, payment in full of associated costs, Licensee shall have the right to make Attachments in accordance with the approved Application to Attach, Specifications, and the terms and conditions of the Agreement.

Any verbal requests and permissions for Attachments to GP&L Poles are not considered authorized. Any such verbal requests and subsequent permissions shall not be considered valid.

### Wireless Attachments

All Wireless Facilities also require an Application to Attach. See Section 13 for processes related to Wireless Facilities.

### Permit

A Permit includes all documents associated with an approved Application to Attach, including work directives and pole mapping, which authorize the Licensee to proceed with the installation as approved.

An approved Application to Attach shall be valid for ninety (90) days after issuance. Should Licensee need additional time for placing facilities, an extension may be requested. If after one-hundred and eighty (180) days Licensee has not placed their facilities, the Licensee must submit a new Application to Attach.

Licensee's construction crews installing communication facilities must carry a copy of all Permit documents for the location at which they are working. Failure to carry such documentation is grounds for shutdown by GP&L field personnel.

# **Section 8 - Inspections**

In connection with an Application to Attach an initial inspection will be done to determine what, if any, Make Ready Work will have to be done to accommodate a new Attachment or modified Attachment, including Overlashing, to insure that the existing Pole is in compliance with the Specifications.

Subsequent to the initial inspection, GP&L, or GP&L's Representative, may perform in progress inspections, post-installation inspections, and safety or compliance inspections, all costs for which the Licensee will be responsible.

#### In Progress Inspection

GP&L, or GP&L's Representative, may perform in progress inspections of Licensee's work to ensure Attachments are being made in accordance with Specifications and standards set forth in this document. The decision to perform in progress inspections shall be made at the sole discretion of GP&L. This decision shall be based upon the environment where Attachments are being placed and the previous performance of the Licensee.

#### Post Installation Inspection

GP&L, or GP&L's Representative, shall perform Post Installation Inspections of each new Attachment or modification made by Licensee upon notice from Licensee of the completion of the installation of Attachments.

Should Licensee fail to provide notice of completion within one-hundred and eighty (180) days from the approval of the Application to Attach, GP&L, or GP&L's Representative will proceed with the Post Installation Inspection. If Licensee postpones or cancels construction, without notice, Licensee will be responsible for all associated Post Installation Inspection expenses.

Additional Post Installation Inspections may occur should Attachments be found to be Noncompliant or improperly installed.

GP&L reserves the right to inspect the installation of Licensees' communications Attachments in relation to GP&L's facilities regardless of pole ownership.

### Safety and/or Compliance Inspections

GP&L, or GP&L's Representative, may perform periodic safety and compliance inspections in accordance with Article 10.A.3 of the Agreement

- Licensee may provide a representative to participate in safety and compliance inspections.
- Failure of Licensee to participate shall not relieve Licensee from any responsibilities or obligations associated with the results of an inspection.

- GP&L shall provide a description of the Licensee's violations, including the location of the Pole, the Pole number (if available), and provide Licensee an opportunity to review the violation.
- Licensee shall be responsible for all necessary corrective actions associated with the violations caused by Licensee.
- Licensee shall be responsible for all costs of any such inspection of Licensee's Attachments.

### Inventory

GP&L, or GP&L's Representative, may conduct a baseline Inventory and subsequent Inventories of Licensee's Attachments to Poles in accordance with Article 10.B of the Agreement.

- GP&L shall provide Licensee with at least sixty (60) days prior written notice of such Inventory.
- Licensee shall have the right, but not the obligation to accompany GP&L, or GP&L's Representative, on any and all Inventories.
- Licensee shall be responsible for all costs of any such Inventory to verify Licensee's Attachments to Poles.
- Where multiple third parties are included in the Inventory, all participating third parties and Licensee shall incur a prorated share of the cost of such Inventory.

Each Application to Attach will be reviewed to determine if any Pole on the Permit will require a pole loading analysis. GP&L, or GP&L's Representative, will gather the associated data and perform a pole loading analysis on any Pole per the NESC that requires Grade B construction, any Pole needing change out to correct a clearance violation, or any Pole it deems in its experience to be overloaded. Initial criteria for a pole loading analysis includes:

- All un-guyed non-tangent Poles with a deflection of 5 degrees or more with a span length equal to or greater than 200 feet.
- All un-guyed non-tangent Poles with a deflection of 5 degrees or more and three (3) or more foreign Attachments.
- All double circuit Poles, including tangent, dead-end and corner poles with more than one (1) foreign Attachment.
- Any existing deformed Pole with one or more foreign Attachments.

This criteria may be modified or changed as results and experience dictate.

### Process

- As part of the Application to Attach process, Licensee provides a map of Poles to be attached and the Attachment type and its characteristics.
- GP&L, or GP&L's Representative, reviews the Licensee map, Google Earth or equivalent and any pictures provided with the Permit prior to the initial field inspection to choose possible candidates for pole loading analysis.
- Field inspection data is gathered for those Poles requiring loading analysis. A final determination of Poles to be analyzed is made during this inspection as actual observed conditions may differ from the information reviewed above.
- A pole loading analysis is performed using a recognized software tool. Any Poles that fail are further analyzed to determine a Make Ready solution.
- Licensee is responsible for all costs associated with this Pole loading analysis.

GP&L requirements for third party supply and communication Attachments are based on the standards and Specifications set forth in this document. Installations shall be made in accordance with GP&L Distribution Construction Standards and other GP&L requirements ("Standards"). Additional requirements may be prudent or required for good practice under certain local conditions.

In the event GP&L amends the Guidelines and Procedures, Licensee shall make all required modifications at the next occurrence of any Licensee performance of work at the Pole or Poles.

GP&L will consider, but not necessarily allow, Attachments to non-wood poles (e.g., concrete, steel, fiberglass, or composite materials). Where such Attachments are requested, the Licensee shall provide any and all information required by GP&L for the completion of a detailed engineering analysis of the Pole. The Attachment will not be allowed if adequate information regarding the Pole is unable to be determined.

Prior to submitting an Application to Attach, the Licensee shall visually inspect the Pole for noticeable defects or damage and denote these the Application to Attach.

GP&L Standards define span length limitation for NESC Grade B and C construction for various combinations of conductors, attachments, and pole classes. When the addition of an Attachment to a Pole causes the span length limitations to be exceeded, the Attachment will only be allowed if the Pole is changed out to an appropriate class of pole, a mid-span pole is added to reduce the span lengths, or an engineering analysis demonstrating the structural sufficiency is performed by GP&L or its Representative.

No Licensee communication lines shall be attached to GP&L's metal or fiberglass street light poles.

### **Electric Service Connection**

All Attachments made to GP&L's electrical system shall be performed by GP&L. In the event Licensee or its agents connects any device to GP&L's electrical system without written approval, such connection shall be considered a Default in accordance with the terms and conditions of the Agreement, including all remedies provided for by the Agreement and to any other remedies available to GP&L at law or in equity.

### **Equipment Mounting**

Pole mounted equipment, such as cabinets, power supplies, etc., should generally not be installed on Poles which have power utility equipment installed (i.e. Transformers, capacitors, conduit Risers, etc.). Exceptions, particularly where an electric service connection is required, will be evaluated on a case by case basis and must be approved by GP&L. All communications Attachments shall be mounted in a configuration which preserves the ability of utility workers to easily and safely climb the Pole.

# See Reference Drawing REF-PA003

New equipment boxes shall be mounted on the same side of the Pole as pre-existing equipment boxes. Where possible, equipment boxes should be mounted on an in-line pole surface.

Equipment may be attached on an approved bracket arm or may be attached directly to the Pole provided appropriate standoff requirements are met. Dedicated equipment/antenna support brackets shall not exceed eighteen inches in length. The use of pole top extensions is prohibited except as approved for Wireless Facilities.

Extension arms or Stand-Off Brackets will be permitted contingent upon an engineering analysis demonstrating that the NESC pole loading requirements have been met as approved by GP&L. The extension arm or Stand-Off Bracket shall not be used to meet vertical clearance requirements.

If a Pole is topped for any reason, the untreated Pole top must be treated and covered.

#### Antennas

See Wireless Facilities, Section 13.

### **Common Use Poles with Foreign Electric Utilities**

Common use lines shall be jointly designed to account for the requirements of each electric utility.

The position of the circuits in the Supply Space for double-circuit installations will depend on the service territories. The lower position on the Pole of the double circuit shall be occupied by the electric utility who is providing service.

Span length should not exceed 250 feet for urban construction and 350 feet for rural construction.

Vertical and armless construction should be avoided.

A common Neutral shall be used and designed considering the fault current of both lines.

A minimum of 60 inches of vertical spacing on the Pole shall be maintained between each electric utility. The vertical spacing shall be increased as necessary to maintain the Mid-Span Clearances required by the NESC as a result of the tensions and sags of both utilities conductors. Additional spacing may be required to provide required clearance when equipment is attached to a Pole.

Anchors and guys shall not be common between utilities.

## Licensee Attachment and Connection Requirements

To reduce the impact of communication Attachments on mechanical pole loading and to preserve GP&L's ability to place facilities on its Poles, Attachments should generally be installed as low as permissible on the Pole. Where there are no previous attachments on the Pole, the first Attachment should be placed at the lowest position which complies with Specifications. Subsequent communication Attachments shall be made above the previous Attachments and be as low as possible to maintain required clearance from electrical supply and communication facilities. An exception is that medium to large multi-pair cables should always be placed as the lowest Attachment as these cables have the most sag.

Compliance with the NESC, GP&L Service Standards, Specifications, and other local, state, and federal laws, rules, and regulations is at all times the responsibility of the Licensee. Licensee is responsible for the engineering and design of its system. Facilities must be installed in accordance with the approved Application to Attach.

See Reference Drawings REF-PA008, REF-PA009, REF-PA010, REF-PA011, & REF-PA013

Where a pre-existing violation exists, an additional cable can be installed only if a) the additional cable can be installed in compliance with Specifications; and b) the existing Licensee(s) are able to adjust their facilities to provide space for the additional cable and both are in accordance with Specifications.

# **Facilities Allowed**

Subject to the terms and conditions of the Agreement, GP&L shall allow Licensees to attach to Poles for the provision of services. The terms and conditions of the Agreement shall not apply to the attachment of Wireless Facilities without a properly executed Wireless Addendum. GP&L may require Licensee to replace, relocate, modify, remove, or perform other work with respect to Licensee's Attachment on any Pole.

# **Construction Requirements**

1. Communications Attachments shall be installed on the same side of poles as GP&L's Neutral and secondary conductors and any existing communications cables (typically the street side) or as directed by GP&L. In the absence of any existing installation on Poles, communications Attachments should be installed on the street side of Poles.

# See Reference Drawing REF-PA001

- 2. Communications cables must be designed for installation as low as practical and to conform to GP&L's Construction Standard Reference Drawings, Specifications, and in accordance with any local, state and/or federal regulations.
- 3. Licensee must bond its messengers, cabinets, enclosures, and cables in accordance with the NESC. Licensee's facilities shall be bonded to the vertical pole ground on each Pole where the

ground exists using #6 S.D. bare copper wire. If an attaching company requires a separate bond and ground, it must be bonded to the grounding conductor at the base of the Pole in accordance with the NESC.

See Reference Drawing REF-PA004

- 4. Communication cables must be identified according to Section 11.
- 5. Licensee is responsible for coordinating adjustments of existing Attachments with appropriate third parties; prior permission to adjust existing cable facilities between any new Licensee and any existing Licensee should occur before any adjustments are made.
- 6. To provide safe climbing space on Poles, conduit Risers cannot be attached directly to Poles. Conduit Riser must be installed using an 8"Stand-Off Bracket. No more than three (3) customer conduit Risers can be attached to an 8" Stand-Off Bracket, and only one (1) Stand-Off Bracket assembly is permitted per Pole. All conduit must be galvanized steel.

### See Reference Drawing REF-PA003

- 7. GP&L does not permit communications Risers on Three-phase major underground dead-end Poles, Single-phase dead-end Poles, or Poles with pole-top switches.
- 8. Use of a U-guard is prohibited for new installations.
- 9. Horizontal Extension Arms shall not be used by Licensees to achieve required vertical clearance and/or horizontal separation. Attachments shall be arranged vertically on the Pole and mounted directly to the Pole. The use of extension arms, cross-arms, and Stand-Off Brackets must be approved by GP&L and requires a comprehensive mechanical loading analysis for all affected facilities.
- 10. Vertical extension arms are not acceptable equipment for use on Poles.
- 11. Overlashing of cable attachments and telecommunications Attachments shall be in accordance with Section 7.
- 12. Communications Service Drops may be installed in accordance with procedures outlined in Section 7. Communication Service Drops not reported to GP&L within thirty (30) days of installation will be treated by GP&L as Unauthorized Attachment, and the Service Drops are subject to removal at Licensee's expense.

See Reference Drawing REF-PA002

13. Each Licensee shall independently guy and anchor its respective facilities. Guying is required for third-party Attachments in all cases where such facilities add an unbalanced tension load to the Pole. Communications cables must be properly guyed and anchored before tensioning.

Licensee must install separate guying and anchoring devices to secure their cables. Licensees are responsible for ensuring that communication cables are independently guyed and anchored. Licensee is responsible for the costs of any damages to GP&L facilities resulting from improper guying and anchoring of its installation. Broken or damaged electrical guy wires should be reported to GP&L at 972-205-3000 and should be avoided until repaired. Third party guys and anchors shall be placed in accordance with GP&L Standards. Attachment to GP&L's guys and anchors is not an acceptable design or construction practice. Licensee may not place guy Attachments to GP&L anchors without GP&L's prior consent.

See Reference Drawing REF-PA005 & REF-PA006

- 14. Guy markers shall be installed and maintained on all guys.
- 15. Sidewalk guys shall only be allowed with prior consent.
- 16. Vegetation Management
  - a. Licensee is responsible for all vegetation trimming necessary on or around its Attachments, both during and after installation.
  - b. GP&L does not provide any vegetation trimming services for communication facilities.
- 17. Licensee shall check and verify the condition of any Pole prior to planning or performing work on it. If a Pole is deemed unsafe, Licensee must immediately cease all work and notify GP&L.

# Section 11 - Identification Guidelines for Communication Cables

To facilitate GP&L's notification to attaching companies during routine maintenance and in emergency situations, all communications cables on Poles must be identified with Cable Markers showing at least one of the following identifiers:

- The attaching company's generally recognized business name
- An identifying company logo
- An emergency telephone number
- Other mutually agreed upon identifying symbol

Effective when the Agreement is signed, all newly placed Attachments shall be identified by the installation of Cable Markers on the first and last Pole Attachment on each Pole line and at least every fifth Pole in between the first and last Poles and as necessary to ensure adequate identification. Cables existing before the Agreement is signed shall be tagged during ongoing maintenance and routine inspection activities. Likewise, cable plant acquired during purchases of other attaching companies' systems should be tagged during ongoing maintenance activities.

Cables shall be tagged at the time of installation. Licensees should make tagging an ongoing effort, and work toward complete tagging of all existing cables not previously tagged. Cable Markers shall be secured so as to remain permanently affixed to the Licensee's cable, and must:

- be resistant to fading from the effects of weather, chemicals, etc.
- be generally consistent in appearance for each Licensee throughout GP&L's service area
- have a typeface that is legible to an observer from ground level
- avoid the use of sharp edges and corners (if constructed of metal) to prevent injury to personnel and damage to cables
- be approved by GP&L

After three (3) years from the Effective Date of the Agreement, should GP&L encounter Licensee's facilities without the appropriate Cable Markers, GP&L may notify the Licensee of their failure to comply with this requirement. Should Licensee not install the necessary markers, GP&L may install the Cable Markers at Licensee's expense.

NOTE: For Licensees proposing to attach Wireless Facilities to Poles, all of the foregoing tagging requirements are applicable.

GP&L will not re-arrange or relocate any Attachments or other facilities owned or operated by third parties on its Poles to accommodate placement of any new Attachment.

In the event any third party Rearrangements are required, the Licensee is responsible for coordinating such work with the appropriate third parties, and as appropriate, directly compensating third parties for performing the work requested.

Where GP&L Make Ready work is required, GP&L, or GP&L's Representative, will provide an estimate to the Licensee. Upon receipt of the estimate Licensee will respond via the Application to Attach, Part III, indicating their decision to:

- Accept modifications and conditions indicated in the estimate and responsibility for payment of the estimated cost.
- Request modifications to the Application to Attach.
- Withdraw the Application to Attach from all Poles, and indicate that no further action is required.

GP&L will perform the Make Ready Work only after written acceptance and payment of the estimated costs for the required changes are received from Licensee. Licensee shall be responsible for all Make Ready Costs associated with Licensee attaching to Poles.

GP&L shall use their best efforts to complete the Make Ready Work within the estimated timeframe and budget provided.

# Section 13 - Wireless Facilities

Wireless Facilities includes without limitation, antennae, transmitters, receivers, hardware, apparatus, power supplies, devices or other equipment for the purpose of receiving, generating, and/or emitting radio frequency ("RF") energy. Cables, wires, and/or other components which are connected to such antennae, apparatuses, devices or other hardware placed on the same Pole shall be considered a part of the Wireless Facilities. All facilities that comprise a portion of an Attachment authorized by GP&L, whether owned by Licensee or by others, shall, be considered part of Licensee's Wireless Facilities and Licensee shall accept full responsibility for such facilities.

Licensee must execute GP&L's Wireless Addendum prior to the installation of any Wireless Facilities and follow the Wireless Application Process described below.

- All Wireless Facility locations shall be approved by GP&L prior to installation.
- All Wireless Facility design configurations shall be approved by GP&L prior to installation.
- All Wireless Facilities must be installed in accordance with the NESC, the Guidelines and Procedures, GP&L Standards, and all other codes, laws, and regulations.
- Only one wireless device installation is allowed per Pole (one radio and one antenna) in accordance with the NESC's safety and climbing requirements.
- The top of a Pole is generally reserved for GP&L's use, unless otherwise expressly approved or designated by GP&L.
- Wireless Facilities shall only be permitted on Poles that are accessible to aerial lift vehicles.
- Ground mounted equipment shall be placed at least six (6) feet from the base of any Pole for worker safety.
- Licensee shall be responsible for the cost of relocating existing communication facilities required to accommodate Licensee's Wireless Facilities.
- Antennae are to be mounted on the opposite side of the Pole from other communication facilities or GP&L supply conductors.
- Licensee shall obtain, at its own expense, all necessary franchise, licenses, permits or rights which relate to the installation and use of the Wireless Facilities and/or the Pole. Licensee shall provide verifiable proof of such documents to GP&L prior to any attachment, or the commencement of any Make Ready Work.
- Wireless Facilities shall be installed only on in-line, non-angle, non-dead end, wood distribution Poles.

### **Equipment Mounting**

Pole mounted equipment, cabinets, power supplies, etc., should generally not be installed on Poles which have power utility equipment installed (i.e. Transformers, capacitors, conduit Risers, etc.). Exceptions, particularly where an electric service connection is required, will be evaluated on a case by case basis and must be approved by GP&L. New equipment boxes shall be mounted on the same side of the Pole as pre-existing equipment boxes. Where possible, equipment boxes should be mounted on an in-line pole surface.

### Supply Space

All work in, around, or above the Supply Space or around any energized conductors must be performed either by GP&L or a contractor approved by GP&L and acting under the direction and control of GP&L. Licensee shall be responsible for all costs associated with any work relating to the installation or maintenance of its Wireless Facilities.

### Non-Emergency

No work shall commence within the Supply Space until GP&L provides its written approval of any contractors, summary of work and schedule. Licensee shall provide written notice of any such work for GP&L's review, at least five (5) business days prior to the desired start date of any installation, maintenance or modification of Licensee Wireless Facilities. Unless otherwise agreed to in writing by GP&L, all maintenance, installation, and other work within the Supply Space, shall only be performed during daylight hours.

### **Emergency Maintenance**

In the event that Licensee requires emergency repairs or maintenance to its Wireless Facilities located in the Supply Space, Licensee shall provide GP&L no less than one (1) hour prior notice and GP&L agrees to not unreasonably delay such work. Licensee shall be responsible for all costs associated with such work, including without limitation any costs associated with GP&L or GP&L's Representative providing direction and control. GP&L shall provide a 24-hour, 7-day per week emergency notification number. Calls shall be directed to the GP&L's dispatch operator, and the caller must be able to provide the following:

- Name of company making report;
- Exact location reporting problem;
- Name of contact person reporting problem;
- Telephone number to call back with progress report;
- Description of the problem in as much detail as possible;
- Time and date the problem occurred or began;
- Proposed corrective actions; and

• If appropriate, a statement that "This is an emergency" and that a problem presents a jeopardy situation to the physical plant of GP&L, Licensee or others as the case may be.

## FCC/FAA Compliance

Licensee is solely responsible for ensuring compliance with any and all Federal Communications Commission ("FCC") antenna registration requirements, Federal Aviation Administration ("FAA") air hazard requirements, or similar requirements with respect to the location of Licensee's Wireless Facilities on Poles. Without limitation, Licensee acknowledges and agrees that Poles are not "antenna support structures" within the meaning of the FCC's rules and that, accordingly, GP&L has no obligation of its own in this regard to register Poles with the FCC, the FAA, or other agencies.

Licensee must obtain any necessary FCC license and provide GP&L with written proof of such license prior to attaching. Such licenses must be kept up to date and Licensee shall provide updated written proof of such licenses whenever a license is renewed or new licenses are obtained.

If no FCC license is required, the Licensee must provide a written statement to GP&L, prior to attaching, warranting that all Wireless Facilities attached to Poles are exempt from a license requirement and that all such Wireless Facilities comply with the FCC's equipment authorization requirements contained in Part 15 of the FCC's rules. For as long as Licensee is not required to obtain an FCC license, Licensee shall provide such a written statement to GP&L on an annual basis.

Wireless Facility applicants shall provide: Analysis of the Radio Frequency Emissions of Proposed Wireless Facilities Under Section 1.1310 of the FCC's Rules and the FCC *OET Bulletin 65* (Exhibit 2 of Wireless Addendum).

Wireless Facility applicants shall provide: RADIO FREQUENCY EMISSIONS CERTIFICATION (Exhibit 3 of Wireless Addendum).

### Marking Requirements

Wireless Facilities that are installed on Poles must be clearly labeled as to the owner. Licensee shall periodically inspect its Wireless Facilities and replace the labels if necessary to ensure that the Wireless Facilities remain clearly labeled and that the signage, including text and warning symbols, remains clearly visible and up to date.

In addition, Licensee shall also affix a sign that:

- Identifies the applicable FCC exposure category (General Population/Uncontrolled or Occupational/Controlled);
- Identifies the FCC's recommended minimum approach distance as set forth in 47 C.F.R. 1.1301, et seq., and OET Bulletin 65; and

- Phone number for Licensee (in the event of an emergency).
- Is made of weather and corrosion resistant material.

Licensee shall place the sign so that it is clearly visible to workers who otherwise climb the Pole or ascend by mechanical means and affix said sign:

- No less than three (3) feet below the Wireless Facility (measured from the top of the sign);
- No less than nine (9) feet above the ground line (measured from the bottom of the sign); and
- In such a manner that does not impede pole climbing methods.

### Disconnecting and De-energizing

### Disconnect Switch

Licensee shall install a switch on each Pole to which it has attached a Wireless Facility with a transmitting antenna that operates to disconnect power from the antenna. The switch shall be clearly labeled.

### **De-energizing Wireless Facilities**

In the event a Wireless Facility needs to be de-energized to perform non-emergency work the following shall apply:

GP&L or its contractors shall contact the Licensee with a minimum of twelve (12) hours advance notice. The following information shall be provided:

- Identity of the GP&L representative and call back number.
- The unique identifier of the Wireless Facility.
- The site address and/or location, if available.

The Licensee shall de-energize the Wireless Facility at the requested time or at a time otherwise mutually agreed upon with GP&L.

- The procedures for de-energizing the subject Wireless Facility shall provide GP&L with a
  satisfactory on-site means to verify the Wireless Facility is de-energized. After remote
  power-down by Licensee, workers or contractors for GP&L may also operate the power
  disconnect switch in order to ensure that the antenna is not remotely re-energized while
  work on the Pole is still in progress.
- Upon completion of the work on the site, GP&L shall contact the Licensee to inform them that the Wireless Facility may be re-energized.
- The Wireless Facility shall not be re-energized by the Licensee without confirmation from GP&L.
- GP&L shall only re-energize the Wireless Facility with the Licensee's prior consent.

# Emergency De-energizing of Wireless Facilities

In the event a Wireless Facility needs to be de-energized in emergency working conditions, the following shall apply:

GP&L shall make a good faith effort to contact the Licensee. The following information shall be provided:

- Identity of the GP&L representative and call back number.
- The unique identifier of the Wireless Facility.
- The site address and/or location, if available.
- The nature of the emergency and/or site condition.

The Licensee shall immediately de-energize the Wireless Facility upon request in emergency working conditions.

If circumstances warrant, workers and contractors for GP&L may accomplish the power-down by operation of the power disconnect switch or by using any necessary means available without advance notice to Licensee.

Upon the completion of any necessary work to address the emergency, GP&L shall notify the Licensee that all work has been completed so that the Licensee can take any necessary actions to re-energize the Wireless Facility.

The Wireless Facility shall not be re-energized by the Licensee without confirmation from GP&L.

GP&L shall only re-energize the Wireless Facility with the Licensee's prior consent.

### Wireless Facility Application Process

Before Licensee makes any Wireless Facility Attachment to Poles, Licensee shall request permission in writing as described in Section 7. Licensee shall be responsible for all application fees and expenses associated with the review and inspection of the Poles covered by the Application to Attach as described in Section 7.

### Additional Information Required

- Licensee must submit one Application to Attach for each Pole proposed for Wireless Facilities.
- Applicant must submit the following information for each Wireless Facilities Attachment request:
- Specification for all equipment proposed for installation on Poles.
- A map showing the location of the pole proposed for the Wireless Facilities Attachment.
- Contact information of the person or entity responsible for the installation.

# Response Times

Response times shall be as described in Section 7.

Licensee shall at all times place, maintain, manage, transfer, and remove its Attachments so as to keep such Attachments in safe condition and in thorough repair, and in compliance with Specifications.

If existing Attachments of Licensee are found not to be in compliance with any provision of Specifications, any such changes necessary to bring the Attachments into compliance shall be made promptly by Licensee.

### **Emergency Situations**

In case of emergency threatening public safety or material property damage, Licensee shall correct such violation immediately. Should Licensee fail to correct such imminent danger situations promptly, GP&L may correct such situation and bill Licensee for the actual costs incurred. Whenever feasible, GP&L shall provide advance notice to Licensee and Licensee shall correct Noncompliant Attachments within thirty (30) days. If the Noncompliant Attachments are not corrected within the specified time, GP&L may perform such corrections and Licensee shall reimburse GP&L or GP&L's Representative for all costs associated with such correction.

#### **Nonfunctional Attachments**

Should any Licensee Attachment, or any part thereof, that becomes no longer fit for service, nonfunctional, or in any way abandoned by Licensee, then Licensee shall remove any of its Nonfunctional Attachments or any part thereof and submit a completed Notification of Attachment Removal form. Any Nonfunctional Attachments that remain after sixty (60) days' notice shall be deemed a Noncompliant Attachment.

Licensee shall remove Nonfunctional Attachments prior to any Attachment Overlashing.

### **Compliance Modifications**

Licensee shall remove, relocate, replace, renew, modify, rearrange, or Transfer its Attachments, or perform any other work in connection with its Attachments that is necessary

- to comply with Specifications;
- as may be required for GP&L's Development Plan; or
- for legitimate business requirements of other licensees or third parties affixed to a Pole(s),
  - Licensee shall not be required to perform any such work without reimbursement by the other licensee or third party.

Licensee shall complete the work required within a reasonable timeframe as set forth in the notice from GP&L. Licensee may request additional time to complete work in unusual cases.

GP&L may perform Compliance Modifications of Licensee's Attachments with Licensee's permission for operational efficiency.

When GP&L proposes to perform Compliance Modifications of Licensee's Attachments, GP&L shall give Licensee fifteen (15) days advance notice, except in case of an emergency. Notice of GP&L's intention to perform Compliance Modifications of Licensee's Attachments may be given concurrently with notice of the Pole relocation or replacement.

When GP&L elects not to perform Compliance Modifications of Licensee's Attachments, Licensee shall, on or before the date specified by GP&L, unless otherwise agreed to in writing, perform Compliance Modifications of its Attachments, including transfers to new or relocated Pole or Poles.

Should GP&L elect not to perform Compliance Modifications of Licensee's facilities, and should Licensee fail to perform Compliance Modifications after the date specified for such modifications and after third party and GP&L responsible work has been accomplished, whichever is later ("Licensee Modification Date"), GP&L shall have the rights as indicated in Article 8.D.7 of the Agreement.

Notices for compliance modifications may be provided through National Joint Utilities Notification System ("NJUNS") when appropriate.

In order to maintain effective and clear communications, Licensee shall maintain accurate and current contact information with GP&L for the following:

- Routine Operations: Name, Address, Phone, E-Mail
- 24 Hour Emergency: Name, Phone
- NJUNS: Member Code

The above information shall be provided to the GP&L Routine Operations contact below and promptly updated with any changes.

GP&L contact information is as follows:

- Routine Operations: Dick McFall
   Distribution Engineering Supervisor
   1755 Gasoline Alley
   Garland, TX 75040
   972.205.3468
   dmcfall@gpltexas.org
- 24 Hour Emergency: System Operations 972.205.3000
- NJUNS: Member Code - GPL

GP&L Representative contact information is found in Section 21.

Where GP&L plans for new Pole facilities within Licensee's Service Area, GP&L may notify Licensee to that effect stating the proposed location and character of the new Poles and whether or not such Pole facilities shall be eligible for Licensee's Attachments.

Notices of Pole line modifications may be provided through NJUNS when appropriate.

### New Pole Installations and Pole Replacements

Upon receipt of notification by GP&L of a new Pole line, Licensee shall respond within a reasonable period (not to exceed fifteen (15) business days) by submittal of an Application to Attach, should Licensee desire to attach to the new Pole(s).

The cost of erecting new Poles shall be borne by the parties as established in the Agreement.

### **Abandoned Poles**

Should GP&L choose to abandon to Licensee any Pole or Poles on which Licensee has any Attachments, GP&L shall give Licensee written notice at least sixty (60) days prior to the date on which GP&L intends to abandon said Pole or Poles. Should Licensee decline to accept ownership of said Poles, then Licensee shall reply in writing within fifteen (15) days of GP&L's notice and remove its Attachments from said Pole or Poles before the expiration of the sixty (60) day period.

If, at the expiration of said period, and GP&L's removal of all facilities on said Pole or Poles and Licensee has not removed its Attachments from said Pole or Poles, said Pole or Poles shall become the property of Licensee. GP&L shall furnish a bill of sale to Licensee evidencing the Transfer of ownership. Licensee shall pay GP&L the average net book value of said Pole or Poles for that height and class. GP&L does not guarantee to Licensee permission from property owners, municipalities, or others for the continued presence of an abandoned Pole.

Licensee acknowledges that Poles and related items may contain various hazardous chemicals or properties. It is the Licensee's responsibility to become familiar with the appropriate material safety data sheet and comply with such terms and all directions contained therein or otherwise required by local, state and federal law regarding the maintenance, replacement, and/or disposal of the Pole. GP&L does not warrant, guarantee, or imply that such abandoned Pole possesses sufficient mechanical strength as required by or for any use of Licensee.

# Section 17 - Property Rights

Non-GP&L facilities cannot be installed on GP&L's property or within the City of Garland's rightsof-way without prior written approval of GP&L.

In all situations, prior permission must be obtained from property owners and governmental entities for use of private property and public roads. GP&L assumes no responsibility for securing any permission that may be required, and attaching companies should not assume that such permission exists based solely on the presence of GP&L's facilities.

GP&L will not obtain or negotiate rights-of-way for the benefit of Licensee, and no guarantee is given by GP&L of permission from property owners, municipalities, or others. Licensee shall in all cases be solely responsible for obtaining appropriate consents, where necessary, from landowners and governmental entities.

Licensees must obtain all required permits and approvals from any municipality, homeowners association, or other public or private property owner. Licensee will be responsible for resolving property owner complaints regarding the location of their Attachments. The resolution to the issue may require removal and/or relocation of Licensee's Attachments at Licensee's sole expense.

Licensees are at all times responsible for obtaining property rights or easement from property owners and governmental entities for use of private property and public roads. GP&L's approval of a Permit in no way conveys a property interest in the underlying property. GP&L assumes no responsibility for securing any permission that may be required, and Licensees should assume no such permission exists based solely on the presence of GP&L facilities.

# **Section 18 - Foreign Poles**

A number of the Poles to which GP&L's electrical lines are attached are not owned by GP&L. GP&L cannot give permission to attach to these poles. Licensee is responsible for obtaining permission from the owners to install on these non-GP&L poles. When Pole ownership cannot be determined in the field, GP&L will assist in the identification of Pole ownership during the review of the Licensee's Application to Attach.

GP&L reserves the right to inspect any communications Attachments in relation to its own attachment on non-GP&L owned poles, if, and to the extent as permitted, such inspection is permitted by the third-party pole owner.

# Section 19 - Communication Attachments in Transmission ROW

Poles used to support Transmission conductors within GP&L's Transmission right-of-way ("ROW") will require the express written consent of GP&L and may be permitted or denied at the sole discretion of GP&L. Third-party communication Attachments will only be allowed in the Transmission ROW where there is existing Distribution System underbuilt. Any proposed third-party communication Attachments requested on GP&L's Transmission Poles, without Distribution System underbuilt are outside of the scope of this document and must be subject to a separately negotiated agreement.

For Transmission Poles with Distribution System underbuilt, where no previous communication Attachments exist, the first Attachment should always be placed at the lowest position that complies with the greater clearance requirements of Specifications. Subsequent communication Attachments shall be made above the previous Attachments and be as low as possible to maintain required clearance from supply facilities and proper spacing from the existing communication facilities.

All communication aerial and Risers (aerial to underground) Attachments to GP&L's Transmission Poles shall not be banded with stainless steel band or any other type of banding materials. The Attachments shall be bolted by drilling appropriate diameter holes or using factory provided holes if applicable. Bolts and clamps shall be galvanized. All Risers shall be attached by using stand-off method. Riser Stand-Off Brackets may be galvanized or aluminum. Cold galvanize shall be applied to all exposed raw metal surfaces where drilling into steel monopoles or cutting galvanized bolts.

# **Section 20 - Communications Attachments on Streetlight Poles**

GP&L will consider attachment to distribution Poles with streetlights on them subject to the same criteria that would be applied for requests to attach to other distribution Poles, pursuant to Section 7.

Any proposed third-party communication Attachments requested on GP&L's metal or fiberglass streetlight poles are outside of the scope of the requirements upon GP&L to accommodate Attachments, and are therefore not permitted.

All Attachments requested are subject to review for safety, reliability, engineering practice, and capacity concerns.

GP&L will utilize contractors, consultants, engineering firms, and representatives in order to meet the demands and obligations associated with attaching communication facilities to GP&L's Distribution System.

### TRC Engineers, Inc.

TRC Engineers, Inc. has been retained to administer GP&L's Joint Use Management Program. TRC will operate as GP&L's Representative to provide certain services. These services may include:

- Review Applications to Attach
  - Initial review for accuracy and completeness
  - Log and track
  - Field review
  - Determine required Make Ready
- Pole Loading Analysis
- Post and In Progress Inspections
- Direct Billing of Licensees for Make Ready Inspection Costs

### Direct Billing

To reduce the administrative burdens and costs to GP&L and Licensees, TRC will bill Licensees directly for the reimbursable services performed on behalf of GP&L.

### TRC Rate and Fee Schedule – Wireline Applications

- Application Fee: An administrative fee for the costs to prepare field inspection packages, maps, track the application, prepare and send notification/cost letters to all appropriate parties.
- Pole Inspection Fee: A per pole unit cost to gather field information necessary to prepare the Pole for Licensee's new or modified Attachment (does not include travel).
- Travel Fee: Costs to cover the travel expenses to and/or from the Pole assessment site.
- Hourly Fees: Those additional fees outside the standard inspection process not covered in the above fees including any required pole loading analysis.
- Post Installation Inspection Fee: A per Pole unit cost to ensure that Licensee's installation conforms to the design data and Specifications.

## TRC Rate and Fee Schedule – Wireless Applications

• <u>All costs related to Wireless Facility applications including Post Installation Inspection(s)</u> shall be invoiced based on TRC's hourly rate and expense schedule.

## TRC Contact Information

General Contact Information:

TRC Engineers, Inc. 700 Highlander Boulevard Arlington, TX 76015 Attention:

Application to Attach Submissions:

permitapplication@trcsolutions.com

# Section 22 - Reference Drawings

- REF-PA001 Pole Attachment Vertical Runs
- REF-PA002 Communication Attachment & Service Drop
- REF-PA003 Climbing Space Thru Communication Service Drops
- REF-PA004 Pole Attachment Grounding & Bonding
- REF-PA005 Pole Attachment Guying Requirements
- REF-PA006 Sidewalk Guys & Anchors
- REF-PA007 Communication Antenna Mounted in Communication Space
- REF-PA008 Supply and Communication Clearances (1 of 2)
- **REF-PA009** Supply and Communication Clearances (2 of 2)
- **REF-PA010** Supply and Communication Clearances at Midspan (1 of 2)
- **REF-PA011** Supply and Communication Clearances at Midspan (2 of 2)
- **REF-PA012** No Drawing for this Number
- REF-PA013 Supply and Communication at Pole
- REF-PA014 Wireless Attachments on Secondary/Service Pole





















4	$\mathbf{c}$	E	6.1	E	D	Λ.	
÷.,	u	c	1 M	E	ĸ	м	L

A. VERTICAL CLEARANCES SHALL BE MAINTAINED UNDER THE FOLLOWING CONDUCTOR TEMPERATURE AND LOADING CONDITIONS WHICHEVER PRODUCES THE LARGEST FINAL SAG:

1.120" F, NO WIND.

- 2-THE MAXIMUM CONDUCTOR TEMPERATURE FOR WHICH THE LINE IS DESIGNED TO OPERATE, IF GREATER THAN 120° F, NO WIND.
- 3.32° F, NO WIND WITH ½" RADIAL THICKNESS OF ICE.
- B. GREATER CLEARANCES THAN SHOWN ON OH-PA010 SHALL BE PROVIDED WHERE REQUIRED BY LOCAL CODES AND ORDINANCES OR CROSSING PERMITS ISSUED BY OTHER COMPANIES OR GOVERNMENTAL AGENCIES.
- TRUCKS ARE DEFINED AS ANY VEHICLE EXCEEDING 8 FEET IN HEIGHT. AREAS NOT SUBJECT TO TRUCK TRAFFIC ARE AREAS WHERE TRUCK TRAFFIC IS NOT NORMALLY ENCOUNTERED NOR REASONABLY ANTICIPATED.
- 3. SPACES AND WAYS SUBJECT TO PEDESTRIANS OR RESTRICTED TRAFFIC ONLY ARE THOSE AREAS WHERE RIDERS ON HORSEBACK OR OTHER LARGE ANIMALS, VEHICLES OR OTHER MOBILE UNITS EXCEEDING 8 FEET IN HEIGHT ARE PROHIBITED BY REGULATION OR PERMANENT TERRAIN CONFIGURATIONS OR ARE OTHERWISE NOT NORMALLY ENCOUNTERED NOR REASONABLY ANTICIPATED.
- 4. WHERE A SUPPLY OR COMMUNICATION LINE ALONG A ROAD IS LOCATED RELATIVE TO FENCES, DITCHES, EMBANKMENTS, ETC, SO THAT THE GROUND UNDER THE LINE WOULD NOT BE EXPECTED TO BE TRAVELED EXCEPT BY PEDESTRIANS, THIS CLEARANCE MAY BE REDUCED TO 9.5 FEET FOR INSULATED COMMUNICATION CONDUCTOR AND COMMUNICATION CABLES.
- WHERE THIS CONSTRUCTION CROSSES OVER OR RUNS ALONG DRIVEWAYS, PARKING LOTS OR ALLEYS NOT SUBJECT TO TRUCK TRAFFIC, THIS CLEARANCE MAY BE REDUCED TO 15 FEET.
- WHEN DESIGNING A LINE TO ACCOMMODATE OVERSIZED VEHICLES, THESE CLEARANCE VALUES SHALL BE INCREASED BY THE DIFFERENCE BETWEEN THE KNOWN HEIGHT OF THE OVERSIZED VEHICLE AND 14 FEET.
- THIS CLEARANCE MAY BE REDUCED TO 13 FEET FOR INSULATED COMMUNICATION CONDUCTORS AND COMMUNICATION GUYS.
- 8. SEE OH-PA009 FOR CLEARANCE BETWEEN SUPPLY AND COMMUNICATION SERVICE DROPS.

DRAWN BY: DM/JC	DATE: 6/27/16	APPROVED BY: DM 6/27/16	COMMUNICATION	POWER&LIGHT
REVISED BY:	DATE:	APPROVED BY:	MIDSPAN	REFERENCE DRAWING REF-PA011





# **APPENDIX A – APPLICATION TO ATTACH**

LICENSEE:

APPLICATION #:

Submit to TRC at the following email address: PermitApplication@trcsolutions.com

#### PART I (LICENSEE)

This **Application to Attach** is submitted pursuant to the terms of the Pole Attachment License Agreement (Agreement) by and between Licensee and Garland Power and Light (GP&L) and is governed by the provisions of that Agreement. A copy of the approved Application to Attach must be included with the work documents and present at the work location.

Date Licensee Anticipates Starting Construction \_\_\_\_\_\_ (Minimum 45 days from receipt of a valid Application to Attach or 60 days for Wireless Facilities.) This date reflects when you would like to begin your work on GP&L poles. TRC will contact you if they have any issues or concerns related to their ability to process this PA without working overtime. This does not include the GP&L Supply Space make-ready process.

□ Licensee authorizes overtime to EXPEDITE this Application to Attach

#### \*\*\* This Application to Attach or Modify Attachments must include a detailed map of the desired route with the start and end points clearly marked, otherwise submission will be denied. \*\*\*

NEW ATTACHMENTS	MODIFIED ATTACHMENTS		
<ul> <li>New attachment on (how many) Poles</li> <li>*New Small Cell or DAS NODE (how many) Communication Space</li> <li>*New Wireless equipment to wood poles</li> <li>*Camera on Poles</li> </ul>	<ul> <li>Overlash request (how many) Poles</li> <li>Relocate from Poles to Poles</li> <li>Replace node, wireless or camera equipment on Poles</li> <li>Remove equipment from Poles</li> </ul>		
WIRELINE ATTACHMENTS:         Messenger (1/4" EHS, 6M, 3/8" HTL, 10 M, etc.)         Initial String tension (pounds) (%sag/span length)         Type (Fiber, Coax, Multipair Cable, etc.)         Outside Diameter in Inches         Weight in Pounds per Foot         * NODE, WIRELESS or CAMERA:         Include GP&L approved design drawing with         Application to Attach	Existing Messenger (1/4" EHS, 6M, 3/8" HTL, 10 M, etc.) Initial String tension (pounds) (%sag/span length) Existing Type(s) (Fiber, Coax, Multipair Cable, etc.) Existing Outside Diameter in Inches Existing Weight Pounds per Foot New Overlash (Fiber, Coax, etc.) New Outside Diameter in Inches New Weight in Pounds per Foot		
Application to Attach	New Weight in Pounds per Foot		

Dated: \_\_\_\_\_ Licensee Representative: \_\_\_\_\_

### PART II (GP&L)

□ Approved
------------

- Denied
- □ Conditionally approved subject to the modifications and conditions on the attachment(s)

Dated:	GP&L Representative:	

PART III (LICENSEE)

Response required within 14 calendar days from date in Part II

□ Licensee accepts the modifications and conditions in Part II including responsibility for estimated costs.

Construction Start Date:

- □ Licensee requests modifications to the Application to Attach
- □ Applicant requests cancellation of the Application to Attach

Dated: \_\_\_\_\_ Licensee Representative: \_\_\_\_\_

<b>APPENDIX B – NOTIFICATION OF</b>	ATTACHMENT REMOVAL
-------------------------------------	--------------------

Licensee:	Licensee Request No.:		
	GP&L Request No.:		
	(To be completed by Licensee)		
То	Date:		
Licensee hereby provides notification of Licensee's attachments on Pole construction plans and drawings. Nor about	n, pursuant to its Pole Attachment License Agreement, of the remova belonging to GP&L. The attachments are detailed on the attached /ork will begin on or about and will be completed or		
This Appendix B is for the removal of Attachments on Poles (indicate total number of Poles).			
Name (Printed):	Phone:		
Signature:	Fax:		