

May 18, 2017

## VIA ELECTRONIC FILING

Utah Public Service Commission Heber M. Wells Building, 4<sup>th</sup> Floor 160 East 300 South Salt Lake City, UT 84114

- Attention: Gary Widerburg Commission Secretary
- RE: Docket No. 17-035-33 In the Matter of the Application of Rocky Mountain Power for Approval of the Pole Attachment Agreement between Rocky Mountain Power and MCImetro Transmission Access Services Corporation

The Company herein files its application in the above referenced matter.

Rocky Mountain Power respectfully requests that all formal correspondence and requests for additional information regarding these filings be addressed to the following:

By E-mail (preferred):

datarequest@pacificorp.com bob.lively@pacificorp.com daniel.solander@pacificorp.com

By regular mail:

Data Request Response Center PacifiCorp 825 NE Multnomah, Suite 2000 Portland, OR 97232

Informal inquiries may be directed to Bob Lively at (801) 220-4052.

Sincerely,

Jeffrey K. Larsen Vice President, Regulation

CC: DPU OCS Daniel E. Solander (11467) Rocky Mountain Power 1407 North W. Temple Suite 320 Salt Lake City, Utah 84116 Telephone No. (801) 220-4014 daniel.solander@pacificorp.com

Attorney for Rocky Mountain Power

## **BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH**

In the Matter of the Application of Rocky Mountain Power for Approval of the Pole Attachment Agreement between Rocky Mountain Power and MCImetro Transmission Access Services Corporation

#### DOCKET No. 17-035-33

APPLICATION OF ROCKY MOUNTAIN POWER

PacifiCorp, doing business in Utah as Rocky Mountain Power ("Rocky Mountain Power" or "Company") respectfully requests an order under Utah Admin. Code R746-345-3 approving a Pole Attachment Agreement (the "Agreement") between Rocky Mountain Power and MCImetro Transmission Access Services Corp. ("MCImetro or "Licensee"), dated April 19, attached hereto as Exhibit A. Rocky Mountain Power and MCImetro are referred to, individually, as a "Party" and together as the "Parties."

In support of its Application, Rocky Mountain Power states as follows:

1. Rocky Mountain Power is a public utility in the state of Utah, subject to the jurisdiction of the Commission with regard to its rates and service. As a public utility that permits attachments to its poles by an attaching entity, Rocky Mountain Power is obligated to provide that service pursuant to Utah Admin. Rule R.746-345. Rocky Mountain Power has previously submitted, and received Commission approval for, non-reciprocal pole attachment agreements with several parties.

2. Communications regarding this Application should be addressed to:

By e-mail (preferred):	datarequest@pacificorp.com
	bob.lively@pacificorp.com
	daniel.solander@pacificorp.com

By mail: Data Request Response Center Rocky Mountain Power 825 NE Multnomah St., Suite 800 Portland, OR 97232

> Bob Lively Rocky Mountain Power 1407 West N. Temple Salt Lake City, UT 84116 Telephone: (801) 220-4052

Daniel E. Solander Rocky Mountain Power 1407 West N. Temple, Suite 320 Salt Lake City, UT 84116 Telephone: (801) 220-4014

3. Under R746-345-3(B)(1), the parties to pole attachment contracts "may voluntarily negotiate an alternative contract . . . [and] shall submit the negotiated contract to the Commission for approval." The Agreement was voluntarily negotiated between Rocky Mountain Power and MCImetero and represents the Parties' agreed-to terms and conditions for MCImetro's attachments to Rocky Mountain Power's poles in Utah.

4. As with other pole attachment agreements approved by the Commission over the last several years, the Agreement negotiated between Rocky Mountain Power and MCImetro contains terms that differ from the agreement approved by the Commission on November 21, 2012, in Docket No. 10-035-97, known as the "Safe Harbor."

a. The Agreement modifies the definitions by: (1) adding a definition for Credit Requirements; (2) adding Periodic Safety Inspection terms to the definition for "Inspection"; (3) adding a definition for "Material Adverse Change"; and (4) updating the "Security" definition.

b. The Agreement also: contains changes to the Make-ready Work Process section, the Conformance to Requirements and Specifications section, and the Insurance and Bonding Requirements provision; allows a defaulting party additional time to cure a default if it is diligently pursing a cure; and allows assignment of the agreement without requiring the successor in interest to enter into a new agreement.

c. Additional minor changes from the Safe Harbor agreement are simply nonsubstantive wording changes or are changes negotiated between the parties. A table of contents was added for convenience.

WHEREFORE, Rocky Mountain Power respectfully requests that the Commission issue an order approving the Agreement submitted herewith and find the terms and conditions of the Agreement to be just and reasonable and in the public interest.

DATED this 18<sup>th</sup> day of May, 2017.

Respectfully submitted,

Daniel E. Solander Attorney for Rocky Mountain Power

## **CERTIFICATE OF SERVICE**

I hereby certify that I caused a true and correct copy of the foregoing **Application For Approval of the Pole Attachment Agreement between Rocky Mountain Power and MCImetro** be served upon the following by electronic mail to the addresses shown below on May 18, 2017:

### **Utah Office of Consumer Services**

Cheryl Murray - <u>cmurray@utah.gov</u> Michele Beck - <u>mbeck@utah.gov</u>

Division of Public Utilities Chris Parker - ChrisParker@utah.gov William Powell - wpowell@utah.gov Erika Tedder - etedder@utah.gov

Katie Savan

Katie Savarin Coordinator, Regulatory Operations

# Exhibit A

# **Pole Attachment Agreement**

## POLE ATTACHMENT AGREEMENT

## BETWEEN

## ROCKY MOUNTAIN POWER

## AND

#### MCImetro ACCESS TRANSMISSION SERVICES CORP.

Article I.	DEFI	NITIONS	1
Article Il	I. SCOP	PE OF AGREEMENT	3
	ection 2.01	Grant of License; Geographic Scope	
	ection 2.02	Attachments; Purpose	
	ection 2.03	Reservation of Rights	
Article II	I. LICE	NSEE'S USE OF POLES	
Se	ection 3.01	Application for Permission to Install Attachment	4
Se	ection 3.02	Make-ready Work	
	ection 3.03	Pole Replacement for Licensee's Benefit	
Se	ection 3.04	Mid-span Poles	
	ection 3.05	Pole Placement or Replacement for Joint Benefit	5
	ection 3.06	Licensee's Installation Responsibilities	
Se	ection 3.07	Identification of Equipment	
Se	ection 3.08	Conformance to Requirements and Specifications	
	ection 3.09	Nonconforming Equipment	
	ection 3.10	Interference with Rocky Mountain Power's Equipment	
	ection 3.11	Expense of Situating Pole Attachments	
	ection 3.12	Vegetation Management	
Se	ection 3.13	Third-party Consents, Permits, Licenses, or Grants	
	ection 3.14	Relocation of Attachments at Rocky Mountain Power's Option 1	
	ection 3.15	Removal of Attachments by Licensee 1	0
	ection 3.16	Damage to Equipment 1	
Se	ection 3.17	Inspections and Audits 1	1
	ection 3.18	Tax Liability 1	
Se	ection 3.19	Emergency Access 1	2
Article I	V. RENI	TAL PAYMENTS; FEES 1	2
Se	ection 4.01	Rental Amount1	2
Se	ection 4.02	Attachment Space 1	3
S	ection 4.03	Unauthorized Attachments 1	3
S	ection 4.04	Billing and Payments 1	3
Se	ection 4.05	Interest on Late Payments 1	4

## Article V. INDEMNIFICATION; LIMITATION OF LIABILITY;

WARRANT	ES	. 14
Section 5.01	Indemnification/Release	. 14
Section 5.02	Warranty	. 14

Article VI. II	NSURANCE	E, SECURITY AND CREDIT REQUIREMENTS	5
Section 6	5.01 Insurar	nce15	;
Section 6	5.02 Additio	onal Insurance Requirements15	5
Section 6	5.03 Securit	ty 16	5

Article VII. TER	M, DEFAULT AND TERMINATION	. 17
Section 7.01	Term and Termination	. 17
Section 7.02	Default	. 17
Section 7.03	Notice of Default/Cure Period	. 17
Section 7.04	Remedies for Default	. 17

Article VIII.	GENERAL PROVISIONS	. 18
Section 8.01	Entire Agreement	. 18
Section 8.02	Choice of Law/Venue	. 18
Section 8.03	Changes in Law	. 18
Section 8.04	Severability	. 18
Section 8.05	Encumbrances	. 18
Section 8.06	Headings and Exhibits	. 18
Section 8.07	Force Majeure	
Section 8.08	Assignments	
Section 8.09	Waiver	. 19
Section 8.10	Time is of Essence	. 19
Section 8.11	No Partnership	. 19
Section 8.12	No Third-party Beneficiaries	. 19
Section 8.13	Attorneys' Fees	. 19
Section 8.14	Waiver of Jury Trial	
Section 8.15	Agreement Notices	
Section 8.16	Operational Notice	. 20

THIS POLE ATTACHMENT AGREEMENT (this "Agreement"), dated as of Opril 19, 2017, is entered into by and between PACIFICORP, an Oregon Corporation, doing business in Utah as ROCKY MOUNTAIN POWER, hereinafter "Rocky Mountain Power," and MCImetro ACCESS TRANSMISSION SERVICES CORP. "Licensee", a Delaware Corporation.

WHEREAS, Rocky Mountain Power is engaged in the business of providing electric service to customers in certain areas within the state of Utah; and

WHEREAS, Licensee conducts its telecommunications business in a number of the same areas within Utah; and

WHEREAS, Licensee desires to attach its telecommunications Equipment to Poles owned by Rocky Mountain Power within the state of Utah and Rocky Mountain Power desires to grant Licensee access to such Poles in accordance with the terms and conditions of this Agreement.

NOW, THEREFORE, the Parties agree as follows:

## ARTICLE I. DEFINITIONS

The following terms, when used herein with initial capitalization, whether in the singular or in the plural, shall have the meanings specified in this Article I:

"Application" is an action where Licensee requests permission to add or modify its Attachment(s), or sends notification of its removal of previous Attachment(s). For each Application received, Rocky Mountain Power analyzes the data, updates its records, and responds to Licensee at least once per Application, regarding its approval or acknowledgement of the Application.

"Attachment(s)" means Pole Attachment(s) as defined in R746-345-2.E of the Utah Administrative Rules ("UAR"), except for antennas or wireless equipment placed on a Pole.

"Attachment Space" shall have the meaning set forth in UAR R746-345-2.B.

"Business Days" means days other than a Saturday, Sunday, or state or federal holiday when banks are authorized to be closed.

"Commission" means the State of Utah Public Service Commission.

"Cost Estimate" means a Cost Estimate prepared by Rocky Mountain Power, based either on anticipated actual costs on each individual piece of work or flat rates for Make-Ready Work when included in the Fee Schedule (Exhibit A). Rocky Mountain Power reserves the right to determine when flat rates are applicable according to the specific situation.

"Credit Requirements" means the most recently published senior, unsecured long-term debt rating (or corporate rating if such debt rating is not available) of (a) "BBB-"or greater from S&P, or (b)

"Baa3" or greater from Moody's, or such other indicia of creditworthiness acceptable to Rocky Mountain Power in its reasonable judgment.

"Distribution Construction Standards" means the current Rocky Mountain Power Distribution Construction Standards attached hereto as Exhibit B, and any subsequent revisions thereof.

"Electronic Notification System" or "ENS" means the electronic system, or combination of electronic systems designated by Rocky Mountain Power in its sole discretion, Licensee may utilize to submit Applications for permission to attach, relocate, or remove its Equipment, and complete any other notifications as required under the terms of this Agreement.

"Equipment" means cables, wires, antennas, wireless communication devices, conductors, fiber optics, insulators, connectors, fasteners, transformers, capacitors, switches, batteries, amplifiers, power supplies, devices, structures, materials, machines, appurtenances, articles, or apparatus of any sort, whether electrical or physical in nature, or otherwise, including without limitation all support Equipment such as guy wires, anchors, anchor rods, grounds, and other accessories.

"Fee Schedule" means the fees set forth in Exhibit A attached hereto, as may be amended from time to time in accordance with UAR R746-345-3.A.

"Inspection" means examination by Rocky Mountain Power of its Poles and all proposed or existing Attachments for the purpose of verifying the number and location of all Attachments and any other Pole-mounted Equipment of Licensee, or determining whether Licensee is in compliance with the terms of this Agreement, which includes the following four (4) types of Inspections:

- 1. Pre-Construction Inspection: Performed when Applications by Licensee are submitted for new Attachment and in included in the Utah Per Pole Application Fee.
- 2. Special Inspection: Rocky Mountain Power's field visit made at the request of Licensee for all non-periodic Inspections. A Special Inspection does not include Pre-Construction Inspections.
- 3. Audit: A periodic effort to collect information through examination by Rocky Mountain Power of all or any number of Poles that may have Licensee Attachments.
- 4. Periodic Safety Inspection: Any Inspection done by Rocky Mountain Power to review the safety and integrity of its Poles. If, upon inspecting a percentage of Licensee's reported corrections from a Periodic Safety Inspection that consists of a representative random sample and it is discovered that there is a failure rate of 15% or more, Rocky Mountain Power reserves the right to charge Inspection fees for a complete re-inspection of the reported corrections.

"Make-ready Work" means all engineering or construction activities necessary to make a pole, conduit, or other support equipment available for a new Attachment, Attachment modification or additional facilities. Make-ready work costs are non-recurring costs and are not contained in carrying charges.

"Material Adverse Change" means the occurrence of any event of default under any material agreement to which Licensee is a Party and of any other development, financial or otherwise,

which would have a material adverse effect on Licensee, or on Rocky Mountain Power's ability to remove the Attachments or to have access to its Poles.

"National Electrical Safety Code" or "NESC" means the current edition published by the Institute of Electrical and Electronics Engineers, Inc., as may be amended or supplemented from time to time.

"Party" means Rocky Mountain Power or Licensee, as the context requires; "Parties" means Rocky Mountain Power and Licensee.

"Pole" means any Pole owned by Rocky Mountain Power that is designed to carry distribution as defined in R746-345-2.C of the Utah Administrative Rules.

"Security" means a bond, cash escrow, letter of credit or parental guaranty, acceptable in form to Rocky Mountain Power in its sole and reasonable discretion, to assure performance by Licensee of its obligations hereunder, which shall be in an amount sufficient to pay Rocky Mountain Power for the cost to remove and dispose of Licensee Attachments and related Equipment, plus two years' of rental payment obligations under this Agreement. The calculation of the cost to remove and dispose of Licensee's Attachments and related Equipment shall be Rocky Mountain Power's current hourly wage rate of a two-person crew multiplied by the number of actual Attachments.

"Service Drop" means a connection from distribution facilities to the building or structure being served.

## ARTICLE II. SCOPE OF AGREEMENT

## Section 2.01 Grant of License; Geographic Scope

In accordance with the terms and conditions of this Agreement, Rocky Mountain Power hereby grants Licensee the non-exclusive right to attach its Equipment pertaining directly to its business purpose as defined in Section 2.02. Licensee Attachments hereunder shall be limited to Rocky Mountain Power's Poles within the state of Utah.

Attachments to Rocky Mountain Power Poles which are not solely designed to accommodate distribution will be reviewed and approved at Rocky Mountain Power's sole discretion. Nothing in this Agreement shall be construed to obligate Rocky Mountain Power to grant Licensee permission to use any particular Pole or Poles.

With the exception of construction on existing slack spans or on existing messengers attached to Poles carrying voltages 34.5kV and above, Licensee may overlash one instance of up to forty-eight (48) or less count fibers, as well as coaxial cable of equivalent weight(s) without submitting a permit. For these specific instances of overlashing, Licensee will provide Rocky Mountain Power with maps of the proposed overlash route and Pole numbers along with physical characteristics of what is being Overlashed ten (10) days prior to such overlashing. Licensee agrees to correct any of Licensee's existing non-compliant Equipment at the time of the overlashing such that the Equipment conforms to requirements and specifications as outlined in Section 3.08.

## Section 2.02 <u>Attachments; Purpose</u>

Licensee's use of Poles shall be confined to the Attachments which Rocky Mountain Power may give Licensee prior written permission to install for the sole purpose of providing: communications services (the "Permitted Purpose") service. This Agreement does not apply to wireless, Wi-Fi and Pole-Top Attachments.

In the event Licensee intends to expand or modify its Permitted Purpose, Licensee shall provide at least ninety (90) days advance written notice to Rocky Mountain Power. Following receipt of such notice, Rocky Mountain Power shall determine in its sole discretion, whether to permit the modification or expansion and if permitted, whether this Agreement shall be amended accordingly or whether Licensee shall be required to enter into a new agreement.

## Section 2.03 Reservation of Rights

Rocky Mountain Power reserves the right, in its sole judgment, to reject Applications for Attachments to its Poles for the following reasons:

- a. Insufficient capacity once all reasonable potential accommodations have been considered by Rocky Mountain Power and communicated to Licensee.
- b. The Poles are necessary for Rocky Mountain Power's own sole use or the Attachments would threaten Rocky Mountain Power's system reliability.
- c. The proposed Attachment is considered to be unsafe according to the NESC, Rocky Mountain Power's Distribution Construction Standards (Exhibit B) or Commission safety rules.
- d. Unreasonable interference with Rocky Mountain Power's or a third-party's Equipment.
- e. Licensee's account with Rocky Mountain Power is not current (i.e. all undisputed invoices are not paid on time).
- f. Licensee is in default of this Agreement.

## ARTICLE III. LICENSEE'S USE OF POLES

## Section 3.01 Application for Permission to Install Attachment

With the exception of service drops, as addressed in Section 3.06, and certain overlashing as addressed in Section 2.01, Licensee shall not have the right to place, nor shall it place, any Equipment upon Poles without first making Application and receiving permission to do so; nor shall Licensee modify the position of any Attachment upon any Poles without first making Application and receiving permission to do so.

Licensee shall apply for prior permission from Rocky Mountain Power to place any Equipment upon any Poles, or overlash its Equipment to any existing Attachments or other Equipment already attached to Poles, in writing or via the Electronic Notification System (ENS). The Application shall include, without limitation: all location information with Rocky Mountain Power's Pole numbers; description of Equipment to be attached; engineering information for the calculation of Pole loading, clearances and viability of each Pole to accept the Attachment; indication of required Make-ready Work as outlined in Section 3.02; and all applicable contact information for Licensee or Licensee's qualified contractor. Rocky Mountain Power will either approve or deny Applications in writing in accordance with the requirements of UAR R746-345-3.

Licensee shall promptly submit payment for all fees applicable to the assessment of proposed Attachments pursuant to the Fee Schedule (Exhibit A) within forty-five (45) days after receipt of an invoice from Rocky Mountain Power. Rental charges for each approved Attachment shall be in accordance with Section 4.01 pursuant to the Rental Rate Schedule (Exhibit A).

#### Section 3.02 <u>Make-ready Work Process</u>

Licensee shall identify in its Applications any Make-ready Work necessary to accommodate its Attachments. If in the sole judgment of Rocky Mountain Power, the accommodation of any of Licensee's Attachments necessitates Make-ready Work, Rocky Mountain Power shall provide the Cost Estimate for the Make-ready Work in its response to Licensee's Application within the applicable Application processing time period identified in UAR R746-345-3. Licensee shall indicate whether it accepts or rejects the Cost Estimate by returning Rocky Mountain Power's Make-ready Work notice, signed by an authorized Licensee representative, within thirty (30) days of Rocky Mountain Power's Cost Estimate notice.

Licensee's failure to accept or reject the Cost Estimate within said thirty (30) day period shall be deemed as rejection of the Make-ready Work and revocation of its Application to attach to Pole(s) requiring Make-ready Work. Upon rejection of a Cost Estimate or failure to timely reject a cost estimate, Rocky Mountain Power will cancel the Cost Estimate and close the Application request. Licensee shall be obligated to pay Rocky Mountain Power for its costs related to preparation of a Make-ready Work Cost Estimate, regardless of whether Licensee accepts or rejects the Cost Estimate. If licensee determines at a later date that it still desires to attach, it shall submit a new Pole Application for the Attachments.

Rocky Mountain Power shall provide Licensee an estimated completion date for any Make-ready Work, taking into account the timeframes set by UAR 746-345-3, the overall scope of Licensee's project, the volume of Applications received from other licensees, as well as the availability of crews to perform the work. Licensee and Rocky Mountain Power shall negotiate solutions in good faith when the estimated time to perform the Make-ready Work does not meet Licensee's project requirements. At Licensee's option and upon approval from Rocky Mountain Power, Licensee may request either assistance with the work by Licensee or by qualified contractors hired by Licensee, payment of premium rates for Rocky Mountain Power's employees to be dedicated to perform work solely on Licensee's project, or similar measures designed to augment Rocky Mountain Power's capabilities. If Licensee chooses to employ a self-build option as provided in UAR 746-345-3.C to complete the Make-ready Work, to ensure safety and reliability, the qualified contractor and the schedule must be approved by Rocky Mountain Power.

If Licensee accepts the Make-ready Cost Estimate, Rocky Mountain Power shall perform such Make-ready Work as may be required and Licensee shall pay Rocky Mountain Power for the Make-ready Work in accordance with the procedures outlined in UAR 746-345-3. Licensee shall pay the costs of all Make-ready Work undertaken by Rocky Mountain Power where such work is initiated as a result of the proposed installation of Attachments on any Poles without regard to whether Licensee elects not to use the Pole or Poles after Make-ready Work has commenced. Upon

request, Rocky Mountain Power shall provide Licensee a statement of the actual material, hours, equipment costs, and any other associated costs for payment of Make-ready Work. If requested by Rocky Mountain Power, Licensee shall submit pre-payment for the estimated Make-ready Work in accordance with UAR 746-345-3.C.7.

Failure to respond to a Cost Estimate, not related to an Application where the work is required to meet the requirements set forth in Section 3.08, within (30) days shall be deemed acceptance thereof by Licensee. If Licensee accepts or fails to timely reject the Cost Estimate, Rocky Mountain Power may perform such Make-ready Work, and Licensee shall reimburse Rocky Mountain Power for the entire expense thereby actually incurred, without regard to whether Licensee elects not to use the Pole or Poles after Make-ready Work has commenced. Licensee shall be obligated to pay Rocky Mountain Power for its costs related to preparation of Make-ready Work Cost Estimate, regardless of whether Licensee accepts or rejects the Cost Estimate.

## Section 3.03 Pole Replacement for Licensee's Benefit

Where an existing Pole is prematurely replaced by a new Pole for the benefit of Licensee, Licensee shall reimburse Rocky Mountain Power for all costs, including, but not limited to, the cost to replace the Pole, transfer and any required replacement of existing Rocky Mountain Power equipment, lower and haul of the existing Pole, and topping of the existing Pole when performed either as an accommodation to Licensee or as required by the NESC. Rocky Mountain Power shall remove and may retain or dispose of such Pole as the sole owner thereof. Any payments for Poles made by Licensee shall not entitle Licensee to ownership of any part of said Poles.

#### Section 3.04 Mid-span Poles

Any Poles erected by Licensee shall not interfere with, or be in-line with Rocky Mountain Power's Poles, and shall not create a structure conflict as defined in the NESC. If Licensee requires placement of a Pole in-line with any existing Poles ("i.e., a mid-span Pole"), Licensee shall notify Rocky Mountain Power of its need and Rocky Mountain Power shall determine the feasibility of such request and the request shall not be unreasonably denied. Licensee shall pay Rocky Mountain Power for all costs incurred by Rocky Mountain Power in installing such additional Poles. Rocky Mountain Power shall have sole ownership of the mid-span Pole and Licensee shall pay rental fees to Rocky Mountain Power in accordance with Article IV.

## Section 3.05 <u>Pole Placement or Replacement for Joint Benefit of Rocky Mountain</u> <u>Power and Licensee</u>

Where Rocky Mountain Power requires a new Pole for its utility purposes irrespective of Licensee's Attachment and Licensee requires a Pole with extra height or strength exceeding Rocky Mountain Power's requirements, Licensee shall pay to Rocky Mountain Power a sum equal to the difference between the cost, of erecting a Pole adequate to meet Rocky Mountain Power's needs, and the actual cost, of erecting a Pole adequate to meet both Parties' needs. Rocky Mountain Power shall bear the remainder of the cost of erecting such Pole. Each Party shall transfer its Equipment at its own cost.

## Section 3.06 Licensee's Installation Responsibilities

Licensee shall complete the installation of its Attachments upon the Pole(s) covered by each approved Application within one hundred eighty (180) days following approval by Rocky Mountain Power. Licensee shall provide written notice to Rocky Mountain Power of its completion within five (5) Business Days of the actual installation.

In the event Licensee fails to complete installation of its Attachments within the prescribed time limit, the permission granted by Rocky Mountain Power to place Attachments upon the Pole or Poles shall automatically terminate and Licensee shall be required to reapply and receive permission to do so, all as prescribed in Section 3.01 as applicable to the initial Application. Licensee's failure to actually install its Equipment, after it has received approval from Rocky Mountain Power, shall not constitute entitlement for any refund or reduction of fees or rental charges incurred for its proposed Attachments.

Licensee shall have the right to install service drops prior to, but still subject to, approval by Rocky Mountain Power. However, when Licensee installs service drops, Licensee must follow all procedures applicable to Attachments generally, except that the Application pertaining to the service drop must be submitted to Rocky Mountain Power no later than five (5) Business Days after installation. Should Rocky Mountain Power deny permission to install the service drop, Licensee shall remove the service drop immediately. If Licensee has not removed its Attachments or fails to contact Rocky Mountain Power requesting a reasonable extension within the five (5) Business Day period, or in the case of emergencies, within the period specified by Rocky Mountain Power, Rocky Mountain Power may remove Licensee's Equipment at Licensee's sole risk and expense, and Licensee shall pay, upon demand, for all costs thereby incurred by Rocky Mountain Power.

Licensee need not submit Applications for additional Attachments within the permitted Attachment Space for mid-span service drops from permitted Pole Attachments, or service drop risers and associated Equipment attached directly to the Pole.

## Section 3.07 Identification of Equipment

Licensee shall comply with UAR R746-345-4 regarding Attachment labeling, Licensee shall clearly mark Attachments with suitable identification visible from the ground that will not interfere with other facility identification, as mutually agreed to by both Parties.

## Section 3.08 Conformance to Requirements and Specifications

Licensee shall, at its sole risk and expense, place and maintain its Equipment upon the Pole in conformity with the requirements and specifications of the NESC and such requirements and specifications as Rocky Mountain Power shall from time to time prescribe, including without limitation or the current Rocky Mountain Power Distribution Construction Standards (Exhibit B). In the event of any conflict between any of the requirements and specifications of the NESC, and those prescribed by Rocky Mountain Power, the more stringent requirements and specifications shall govern.

Licensee (including its employees and contractors) shall not enter Rocky Mountain Power's electric utility space for any purpose including making connections to the Rocky Mountain Power neutral. If Licensee requires grounding on an existing Pole where a grounding conductor does not exist, Licensee shall request that Rocky Mountain Power install grounding at the sole expense of Licensee. Licensee, its employees and its contractors, shall at all times exercise Licensee's rights and perform Licensee's responsibilities under the terms of this Agreement in a manner that treats all electric facilities of Rocky Mountain Power as energized at all times. Licensee shall indemnify, defend, and hold Rocky Mountain Power harmless from any liability of any sort derived from Licensee's employees' or contractors' failure to abide by the terms of this paragraph.

Licensee's Facilities shall be placed and maintained in accordance with the requirements and specifications of the latest editions of the "Blue Book - Manual of Construction Procedures" (Blue Book), published by Telcordia Technologies Inc.; the "National Electrical Code" (NEC), published by the National Fire Protection Association, Inc.; the "National Electrical Safety Code" (NESC), published by the Institute of Electrical and Electronics Engineers, Inc.; rules and regulations of the U.S. Department of Labor issued pursuant to the "Federal Occupational Safety and Health Act of 1970", as amended, (OSHA) or any governing authority having jurisdiction over the subject matter; and Outside Plant Handbook MCI 046 302 3802 Issue 07, April 2005, as amended from time to time . Where a difference in specifications may exist, the more stringent shall apply.

In the event that a streetlight photo-control socket is used to supply energy to Licensee's Equipment, the installation of which shall be performed only by a Rocky Mountain Power-approved qualified worker, Licensee shall: 1) assume responsibility for all costs associated with repair necessary due to such installation; 2) shall indemnify and hold Rocky Mountain Power harmless for any claims associated with a power outage caused by such installation; and 3) ensure that the light is working after installation, provided Licensee didn't previously notify Rocky Mountain Power of a malfunctioning of the light within two (2) Business Days of discovery of such malfunction and prior to installation of Licensee's Equipment.

## Section 3.09 Nonconforming Equipment

If any Attachment is not placed and maintained in accordance with the requirements and specifications of Section 3.088, Rocky Mountain Power reserves the right to correct said condition upon Licensee's failure to do so. Such work shall be performed at Licensee's sole risk and expense. Rocky Mountain Power shall make commercially reasonable efforts to notify Licensee in writing prior to performing such work. However, if Rocky Mountain Power determines the conditions pose an immediate threat to the safety of utility workers or the public, interfere with the performance of Rocky Mountain Power's service obligations, or pose an immediate threat to the integrity of Rocky Mountain Power's Poles or Equipment, Rocky Mountain Power may perform such work, without prior notice, at the sole risk and expense of Licensee. As soon as practicable thereafter, Rocky Mountain Power shall notify Licensee in writing of the work performed. Licensee shall pay, upon demand, all costs thereby incurred by Rocky Mountain Power.

## Section 3.10 Interference with Rocky Mountain Power's Equipment

If, in Rocky Mountain Power's judgment, Licensee's existing Attachments on any Pole interfere with Rocky Mountain Power's existing Equipment or prevent the placing of any additional Equipment by Rocky Mountain Power, Rocky Mountain Power shall notify Licensee in writing of rearrangements or transfers of Licensee's Attachment, Pole replacements or other changes required in order to continue to accommodate Licensee's Attachments. If appropriate, this notice shall include a Cost Estimate for any applicable Make-ready Work by Rocky Mountain Power to accommodate Licensee's continued Attachment.

If Licensee desires to continue to maintain its Attachments on a Pole where a Cost Estimate has been provided for accommodation work to be completed by Rocky Mountain Power, it shall return Rocky Mountain Power's notice of the Cost Estimate, signed by an authorized Licensee representative, within thirty (30) days. If Licensee does not accept the cost to accommodate its continued Attachment, Licensee shall remove its Attachments from the affected Pole or Poles within thirty (30) days from such notification by Rocky Mountain Power; provided, however, that Rocky Mountain Power in any emergency may require Licensee to remove its Attachments within the time required by the emergency. Licensee shall notify Rocky Mountain Power of its removal within five (5) Business Days of completion of the removal.

If Licensee has not removed its Attachments at the end of the thirty (30) day period, or in the case of emergencies, within the period specified by Rocky Mountain Power, Rocky Mountain Power may remove Licensee's Equipment at Licensee's sole risk and expense, and Licensee shall pay, upon demand, for all costs thereby incurred by Rocky Mountain Power.

#### Section 3.11 Expense of Situating Pole Attachments

Licensee shall place, maintain, rearrange, transfer, and remove its own Attachments at its own expense except as otherwise expressly provided hereunder. Nothing in this Agreement shall prohibit Licensee from seeking reimbursement for costs it incurs from third-party requests; however, all required work to be completed by Licensee must meet the timeframe prescribed by Rocky Mountain Power, without regard to third-party cost recovery negotiations.

## Section 3.12 <u>Vegetation Management</u>

All vegetation management in connection with the initial placement of wires or other Attachment shall be undertaken entirely by the Party placing the wires or other Attachment at such Party's sole risk and expense. Unless agreed to otherwise, each Party shall be responsible for any and all vegetation management related to the wires or Attachment it owns. If Licensee fails to fulfill its obligations of this section, Rocky Mountain Power shall provide written notice to Licensee that if the issue is not resolved within thirty (30) days, Rocky Mountain Power shall perform the required remedy at Licensee's sole risk and expense.

#### Section 3.13 Third-party Consents, Permits, Licenses, or Grants

The right of access to Rocky Mountain Power's Poles granted by this Agreement does not include any right of access to the land upon which the Pole is situated nor does it include any right to cross the land from Pole-to-Pole with Licensee's Equipment and such access rights are specifically disclaimed. Licensee shall be solely responsible for obtaining from public authorities and private

owners of real property and maintaining in effect any and all consents, permits, licenses or grants necessary for the lawful exercise by Licensee of the permission granted by Rocky Mountain Power hereunder. Licensee agrees to indemnify, defend and hold harmless Rocky Mountain Power against and from any and all third-party claims, demands, law suits, losses, costs and damages, including attorney's fees, to the extent arising from Licensee's failure, or alleged failure to have the requisite authority. Rocky Mountain Power, at any time, may require Licensee to submit written documentation of compliance with this section. Upon notice from Rocky Mountain Power to Licensee that necessary permission for the use of any Pole or Poles has expired, or has not been secured from property owners or public authorities, any permission granted covering the use of such Pole or Poles shall immediately terminate and Licensee shall remove its Equipment from the affected Pole or Poles within thirty (30) days of said notice, or within the period required by the property owners or public authorities, whichever is shorter. If Licensee has not removed its Equipment within said period, Rocky Mountain Power may remove Licensee's Equipment from such Poles without incurring any liability and Licensee shall, upon demand, pay Rocky Mountain Power all costs incurred by Rocky Mountain Power in the removal of Licensee's Equipment.

#### Section 3.14 Relocation of Attachments at Rocky Mountain Power's Option

Licensee shall at any time at its own sole risk and expense, upon notice from Rocky Mountain Power, relocate, replace, repair, or perform any other work in connection with the Attachments that may be required by Rocky Mountain Power, within thirty (30) days unless another timeframe is specified in writing by Rocky Mountain Power. Licensee shall provide written notification to Rocky Mountain Power within five (5) Business Days of its completion. Provided, however, that in cases of emergency or if Licensee does not complete required work by the end of the thirty (30) day period or other period specified by Rocky Mountain Power, Rocky Mountain Power may, without incurring any liability, except for Rocky Mountain Power's gross negligence or intentional misconduct, complete any work in connection with Licensee's Attachments that may be required, and Licensee shall reimburse Rocky Mountain Power for the entire expense thereby incurred.

Where Rocky Mountain Power replaces its Pole and cannot remove the replaced Pole due to Licensee's Attachment, Rocky Mountain Power shall remove the top of the Pole to allow Licensee to relocate its Attachment to the new Pole, and Rocky Mountain Power shall make a return trip to remove the replaced Pole. Licensee shall reimburse Rocky Mountain Power for the cost incurred for the topping and return trip.

At Rocky Mountain Power's option, Rocky Mountain Power shall transfer Licensee's Attachment(s) when possible, at the listed rate in the Fee Schedule (Exhibit A) or for the actual cost of the transfer if a listed rate is not in place. If Equipment is needed for the transfer, Licensee shall supply the Equipment.

#### Section 3.15 <u>Removal of Attachments by Licensee</u>

Licensee may at any time remove its Attachments from any of the Poles and, in each case, Licensee shall immediately give Rocky Mountain Power written notice of such removal and removal shall occur within five (5) days of the notice. Removal of the Attachments from any Pole shall constitute a termination of Licensee's right to use such Pole. Licensee shall not be entitled to a refund of any rental on account of any such removal. When Licensee removes Attachments, the applicable Attachment count shall be reduced in the next annual billing cycle following Licensee's proper

notice to Rocky Mountain Power of the removal. When Licensee performs maintenance to or removes or replaces its Attachment on a Rocky Mountain Power Pole, Licensee shall chemically treat all field drilled holes and plug any unused holes, including those resulting from removal of Attachment. If Licensee fails to adequately plug and treat such holes, Rocky Mountain Power may do so at Licensee's sole risk and expense.

If Licensee has not removed its Attachments within five (5) days of notice or fails to contact Rocky Mountain Power requesting a reasonable extension within five (5) Business Days, such Attachments(s) will be subject to unauthorized Attachment in accordance with Fee Schedule (Exhibit A).

## Section 3.16 Damage to Equipment

Licensee shall exercise all necessary precautions to avoid causing damage to Rocky Mountain Power's Poles and Equipment and other Pole users' Equipment. Licensee shall assume responsibility for any and all loss from any such damage and shall reimburse Rocky Mountain Power for the entire expense incurred in making repairs.

## Section 3.17 Inspections and Audits

*Inspections.* Rocky Mountain Power shall have the right to perform an Inspection (other than Audits) for each of Licensee's Attachments upon Rocky Mountain Power Poles at any time. Except for routine Periodic Safety Inspections and Audits, Rocky Mountain Power may charge Licensee for the expense of any such Inspections, including Inspections for Make-ready Work, Pre-Construction Inspections, and any other Inspections requested by Licensee or deemed necessary by Rocky Mountain Power.

*Audits.* Rocky Mountain Power may conduct an Audit of Attachments made to its Poles no more frequently than once every five (5) years. Rocky Mountain Power shall give Licensee at least ninety (90) days prior notice of an initial meeting to plan the next Audit. At such meeting, Rocky Mountain Power, Licensee and all other Pole attachers in attendance in person or by representative shall participate in, among other things, review of the predicted costs to perform an audit, the selection of an independent contractor for conducting the Audit, as well as the scheduling, scope, extent and reporting of the Audit results. Regardless of whether Licensee attends the Audit planning meeting or expresses an intention to participate in the Audit, Rocky Mountain Power shall advise Rocky Mountain Power if Licensee desires to participate in the Audit. Licensee shall advise Rocky Mountain Power if Licensee and all other attachers on the Poles and used to update the Parties' records. Any Party shall make any objections to the Audit results within ninety (90) days of receipt of the Audit report or such objections are waived.

The cost of the Audit shall be included in the rental rate pursuant to the methodology approved by the Commission for such purposes. To the extent that during such a joint Audit, the respective Parties request items to be added to the Audit, beyond the scope predicated in the Rocky Mountain Power carrying charge, the additional costs for such items shall be the sole responsibility of the Party requesting them.

## Section 3.18 <u>Tax Liability</u>

Licensee shall promptly pay any tax, fee, or charge that may be levied or assessed against Rocky Mountain Power's Poles or property resulting from use by Licensee. If Licensee should fail to pay any such tax or assessment on or before the date such tax or assessment becomes delinquent, Rocky Mountain Power, at its own option, may pay such tax on account of Licensee and Licensee shall, upon demand, reimburse Rocky Mountain Power for the full amount of tax and any penalties so paid. Nothing in this provision in any way limits either Party's rights to challenge such tax assessments.

#### Section 3.19 Emergency Access

In the case of emergencies, Rocky Mountain Power may require relocation of Licensee's Attachments within the time period necessitated by the emergency. If Licensee fails to complete the relocation within the necessary time period, Rocky Mountain Power may relocate Licensee's Attachments at Licensee's sole risk and expense and Licensee shall reimburse Rocky Mountain Power for the cost thereof. Rocky Mountain Power shall, to the extent practicable, provide notice to Licensee via Licensee's emergency contact number set forth in Section 8.16 prior to reloating Licensee's Attachments as described herein. Where prior notice is not possible, Rocky Mountain Power will notify Licensee of any such relocation as soon as practicable thereafter. Notwithstanding anything to the contrary contained herein, neither Party shall be liable for any damages to the extent caused by the negligence or willful misconduct of the other Party.

## **ARTICLE IV.** RENTAL PAYMENTS; FEES

## Section 4.01 Rental Amount

For authorized Attachments covered under this Agreement, Licensee shall pay to Rocky Mountain Power, in advance, on an annual basis, a rental amount computed in accordance with UAR R746-345-5.A and Electric Service Schedule 4 (Exhibit A), on a billing cycle beginning July 1 of each year. The rental amount for each year shall be based on Rocky Mountain Power's tabulation of Licensee's Attachments situated upon Rocky Mountain Power's Poles and based upon Rocky Mountain Power's current records.

Consistent with the terms of this provision, the components of the rental rates, and the methodology employed to determine the rental rates are subject to UAR R746-345-5.A and may not be changed, modified or replaced except as allowed by applicable law.

The rental rate does not include the costs of Application processing, Inspections (other than Audits and Periodic Safety Inspections), Make-ready Work, and the costs related to unauthorized Attachments as addressed in Section 4.03. Charges for activities not included in the rental rate will be based on actual costs, including administrative costs, or flat rates specified in Exhibit A, and will be charged in addition to the rental rate. Parties recognize that rates shall change consistent with approved changes to Electric Service Schedule 4 (Exhibit A).

#### Section 4.02 <u>Attachment Space</u>

Each permitted Attachment on a Pole shall constitute one Attachment Space for the calculation of annual contact rental (Exhibit A). If additional Attachments are placed within the same Attachment Space as a previously permitted Attachment, and are compliant with all requirements of this Agreement, no additional annual contact rental is applicable. If additional Attachments are permitted which are placed in the usable space of the Pole, but outside of the previously permitted Attachment Space, then an additional Attachment Space shall be added for calculation of annual contact rental. Permitted Attachments placed outside of the usable space on a Pole shall be excluded from the calculation of annual contact rental, including overlashed Attachments. Attachments, for the purpose of permitting, shall be limited to those wires, cables, wireless antennas, or rigid risers affixed to the Pole, including overlashed Attachments, and does not include related devices, apparatus, or auxiliary Equipment, such as non-rigid risers, fasteners, or brackets.

#### Section 4.03 <u>Unauthorized Attachments</u>

Licensee shall not make Attachments to Rocky Mountain Power's Poles without obtaining Rocky Mountain Power's written permission as provided for in this Agreement. Rocky Mountain Power may charge Licensee an unauthorized Attachment fee as shown on Exhibit A, upon the discovery of unauthorized Attachments belonging to Licensee. Back rent shall be charged for the lesser of 5 years or the period of unauthorized Attachment. The imposition of such charges shall be without prejudice to Rocky Mountain Power's right to utilize additional other remedies, including, but not limited to, the remedies available for default under Article VII of this Agreement and any remedies available under Commission rules. Licensee may avoid unauthorized Attachment fees, except back rent, if it self-discloses unpermitted Attachments and makes an Application for said Attachment pursuant to Section 3.01 prior to Rocky Mountain Power's discovery.

#### Section 4.04 <u>Billing and Payments</u>

Rocky Mountain Power shall send invoices to Licensee via regular U.S. Mail at the address(es) provided by Licensee in writing. Licensee shall pay all charges within forty-five (45) days of the invoice date. Late charges and interest shall be imposed on any delinquent amounts as specified in Section 4.05.

In the event Licensee disputes an invoice, Licensee shall provide written notice of the dispute to Rocky Mountain Power within forty-five (45) days of the date of the disputed invoice; otherwise Licensee shall forfeit its right to dispute the invoice, except as provided by Commission rule. Notice shall include an explanation of the basis for Licensee's dispute. Rocky Mountain Power reserves the right to impose interest as specified in Section 4.05 in the event the dispute is unfounded.

Licensee shall provide its accounts payable address(es) upon execution of this agreement and any future changes to the address(es) in writing sixty (60) days prior to the date of the change. Copies of individual invoices may be requested in writing to be forwarded to an alternate address upon each written request.

#### Section 4.05 Interest on Late Payments

All amounts payable under the provisions of this Agreement shall, unless otherwise specified, be payable within forty-five (45) days of the invoice date. An interest charge at the lower of one and one-half percent (1.5%) per month or the maximum rate allowed by applicable law shall be assessed against all late payments.

#### ARTICLE V. INDEMNIFICATION; LIMITATION OF LIABILITY; WARRANTIES

#### Section 5.01 Indemnification/Release

To the fullest extent permitted by law, Licensee shall indemnify, protect, and hold harmless Rocky Mountain Power, its successors and assigns, and its directors, officers, employees and agents (collectively, the "Rocky Mountain Power Indemnified Parties") against and from any and all claims, demands, suits, losses, costs and damages of every kind and description, including attorneys' fees and/or litigation expenses, brought or made against or incurred by the Rocky Mountain Power Indemnified Parties resulting from, arising out of, or in any way connected with any act, omission, fault or negligence of Licensee, its employees, agents, representatives or contractors, their employees, agents or representatives in the performance or nonperformance of Licensee's obligations under this Agreement or in any way related to this Agreement except to the extent that such claim, demand, loss, cause of action, or costs arises from Rocky Mountain Power's gross negligence or intentional misconduct. Licensee shall also indemnify and release, protect and hold harmless the Rocky Mountain Power Indemnified Parties from and against any and all claims. demands, causes of action, costs (including attorneys' fees), or other liabilities arising from any interruption, discontinuance, or interference with Licensee's service to its customers which may be caused, or which may be claimed to have been caused, by any action of Rocky Mountain Power undertaken in furtherance of the purposes of this Agreement, including damages caused by Rocky Mountain Power's ordinary negligence. In addition, Licensee shall, upon demand, and at its own sole risk and expense, defend any and all suits, actions, or other legal proceedings which may be brought against Rocky Mountain Power Indemnified Parties, on any claim, demand, or cause of action arising from any interruption, discontinuance, or interference with Rocky Mountain Power's service to Rocky Mountain Power's customers which may be caused, or which may be claimed to have been caused, by any action of Licensee. To the extent Licensee shall be found to have caused such interruption, discontinuance or interference, Licensee shall pay and satisfy any judgment or decree which may be rendered against Rocky Mountain Power Indemnified Parties, in any such suit, action, or other legal proceeding; and further, Licensee shall reimburse Rocky Mountain Power for any and all legal expenses, including attorneys' fees, incurred in connection therewith, including appeals thereof. Licensee hereby releases Rocky Mountain Power from any liability for damage to Equipment, or for any interruption, discontinuance or interference with Licensee's service to its customers, caused by or resulting from Rocky Mountain Power's actions or inaction, including damages caused by Rocky Mountain Power's ordinary negligence.

### Section 5.02 <u>Warranty</u>

Rocky Mountain Power warrants that its work in constructing and maintaining the Poles covered by this Agreement shall be consistent with prudent utility practices. **ROCKY MOUNTAIN POWER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, AND SIMILAR WARRANTIES.** Under no

circumstances shall Rocky Mountain Power be liable for economic losses, costs or damages, including but not limited to special, indirect, incidental, punitive, exemplary or consequential damages.

## **ARTICLE VI.** INSURANCE, SECURITY AND CREDIT REQUIREMENTS

### Section 6.01 Insurance

Without limiting any liabilities or any other obligations of Licensee, Licensee shall secure and continuously carry during the term of this Agreement with insurers having an A.M. Best Insurance Reports rating of A-:VII or better the following insurance coverage:

- a. <u>Workers' Compensation</u>. Workers' Compensation in compliance with the statutory requirements of the state of operation and Employer's Liability with a limit of \$1,000,000 each accident; \$1,000,000 each employee; and co-venturers, agents, directors, officers, employees, servants, and insurers, it being the intention of the Parties that the insurance as effected shall protect all Parties.
- b. <u>Employers' Liability</u>. Insurance with a minimum single limit of \$1,000,000 each accident, \$1,000,000 by disease-each employee, and \$1,000,000 by disease-policy limit.
- c. <u>Commercial General Liability.</u> Licensee shall maintain commercial general liability insurance on the most recently approved ISO policy, or its equivalent, written on an occurrence basis, with minimum limits of \$5,000,000 each occurrence/\$5,000,000 general aggregate for bodily injury and property damage, including the following coverages:
  - a. Premises and operations coverage
  - b. Independent contractor's coverage
  - c. Contractual liability
  - d. Broad form property damage liability
- d. <u>Business Automobile Liability</u>. Licensee shall maintain business automobile liability insurance on the most recently approved ISO policy, or its equivalent, with a minimum combined single limit of \$1,000,000 each accident for bodily injury and property damage covering all owned, hired or non-owned, assigned to or used in the performance of the Work.
- e. <u>Umbrella Liability</u>. Licensee shall maintain umbrella or excess liability insurance with minimum limits of \$5,000,000 each occurrence and \$5,000,000 aggregate where applicable, providing following form coverage in excess of the Employers' Liability insurance, Commercial General Liability insurance and Business Automobile Liability insurance above.

#### Section 6.02 Additional Insurance Requirements

The following additional requirements apply to coverage specified in Section 6.01:

Commercial general liability and business automobile insurance policies shall include provisions or endorsements that:

a) include Rocky Mountain Power, its officers, directors, and employees as an additional insured as their interest may appear.

b) such insurance is primary insurance with respect to the interests of Rocky Mountain Power and that any other insurance and self-insurance maintained by Rocky Mountain Power is excess and not contributory insurance with the insurance required herein;

c) provide cross liability or a severability of interest clause.

Licensee shall not cancel without Licensee sending thirty (30) calendar days prior written Notice to Company if canceled. Lack of notification shall be considered a material breach of this Contract.

All required insurance policies shall not contain any provisions prohibiting waivers of subrogation. Unless prohibited by applicable law, all required insurance policies shall contain provisions that the insurer will have no right of recovery or subrogation against Rocky Mountain Power, its parent, divisions, affiliates, subsidiary companies, co-lessees, or co-venturers, agents, directors, officers, employees, servants, and insurers, it being the intention of the Parties that the insurance as effected shall protect all Parties.

Prior to installation of Equipment as permitted under this Agreement, and within ten (10) days of the expiration of each policy throughout the term of this Agreement, Licensee shall provide certificates of insurance evidencing current insurance coverage, and confirming compliance with the requirements stated in this article.

### Section 6.03 <u>Security</u>

Licensee must furnish and maintain Security at all times during the term of this Agreement. The face amount of the Security will be based on the total number of Licensee's actual Attachments. Such Security must be furnished upon execution of this Agreement and be maintained in full force and effect throughout the term of this Agreement, including any renewals thereof, except as otherwise agreed to by the Parties. The furnishing of Security will not relieve Licensee of any of its obligations under this Agreement, and Security will not be released until all of Licensee's obligations under this Agreement have been discharged. The initial required Security will be \$760,000 and may be reviewed and adjusted annually by Rocky Mountain Power. Rocky Mountain Power may draw upon such Security to satisfy Licensee's obligations under this Agreement, and Security to satisfy Licensee's obligations under this Agreement, and Security to satisfy Licensee's obligations under this Agreement, and Security to satisfy Licensee's obligations under this Agreement, and Security to satisfy Licensee's obligations under this Agreement, and Security to satisfy Licensee's obligations under this Agreement, and Licensee shall replenish such Security within sixty (60) days.

The amount of Security will be in an amount sufficient to pay Rocky Mountain Power for the cost to remove and dispose of Licensee Attachments and related Equipment, plus two (2) years' of rental payment obligations under this Agreement. The calculation of the cost to remove and dispose of Licensee's Attachments and related Equipment will be Rocky Mountain Power's current hourly wage rate of a two-person crew multiplied by the number of actual Attachments.

## **ARTICLE VII.** TERM, DEFAULT AND TERMINATION

## Section 7.01 Term and Termination

Unless terminated sooner as provided herein, this Agreement shall remain in full force and effect unless and until it is terminated by either Party upon one hundred eighty (180) days written notice to the other Party. Licensee shall remove its Equipment from Poles within said one hundred eighty (180) day notice period. Should Licensee fail to remove its Equipment within such period, Rocky Mountain Power may remove and dispose of Licensee's Equipment at Licensee's sole risk and expense. On the date of termination specified in such notice, all rights and privileges of Licensee hereunder shall cease; provided however that Licensee shall not be released from any liability hereunder, which may accrue or be accruing or which arises out of any claim that may have accrued or may be accruing at the time of termination.

Rocky Mountain Power reserves the right to terminate Licensee's permit to use any particular Pole or Poles at any time upon thirty (30) days written notice to Licensee and Licensee shall remove its Equipment from Rocky Mountain Power's Pole or Poles within the thirty (30) day period and provide written notice to Rocky Mountain Power upon its completion.

## Section 7.02 Default

The following shall constitute a default hereunder if not cured as provided in Section 7.03: (a) any material breach of this Agreement, including, without limitation, the failure to comply with Section 6.03; (b) the appointment of a receiver to take possession of all of the assets of Licensee; (c) a general assignment for benefit of creditors; (d) any action taken or suffered by Licensee under any insolvency or bankruptcy act.

#### Section 7.03 Notice of Default/Cure Period

The non-defaulting Party shall provide written notice of the default to the other and the defaulting Party shall have thirty (30) days from receipt of said notice to cure the default. Provided however, in such cases where a default cannot be cured within the thirty (30) day period by the exercise of diligent, commercially reasonable effort, the defaulting Party shall have an additional sixty (60) days to cure the default for a total of ninety (90) days after the Party not in default provides its notice of default.

## Section 7.04 <u>Remedies for Default</u>

The non-defaulting Party may utilize any and all remedies available to it at law and in equity in the event the defaulting Party fails to cure a default within the time period set forth above. Such remedies may include, without limitation: (a) refusal to authorize any additional Attachments until the default is cured; (b) termination, in whole or in part, of this Agreement; (c) withhold amounts due to the defaulting Party from non-defaulting Party pursuant to this Agreement or another agreement; and (d) cure the default, if Licensee is the defaulting Party, at Licensee's sole cost and expense.

## ARTICLE VIII. GENERAL PROVISIONS

#### Section 8.01 Entire Agreement

This Agreement constitutes the entire Agreement of the Parties and supersedes and terminates the following prior agreements between the Parties: (1) Pole Contact Agreement between Pacificorp and Brook Fiber Properties, Inc. (undated and unsigned), (2) Pole Contact Agreement between Pacificorp and Phoenix Fiberlink of Utah, Inc., dated August 25, 1995 and (3) Transmission Line Pole Contact Agreement between PacifiCorp and Brooks Fiber Properties, Inc., dated September 29, 1997 ("Prior Agreements"). All existing licenses permitted under the above-referenced Prior Agreements will remain in full force and effect and be subject to the terms and conditions of the Agreement. Any amendments hereto shall be in writing and signed by the Parties.

Section 8.02 Choice of Law/Venue

This Agreement and performance hereunder shall be construed, interpreted, regulated and enforced pursuant to the laws of Utah. The state and federal courts within Salt Lake County, Utah shall constitute the sole proper venue for resolution hereunder and the Parties agree to submit to such jurisdiction.

Section 8.03 Changes in Law

The Parties agree to negotiate in good faith any changes to this Agreement necessitated to conform to applicable law.

Section 8.04 Severability

If any provision or part of this Agreement is or becomes invalid under any applicable statute, regulation, or law and such invalidity does not materially alter the essence of this Agreement with respect to either Party, the invalidity shall not render this entire Agreement unenforceable and such provision or part shall be deemed void.

Section 8.05 Encumbrances

Licensee shall prevent any and all liens or other encumbrances from attaching, as result of Licensee's activities hereunder, to Rocky Mountain Power's property.

Section 8.06 <u>Headings and Exhibits</u>

The captions and headings herein are for convenience in reference only and not for interpretation purposes. All exhibits referred to herein and recitals are incorporated by reference.

Section 8.07 Force Majeure

Except for the late payment of monies due under this Agreement, neither Party shall be deemed in default hereunder for any delay or failure in the performance of its obligations to the extent that such inability shall be due to causes beyond the control of the Party seeking to invoke this provision, including, but not limited to, the following: (a) the operation and effect of any rules, regulations and orders promulgated by any Commission, municipality, or governmental agency of the United States, or subdivision thereof; (b) restraining order, injunction or similar decree of any court; (c) war; (d) earthquake, fire or flood; (e) act of God; (f) civil disturbance; (g) strikes or boycotts; or (h) major equipment breakdown or failure. Should any of the foregoing occur for a

continuous duration lasting longer than one month, the contact rental rate shall be applied to only those Attachments where Rocky Mountain Power is able to provide Poles and to those Poles where Licensee is able to attach. The Party claiming Force Majeure under this provision shall provide prompt written notice to the other Party and shall make every reasonable attempt to mitigate or remedy the cause thereof as diligently and expeditiously as possible. Time periods for performance obligations of Parties herein shall be extended for the period during which Force Majeure was in effect. In the event that a Force Majeure event occurs, and Licensee does not reinstall Attachments at pre-event levels within six (6) months of the end of the event, the Permit for each Attachment which is not reinstalled shall terminate.

## Section 8.08 Assignments

Licensee shall not voluntarily or involuntarily assign, transfer, sublease or sublet this Agreement, in whole or in part, or any right, privilege or obligation hereunder, without Rocky Mountain Power's prior written consent, at which time Rocky Mountain Power may require that the proposed assignee or successor enter into a new agreement or other reasonable conditions. Approval of assignment may require Application to remove from each Pole by the Assignor and an Application to attach to each Pole by Assignee, and payment of associated fees, if the record of Attachments from either attaching Party is inconsistent with Rocky Mountain Power's records. Notwithstanding anything to the contrary in this Agreement, Licensee shall have the right to assign this Agreement without consent to any parent, subsidiary or affiliate, or to any corporation or other entity into which it may be merged or consolidated or which purchases all or substantially all of its stock or assets, as long as Licensee provide written notice of such assignment no later than thirty (30) days of assignment being made public.

## Section 8.09 <u>Waiver</u>

Failure by either Party to enforce any of the terms or provisions of this Agreement shall not be construed as a waiver hereunder.

#### Section 8.10 <u>Time is of Essence</u>

Time is of essence with respect to every term and provision of this Agreement.

#### Section 8.11 No Partnership

Nothing herein shall be construed to create a partnership, trust, joint venture, or association between the Parties.

## Section 8.12 <u>No Third-party Beneficiaries</u>

This Agreement shall not be construed for the benefit of any third-party, including without limitation, customers of either Party.

#### Section 8.13 <u>Attorneys' Fees</u>

If either Party files any action or brings any court proceeding against the other arising from or related to this Agreement, the prevailing Party shall be entitled to recover, in addition to any judgment or decree for costs, such reasonable attorneys' fees as it may have incurred in such suit, action, or other legal proceeding, together with other reasonable litigation expenses.

Section 8.14 <u>Waiver of Jury Trial</u>

TO THE FULLEST EXTENT PERMITTED BY LAW, EACH OF THE PARTIES HERETO WAIVES ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.

#### Section 8.15 <u>Agreement Notices</u>

Except as otherwise provided herein, any notice regarding this Agreement hereunder shall be in writing, shall be addressed to the Party to be notified at the address set forth below or at such other address as a Party may designate for itself from time to time by written notice, and shall be transmitted by United States certified mail, by regularly scheduled overnight delivery, or by personal delivery:

Rocky Mountain Power: Joint Use Administration-Contracts 825 NE Multnomah St., Suite 1700 Portland, Oregon 97232 jointusecontracts@pacificorp.com

Licensee:	MCImetro Access Transmission Services Corp.
	Contract Management
	400 International Parkway, C
	Richardson, Texas 75081
	carol.pruitt@one.verizon.com

With a copy to: MCImetro Access Transmission Services Corp. Legal Department 1320 North Courthouse Road, 9<sup>th</sup> Floor Arlington VA 22201

Section 8.16 Operational Notice

All notices regarding permitting and other communications regarding day-to-day operations shall be submitted by the Parties via an ENS if designated by Rocky Mountain Power, via e-mail at the addresses set forth below or at such other address as a Party may designate for itself from time to time by written notice.

Rocky Mountain Power: jointuse@pacificorp.com

MCImetro Access Transmission Services Corp. <u>david.mcallister@one.verizon.com</u>

In the case of emergency work, as prescribed in Section 3.19, each Party will notify the other party via the emergency contact information set forth below in addition to the operational contact notice in writing.

Rocky Moutnain Power: (888) 221-7070

Licensee: National Transmission Surveillance Center (800) 973-7866

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized officers as of the date first herein written.

LICENSEE: MCImetro ACCESS TRANSMISSION SERVICES CORP. PACIFICORP, doing business as

ROCKY MOUNTAIN POWER

Sigr

Mark J. Wingate Senior Manager

Title 17,2017

Date Signed

Signed ebra Guerro Printed D OPS Support irect Title

Date Signed

## Exhibit A

Page 1 of 1

Contact Rental Rate Schedule & Fees

Annual Utah Rental Rate per attachment is \$5.76 per foot of space

Exhibit A Page 1 of 2



P.S.C.U. No. 47

Original Sheet No. 4.1

#### ROCKY MOUNTAIN POWER

#### **ELECTRIC SERVICE SCHEDULE NO. 4**

#### STATE OF UTAH

#### **Pole Attachments**

**AVAILABILITY:** To public utilities, wireless providers, cable television companies, communications companies, or other entities that provide information or telecommunications services or any other services whose operation requires that cables, wires, and other appurtenances be placed on Company utility poles. This Schedule shall be available only upon the following three conditions:

- 1. The execution of a Pole Attachment Agreement between an "attaching entity" as defined by Utah Admin. Code § R746-345-2 and the Company for permission to place equipment on the Company's poles; or, in the event that such an agreement has not been reached, the attaching entity is subject to the provisions of the standard Attachment Agreement approved by the Utah Public Service Commission ("Standard Agreement").
- 2. The approval by the Company of the attaching entity's application, as required under the agreement between the Company and the attaching entity, for permission to place equipment on Company poles.
- 3. The availability of utility poles located on the Company's interconnected system in the state of Utah, which are of sufficient size and capacity to accommodate the equipment to be installed in accordance with the National Electric Safety Code, the applicable pole attachment agreement and applicable Utah Administrative Code provisions.

APPLICATION: The rate specified in this Electric Service Schedule shall apply to all Company-owned poles.

(continued)

FILED: December 7, 2006

Issued by authority of Report and Order of the Public Service Commission of Utah in Docket No. 06-035-21

Exhibit A Page 2 of 2



P.S.C.U. No. 50

First Revision of Sheet No. 4.2 Canceling Original Sheet No. 4.2

#### **ELECTRIC SERVICE SCHEDULE NO. 4 - Continued**

**ANNUAL CHARGE:** For each Company pole on which the attaching entity has placed an attachment, **\$5.76** per foot of space used by the attaching entity. "Space used" is determined under the provisions of Utah Admin. Code § R746-345-5.A.3.

SCHEDULE OF NON-RECURRING FEES: For each Company pole on which the attaching entity has placed or requests to place an attachment, the following fees may be applied.

1. Per Pole Application Fee: \$55.64 per Pole

This fee is applicable when Licensee's submit application for permission to attach to the Company's poles. This fee covers the expected costs for performing the work necessary to determine what make-ready work must be done to accommodate the application. The fee shall be based on a state specific allocation of costs.

2. Unauthorized Attachment Charge: \$100.00 + Back Rent, per Pole

This fee is applicable when the Company discovers a Licensee attachment on a Company pole where the Company has no record of approving the attachment. Back Rent shall consist of 5 years of rent at the current rental rate unless credible evidence supports a lesser period. The Unauthorized Attachment Fee shall be waived if Licensee presents credible evidence of any of the following: approval by and payment of rent to a putative pole owner; good faith belief of pole ownership; or of attaching in good faith. The Unauthorized Attachment Fee shall also be waived if Licensee presents credible evidence the attachment was in place prior to January 1, 2007.

3. Other Miscellaneous Fees: To be invoiced at the Company's actual cost. This fee is applicable to recover the cost of work necessitated by Licensee requests not otherwise recovered in the Annual Charge or other fee categories, such as actual or estimated charges for make-ready work and labor for emergency restoration work.

**TERMS, CONDITIONS, LIABILITIES:** The terms, conditions, and liabilities for service under this Schedule shall be those specified in the applicable pole attachment agreement between the Company and the attaching entity. The annual charge rate specified by the agreement shall be in accordance with the rate specified in this Schedule and shall be subject to periodic adjustment in accordance with the applicable agreement and the rules established by the Public Service Commission of Utah and subject to its approval.

**ELECTRIC SERVICE REGULATIONS:** Service under this Schedule will be in accordance with the terms of the Pole Attachment Agreement or the Standard Agreement between the Company and the attaching entity. The Electric Service Regulations of the Company on file with and approved by the Public Service Commission of Utah, including future applicable amendments, will be considered as forming a part of and incorporated in said Agreement. In case of any conflict between any of the provisions of the Pole Attachment Agreement or Standard Agreement, this Rate Schedule, and the Electric Service Regulations, the provisions of this Rate Schedule will take precedence followed by the provisions of the Pole Attachment Agreement or the Standard Agreement, whichever is applicable.

FILED: November 25, 2014

Issued by authority of Report and Order of the Public Service Commission of Utah in Advice No. 14-11

## Exhibit B

Page 0 of 36

## Rocky Mountain Power's Distribution Construction Standards

This Page is left intentionally blank. Standards are attached as next page.

# **Table of Contents**

## EU—Joint Use

## Information Standards

Standard	Title	Revised
EU 001	Joint Use—General Information	25 Nov 14
<u>EU 101</u>	Joint Use—Pole Space Allocation	3 Jan 17
<u>EU 211</u>	Joint Use—Climbing Space through Communication Circuits	8 Feb 16
EU 221	Joint Use—Clearances, Communication to Supply Circuits	8 Feb 16
<u>EU 231</u>	Joint Use—Clearances, Communication Above Ground, Roadway or Water	3 Jun 16
<u>EU 241</u>	Joint Use—Clearances, Communication Equipment to Risers	25 Nov 14
EU 251	Joint Use—Clearances, Communication Equipment to Transformers	25 Nov 14
EU 261	Joint Use—Clearances, Communication Equipment to Street Lights	24 Jan 17
<u>EU 271</u>	Joint Use—Clearances, Communication Equipment to Street Lights— California	8 Feb 16
EU 281	Joint Use—Clearances, Low Voltage Service Drops	8 Feb 16
EU 401	Joint Use—CATV on Poles	29 Jun 16

Distribution Construction Standards Engineering Publications





Published Date: 24 Jan 17

## **Table of Contents**

This page is left blank intentionally.

Distribution Construction Standards Engineering Publications





Published Date: 24 Jan 17

# EU 001 Joint Use—General Information

# Scope

Joint use agreements with other utilities include standards covering the attachments involved. This section contains drawings covering joint use of poles by supply and communications circuits and equipment. These drawings conform with the applicable requirements of joint pole practices for supply and communications circuits: National Electrical Safety Code (NESC); California Public Utility Commission General Order No. 95 (G.O. 95); and other state and local requirements.

# General

The drawings in this section specify the clearances required and the typical arrangement of attachments.

Questions concerning conflicts or impaired clearances between supply circuits and communications circuits, including community antenna TV cables, which are not adequately covered by the scope or detail of this section, shall be referred to the area engineer.

These standards apply to all other utilities and other entities who own facilities which contact or are supported by equipment owned by the company, including attachments not covered by joint use agreements.

Any trolley circuits attached to company-owned power poles will require special joint use agreements and drawings showing clearances. Trolley circuit attachments will require distribution engineering approval on a caseby-case basis.

Over-lashing of communication cables is an acceptable practice and will follow the same policy as any other attachment request. The application will be reviewed by the company and the party being over-lashed, to determine any upgrades that may be required. The requesting party, the party that is being over-lashed, and the company will agree to payment of the cost of any needed upgrades and the attachment fees.

The addition of the new cable will place additional loading requirements on poles and down guys and will impact the sag of the existing cable. These items will need to be reviewed to see if pole change-outs or guy replacements will be necessary.

Distribution Construction Standard Page 1 of 2 Published Date: 25 Nov 14 Last Reviewed: 25 Nov 14





This page is left blank intentionally.

Distribution Construction Standard Page 2 of 2 Published Date: 25 Nov 14 Last Reviewed: 25 Nov 14





# EU 101 Joint Use—Pole Space Allocation

# Scope

This standard provides information regarding a typical allocation of space on joint use poles for attachment of communication and company facilities.

# General

# 1. Compliance with Safety Codes and Rules

It is intended that all construction will meet or exceed the requirements of the latest edition of the National Electrical Safety Code (NESC). All work will be performed in a safe manner that complies with the rules of the NESC, the Occupational Safety and Health Administration (OSHA) and the rules of any state agencies having jurisdiction.

# 2. Communication

The term "communication" is considered to include telephone, cable TV, fiber optic cables, and facilities meeting the definition of "communication lines" in the NESC.

# 3. Available Pole Space

The setting depth of a pole in normal soil is approximately 10% of the pole length plus two (2) feet. Thus a 45' pole will be set  $6\frac{1}{2}$ ' into the ground with  $38\frac{1}{2}$ ' above ground.

# 4. Joint Use Agreements

Some of the joint use agreements do not match all conditions set forth in the EU section of the distribution construction standards. A specific joint use agreement may spell out a different method of sharing costs of taller poles. In that case, the agreement takes precedence over this standard.

# 5. Bonding of Communication or Cable Equipment to Ground

When a pole ground is required by the communications utility and does not exist on the pole, the communications utility shall request the installation of a pole ground by the company. This allows the company to ground the neutral conductor attached to the pole. The communications company shall pay for all expenses incurred. At no time shall the communications utility personnel be in the company's pole space.

#### 6. Guying and Anchoring

The communications utility shall not attach their guy wires to company anchors unless explicit written permission is given for each specific location. Anchor rod auxiliary eyes are not permitted on company anchors. Additionally, all guy wires installed on company anchors to support communications utility's equipment or cable shall be insulated as defined by Rule 279A2a of the NESC and in accordance with company standard practice. This practice meets code and also prevents galvanic corrosion of anchors. The insulator shall meet NESC flashover and strength requirements. If, by written permission, the company allows the guy wire to be bonded at the pole, an insulator is still required that meets NESC strength requirements as stated in NESC Rules 279A1c and 279B3.

Distribution Construction Standard Page I of 4 Published Date: 3 Jan 17 Last Reviewed: 3 Jan 17





#### EU 101 Joint Use-Pole Space Allocation

All guy wires attached to the communications utility's own anchors shall meet NESC requirements.

Slack span installations and unguyed deadend pole installations by communications licensee companies are not allowed on company-owned poles unless:

- a. The communications company provides a complete engineering design and review, signed and stamped by a licensed professional engineer.
- b. The engineering review shall be included in the application, with all tensions, strengths, angles, and calculations associated with the proposed slack span or unguyed deadend installation
- c. Receipt of the professional engineer's design and review is acknowledged in writing by the company.

For multiple anchor and rod assemblies, when required, multiple anchors should be separated five (5) feet or more horizontally for power driven screw anchors and eight (8) feet for disk anchors.

#### 7. Replacing an Existing Pole

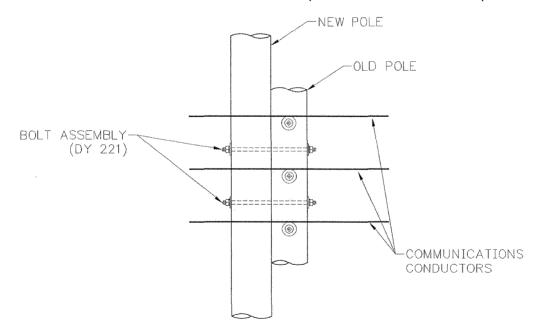
When the company has need to replace an existing pole with joint use attachments and the attachment cannot immediately be transferred directly to the new pole, an alternative method of attachment may be used to reduce crew and travel time. The following criteria must be satisfied prior to such action:

a. The pole is positioned close enough to allow attachment by this method.

b. The condition of the old pole section will maintain the integrity of the attachments.

c. No other issues are apparent that sacrifice proper clearances, safety, or working conditions.

This method of attachment should be considered temporary, and affected joint use attaching entities must remove their facilities within a reasonable time frame. Additionally, the last joint use attaching entity to perform transfer work on the structure must remove and dispose of the old section of the pole and DA bolts.





Distribution Construction Standard Page 2 of 4 Published Date: 3 Jan 17 Last Reviewed: 3 Jan 17





#### **Allocation of Pole Space**

#### 1. Separation Space - Permitted Uses

- a. There shall be a minimum of 40" of clearance between the surface (not the center) of any supply system conductors or equipment (including support hardware and washers) and any communications system conductors or equipment (including support hardware and washers) as required by the NESC.
- b. Communications equipment is not permitted to be mounted in the 40" separation space.
- c. Street lighting fixtures may be installed in the separation space when necessary to meet mounting height requirements provided that such installations are in accordance with the NESC and other applicable codes. For details, see EU 261. In California, see EU 271.

Distribution Construction Standard Page 3 of 4 Published Date: 3 Jan 17 Last Reviewed: 3 Jan 17





EU 101 Joint Use-Pole Space Allocation

This page is left blank intentionally.

Distribution Construction Standard Page 4 of 4 Published Date: 3 Jan 17 Last Reviewed: 3 Jan 17





# EU 211 Joint Use—Climbing Space through Communication Circuits

#### Scope

This standard provides information defining the climbing space requirements for joint use poles through the communication circuit level. Included are communication cables, service drops, and vertical runs attached to the pole.

#### General

The climbing space as defined is intended to provide adequate clearances on the pole for safe ascent and descent by line personnel. The climbing space must extend 40" above and below the referenced communication-circuit or 48" above and below in California (see Figure 1). If the climbing space is rotated around the pole for continued climbing, the climbing spaces in different quadrants of the pole must overlap.

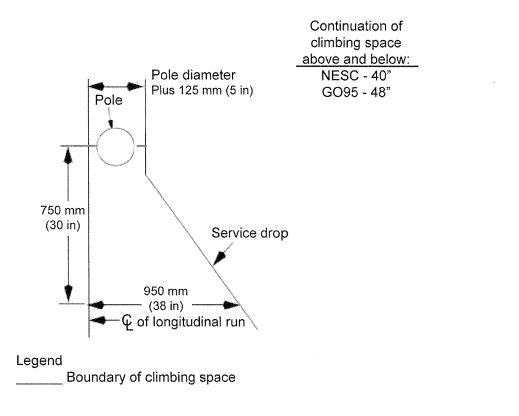


Figure I—Climbing Space

Distribution Construction Standard Page 1 of 2 Published Date: 8 Feb 16 Last Reviewed: 8 Feb 16



EU 211 Joint Use-Climbing Space through Communication Circuits

This page is left blank intentionally.

Distribution Construction Standard Page 2 of 2 Published Date: 8 Feb 16 Last Reviewed: 8 Feb 16





# EU 221 Joint Use—Clearances, Communication to Supply Circuits

#### Scope

This standard provides information regarding vertical clearances between company supply circuits and joint use facilities. Included are communication circuits, neutral supports, and secondary supply supports.

# General

The vertical clearances between company supply circuits and other utility attachments are specified in this standard.

# 1. Vertical Spacing - Crossarms

The vertical spacing requirements between company supply circuits and communication circuits varies depending upon the voltage level and NESC and/or state (California and Washington) jurisdiction. (See Figure 1 and Table 1 for clearances.)

# 2. Vertical Spacing - Attachments to Pole

The vertical spacing requirements between company supply circuits attached to the pole and communication circuits depends upon the supply voltage level, effectively grounded cables and NESC and/or state (California and Washington) jurisdiction. (See Figure 2 and Table 2 for clearances.)

# 3. Open Wire Communications Circuits

It is not intended that there be any new joint use poles with open wire communications circuits. Clearance to these circuits is shown because some of this type of construction still exists.

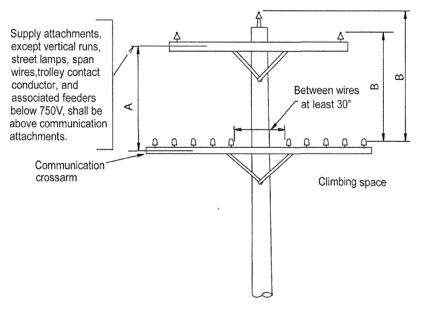


Figure I-Vertical Spacing of Crossarms and Circuits, Communication and Supply

Distribution Construction Standard Page I of 4 Published Date: 8 Feb I 6 Last Reviewed: 8 Feb I 6



Voltage of Supply Circuit	Min. X-arm Spacing (In.) (Dimension A)	Min. Conductor Spacing (In.) (Dimension B)				
NESC <sup>1</sup>						
0-8700	48	40				
8700-50000	72	60				
Anna an	Washington <sup>2</sup>					
0-7500	48	40				
Over 7500	84	84				
Anne - Anne Anne Anne - Ann	California <sup>2</sup>	<b></b>				
0-7500	48	48				
7500-75000	72	72				

#### Table I—Vertical Clearance Between Supply and Communication Facilities

<sup>1</sup> Voltage is to ground if there is an effectively grounded circuit, otherwise voltage is the highest voltage between any two conductors (note 2).

<sup>2</sup> Voltage is the highest voltage between any two conductors.

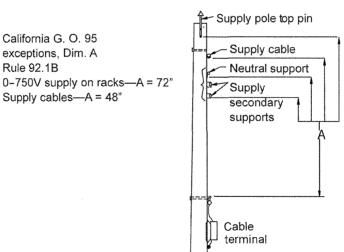


Figure 2—Vertical Clearances Between Conductors and Noncurrent Carrying Metal Parts of Communication Equipment and Supply

**Distribution Construction Standard** Page 2 of 4 Published Date: 8 Feb 16 Last Reviewed: 8 Feb 16





# Table 2—Vertical Clearances Between Conductors and Noncurrent Carrying Metal Parts of Communication Equipment and Supply Circuits

	Washington		NESC		California	
Dim. A	Voltage of Supply <sup>2</sup> Circuit Concerned	Min. Clearance Inches	Voltage of Supply <sup>1</sup> Circuit Concerned	Min. Clearance Inches	Voltage of Supply <sup>2</sup> Circuit Concerned	Min. Clearance Inches
	0-7500	40	0-8700	40	0-7500	48
	Over 7500	84	Over 8700	60	7500-75000	72

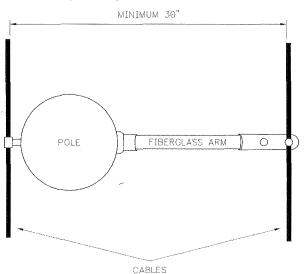
<sup>1</sup> Voltage is to ground if there is an effectively grounded circuit, voltage is the highest voltage between any two conductors (note 2).

<sup>2</sup> Voltage is the highest voltage between any two conductors.

#### 4. Horizontal Spacing

The preferred method of attaching communications cables to poles is to utilize one side of the pole with 12" minimum vertical separation between cables. This allows climbing on the other side of the pole. However, in certain circumstances, the company will allow installation of communications cables on both sides of a pole, as long as there is a minimum of 30" horizontal separation between wires for climbing. This separation can be obtained by using fiberglass arms, strong enough to handle physical loads upon them and long enough to provide the needed 30" separation at the point of attachment to the pole. (See Figure 1 and Figure 3).

If Figure 1 is the attachment method being used, 30" horizontal measurements are required between cables. This measurement applies to any cables attached to the crossarm, but must also take into consideration any cable attached directly to the pole.



# Figure 3—Horizontal Spacing Using Fiberglass Arm

Distribution Construction Standard Page 3 of 4 Published Date: 8 Feb 16 Last Reviewed: 8 Feb 16



EU 221 Joint Use-Clearances, Communication to Supply Circuits

This page is left blank intentionally.

Distribution Construction Standard Page 4 of 4 Published Date: 8 Feb 16 Last Reviewed: 8 Feb 16





# EU 231 Joint Use—Clearances, Communication Above Ground, Roadway or Water

# Scope

This standard provides information regarding the minimum clearance required between joint use facilities attached to company structures and ground, roadways, and waterways.

# General

The vertical clearances of all facilities attached to company structures must meet or exceed the minimum requirements of the National Electrical Safety Code (ANSI C2, current edition), and any applicable state or local codes and the requirements of the company construction standards. These requirements shall apply to communication circuits, fiber optic lines, cable television circuits, messenger wires, guy wires and any other foreign owned facilities attached to company equipment.

In the event that the owner of a foreign facility is not a public utility company, then the attached facility must also comply with the provisions of the National Electrical Code (NFPA 70).

# Application

- 1. Clearances shall be maintained at maximum loading conditions as defined by NESC rule 232.
- 2. Company clearance requirements are found in chapter TC of the Transmission Construction Standards. Company ground clearance requirements are found in standard TC 111.
- 3. In the event of conflicting requirements, the requirement which provides more clearance shall apply.

# Special Requirements by State

#### 1. Utah

Administrative Rule 930-7 applies to Federal-aid highway\* projects including local government projects. This rule requires the following:

- a. For crossings<sup>†</sup>, the minimal vertical clearance for installed overhead lines is 18 feet.
- b. For intersections<sup>‡</sup>, the minimal vertical clearance for installed overhead lines is 23 feet.
- c. The NESC minimum clearances shall be met or exceeded.

Note: The most stringent clearance requirement shall govern.

\* "Highway, street, or road" are general terms denoting a public way for the transportation of people, materials, and goods, but primarily for vehicular travel, including the entire area within the right of way. (Administrative Rule R930-7)

<sup>†</sup> "Crossing" refers to a location where the utility line crosses the highway.

<sup>‡</sup> "Intersection" is the general area where two or more highways or streets join or cross at-grade. (Administrative Rule R930-6)





#### EU 231 Joint Use-Clearances, Communication Above Ground, Roadway or Water

#### 2. California

The NESC is not applicable in California. The greater requirement of GO 95, or company clearances found in section TC shall apply.

#### 3. Washington

Along or crossing a state or federal highway, 24 feet of clearance is required.

Distribution Construction Standard Page 2 of 2 Published Date: 3 Jun 16 Last Reviewed: 3 Jun 16





# EU 241 Joint Use—Clearances, Communication Equipment to Risers

#### Scope

This standard provides information regarding the location of risers and vertical runs on joint use poles. Included are company owned supply risers, communication risers and ground conductors.

#### General

Risers and vertical runs on joint use poles shall be located on poles so as to minimize congestion, provide adequate climbing space and meet clearance requirements. Whenever practicable, risers and vertical runs shall be located on the 'away from'-traffic side of the pole. If supply and communication risers are required on the same pole, they should be installed in the same quadrant away from the climbing space. For typical arrangement of joint risers, see Figure 1. For preferred arrangements of risers and vertical runs on joint poles, see Figure 2. Supply cable risers shall be installed in approved protective conduit (see Standard GC 011). Supply cable carried vertically through communication attachments and supply circuits shall be attached to the pole so as to meet or exceed minimum NESC clearance requirements in all areas and also meet or exceed the requirements of General Order 95 in California (see Figure 3).

Distribution Construction Standard Page I of 4 Published Date: 25 Nov 14 Last Reviewed: 25 Nov 14





EU 241 Joint Use-Clearances, Communication Equipment to Risers

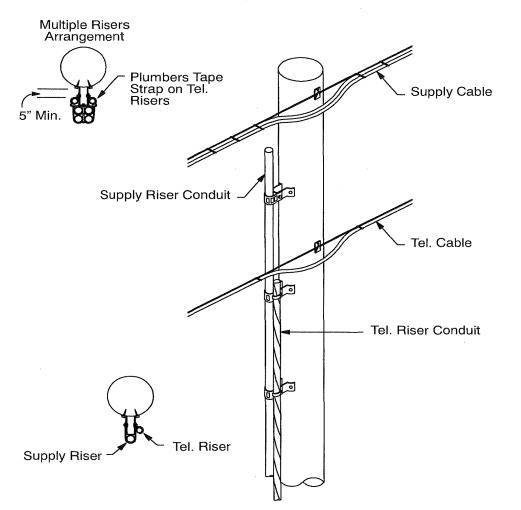


Figure I-Typical Arrangement of Supply and Communications Risers

# Notes

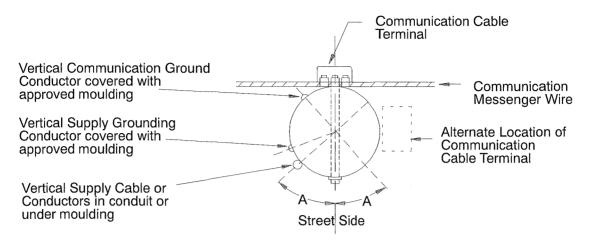
- 1. Arrangement for joint use of offset bracket for support of one supply riser and one communications riser. The actual offset bracket may be another approved style. Two or more supply riser conduits will always be on offset brackets, in which case the communications riser or risers shall also be on the brackets.
- 2. All supply riser conduits shall be supported by offset brackets. Multiple risers, supply or communication or both shall be combined on a riser offset bracket. If a supply riser is installed on an offset bracket, the communication riser shall also be on the offset bracket.
- 3. Spacing between brackets shall not exceed 10' and provide as much clearance as possible between pole and conduit surfaces but not less than 5".

Distribution Construction Standard Page 2 of 4 Published Date: 25 Nov 14 Last Reviewed: 25 Nov 14





EU 241 Joint Use-Clearances, Communication Equipment to Risers



#### Figure 2-Preferred Locations for Risers, etc. on Joint Use Poles

#### Notes

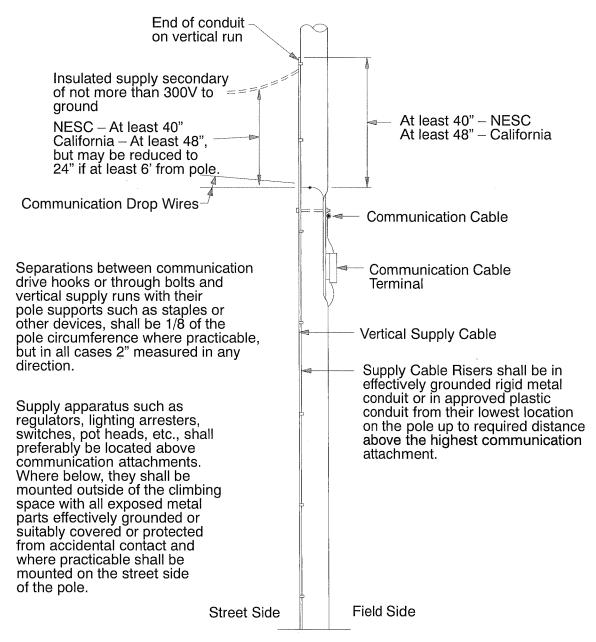
- 1. Whenever practicable, angle A should be approximately 45°. The risers and vertical runs shall be located on the low side of raked and other non-vertical poles.
- 2. All supply riser conduits shall be supported by offset brackets. Multiple risers, supply or communication or both shall be combined on a riser offset bracket. If a supply riser is installed on an offset bracket, the communication riser shall also be on the offset bracket.
- 3. Spacing between brackets shall not exceed 10' and provide as much clearance as possible between pole and conduit surfaces but not less than 5".
- 4. The clearance between supply hardware and communications hardware shall be as much as practicable but in no case less than 2" in any direction, except if all the following applies:
  - a. The systems and applicable codes involved would permit grounding of the hardware.
  - b. The hardware involved in the reduced clearance is effectively grounded at the location.
  - c. The hardware involved is mechanically and electrically securely bonded.

Applicable in California also if the riser covering is of rigid PVC meeting the requirements of GO 95.





EU 241 Joint Use-Clearances, Communication Equipment to Risers



# Figure 3—Supply Riser on Joint Use Pole

Distribution Construction Standard Page 4 of 4 Published Date: 25 Nov 14 Last Reviewed: 25 Nov 14





# EU 251 Joint Use—Clearances, Communication Equipment to Transformers

#### Scope

This standard provides information regarding clearances between communication cables and supply transformers attached to joint use poles.

#### General

Clearance requirements between communication cables and supply transformers vary according to geographic location and supply system voltage. For typical joint pole arrangement with supply transformer, see Figure 1. NESC and WAC (Washington) supply transformer clearances are identical (see Table 1).

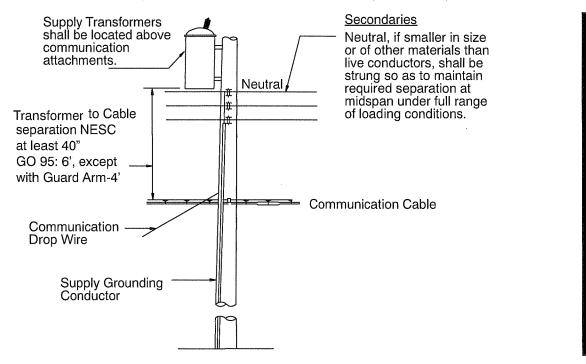


Figure I—Clearances Between Transformers and Communications Cables

Distribution Construction Standard Page 1 of 2 Published Date: 25 Nov 14 Last Reviewed: 25 Nov 14





EU 251 Joint Use-Clearances, Communication Equipment to Transformers

Transformer Primary Voltage	Minimum Clearance In Inches				
NESC & Washington					
0-8700	40 [1]				
8700-50000	60 [1]				
California					
0-750	72 [2]				
750-22500	72 [2]				

# Table I—Clearance from Transformers for Communication Cables

#### Notes:

[1] If transformer cases are effectively grounded, these clearances may be reduced to 30".

[2] With guard arm above communication cable, may be reduced to not less than 48".

Distribution Construction Standard Page 2 of 2 Published Date: 25 Nov 14 Last Reviewed: 25 Nov 14





# Scope

This standard provides information regarding vertical clearances between street lights and joint use facilities. Included are clearances from communication circuits and cable TV to street lights and street lighting supply drip loops (for California, see EU 271).

# General

The vertical clearances under the jurisdiction of the NESC between street lights and communication facility attachments are specified in this standard.

# 1. Vertical Clearance for Communication Cable

The vertical clearances required between street lighting equipment and communication cables attached to the pole are defined by Figures 1 and 3 of this standard. Street lighting may be installed above or below the communication level provided that required clearances shown in the notes and on Figures 1 and 3 are met.

# 2. Vertical Clearance for Open Wire Communication Circuits on Crossarms

The vertical and horizontal clearances required between street lighting equipment and open wire communication circuits on wood crossarms are defined by Figures 2 and 4 of this standard. Street lighting may be installed above or below open wire communication circuits provided that required clearances shown in the notes and on Figures 2 and 4 are met.

Applicable in All States Except California





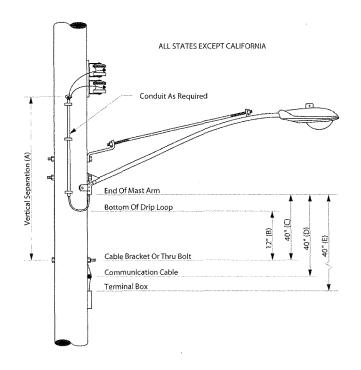


Figure I—Street Lighting Facilities Above Communication Cable

#### Notes:

#### A. Vertical Separation (NESC Section 23, Table 238-1)

40" If supply voltage is 0 - 8.7 kV

40" + 0.4 per kV If supply voltage is over 8.7 kV

**Exception:** Clearances may be reduced to 30" where non-current-carrying parts of supply equipment are effectively grounded and the associated neutral meets Rule 230E1, **or** supply cables meeting Rule 230C1 (including support brackets) are bonded to communication messengers at intervals meeting Rule 92C throughout well-defined areas, and where communication is at lower levels.

#### B. Separation from Drip Loops of Street Light Brackets (NESC Section 23, Rule 238D)

**Exception:** The "B" clearance may be reduced to 3" if the drip loop is covered by a suitable nonmetallic covering that extends at least 2" beyond the loop.

- C. Separation from Communication Brackets (NESC Section 23, Table 238-2)
- D. Separation from Messengers Carrying Communication Cables (NESC Sec. 23, T. 238-2)

#### E. Separation from Terminal Box of Communication Cable (NESC Sec. 23, Table 238-2)

#### **Exceptions:**

a. The separation of C, D, and E may be reduced to 4" if the mast arm is effectively grounded.

Distribution Construction Standard Page 2 of 6 Published Date: 24 Jan 17 Last Reviewed: 24 Jan 17





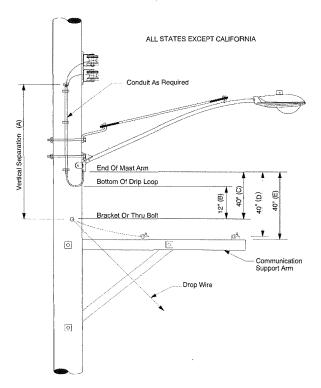


Figure 2—Street Lighting Facilities Above Communication Open Wire Crossarm

#### Notes:

#### A. Vertical Separation (NESC Section 23, Table 238-1)

40" If supply voltage is 0 - 8.7 kV

40" + 0.4 per kV If supply voltage is over 8.7 kV

**Exception:** Clearances may be reduced to 30" where non-current-carrying parts of supply equipment are effectively grounded and the associated neutral meets Rule 230E1, or supply cables meeting Rule 230C1 (including support brackets) are bonded to communication messengers at intervals meeting Rule 92C throughout well-defined areas, and where communication is at lower levels.

#### B. Separation from Drip Loops of Street Light Brackets (NESC Section 23, Rule 238D)

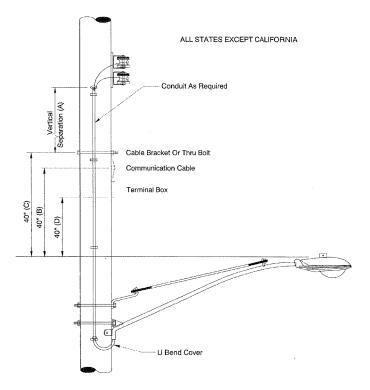
**Exception:** The "B" clearance may be reduced to 3" if the drip loop is covered by a suitable nonmetallic covering that extends at least 2" beyond the loop.

- C. Separation from Communication Brackets (NESC Section 23, Table 238-2)
- D. Separation from Messengers Carrying Communication Cables (NESC Sec. 23, T. 238.2) Exceptions:
  - a. The separation of C and D may be reduced to 4" if the mast arm is effectively grounded.
  - b. The separation of E may be reduced to 20" if the mast arm is effectively grounded.

Distribution Construction Standard Page 3 of 6 Published Date: 24 Jan 17 Last Reviewed: 24 Jan 17









#### Notes:

#### A. Vertical Separation (NESC Section 23, Table 238-1)

40" If supply voltage is 0 - 8.7 kV

40" + 0.4 per kV If supply voltage is over 8.7 kV

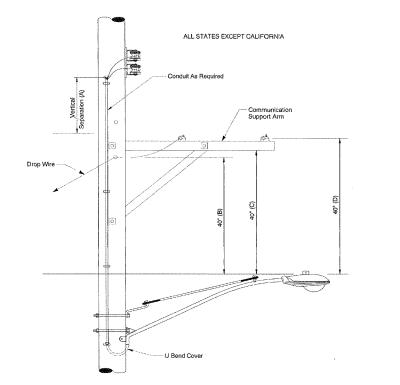
**Exception:** Clearances may be reduced to 30" where non-current-carrying parts of supply equipment are effectively grounded and the associated neutral meets Rule 230E1, **or** supply cables meeting Rule 230C1 (including support brackets) are bonded to communication messengers at intervals meeting Rule 92C throughout well-defined areas, and where communication is at lower levels.

- B. Separation from Communication Brackets (NESC Section 23, Table 238-2)
- C. Separation from Messengers Carrying Communication Cables (NESC Sec. 23, T. 238-2)
- D. Separation from Terminal Box of Communication Cable (NESC Sec. 23, Table 238-2) Exceptions:
  - a. The separation of B, C, and D may be reduced to 4" if the mast arm is effectively grounded.

Distribution Construction Standard Page 4 of 6 Published Date: 24 Jan 17 Last Reviewed: 24 Jan 17







# Figure 4—Street Lighting Facilities Below Communication Open Wire Crossarm

#### Notes:

#### A. Vertical Separation (NESC Section 23, Table 238-1)

40" If supply voltage is 0 - 8.7 kV

40" + 0.4 per kV If supply voltage is over 8.7 kV

**Exception:** Clearances may be reduced to 30" where non-current-carrying parts of supply equipment are effectively grounded and the associated neutral meets Rule 230E1, or supply cables meeting Rule 230C1 (including support brackets) are bonded to communication messengers at intervals meeting Rule 92C throughout well-defined areas, and where communication is at lower levels.

#### B. Separation from Communication Brackets (NESC Section 23, Table 238-2)

- a. The separation of B may be reduced to 4" if the mast arm is effectively grounded.
- b. The separation of C and D may be reduced to 24" if the mast arm is effectively grounded.
- c. The separation of D may be further reduced to 4" if the communications cable is located below the crossarm and the mast arm is effectively grounded.

#### C. Separation from Below Communication Support Arm (NESC Section 23, Table 238-2)

D. Separation from Messengers Carrying Communication Cables (NESC Sec. 23, T. 238-2)

Distribution Construction Standard Page 5 of 6 Published Date: 24 Jan 17 Last Reviewed: 24 Jan 17





This page is left blank intentionally.

Distribution Construction Standard Page 6 of 6 Published Date: 24 Jan 17 Last Reviewed: 24 Jan 17



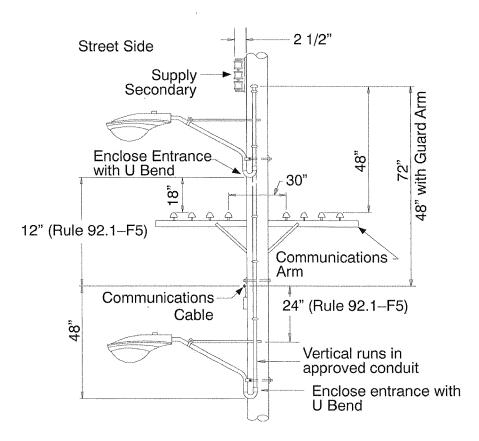


# Scope

This standard provides information regarding clearances between street lights and communication attachments on joint use poles in the State of California. Included are open wire communication circuits on crossarms, cable attached directly to the pole and secondary supply circuits.

#### General

Joint use clearances for street lights installed in California are under the jurisdiction of GO 95. Street lights may be installed above or below communication circuits provided that required clearances are met. (See Figure 1 for clearances.)





#### Notes

Hardware clearances 2"

Distribution Construction Standard Page I of 2 Published Date: 8 Feb 16 Last Reviewed: 8 Feb 16



This page is left blank intentionally.

Distribution Construction Standard Page 2 of 2 Published Date: 8 Feb 16 Last Reviewed: 8 Feb 16





# EU 281 Joint Use—Clearances, Low Voltage Service Drops

#### Scope

This standard provides information regarding clearances between company-owned supply service drops and communication attachments on joint use poles in California, Washington, and all other service areas.

# General

This standard includes clearances between supply service drops from 0-750V and open wire communication circuits on crossarms (see Figure 1 below for clearances).

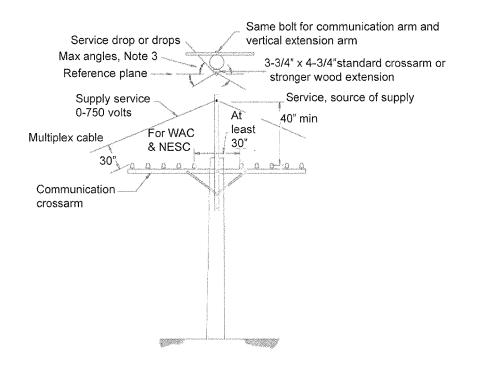


Figure I—Service Drop Contacts on Communications Poles

Distribution Construction Standard Page I of 2 Published Date: 8 Feb I6 Last Reviewed: 8 Feb I6





#### EU 281 Joint Use—Clearances, Low Voltage Service Drops

#### Notes

- 1. Use a pole top fixture when the following conditions exist:
  - a. Not more than two branches to service
  - b. The span from the supply pole to the communication pole is not over 100' and the span from the communication pole to the house is not over 100'
  - c. Maximum size of service wire from the communication pole to the house is #2 triplex
- 2. Where conditions are more severe than shown in Figure 1 or as limited by note 1, each case must be individually planned.
- 3. The angle of service crossing and service drop or drops to a plane normal to the alignment of the pole line shall not exceed 45°.





# EU 401 Joint Use—CATV on Poles

# Scope

This standard details the clearances, locations and equipment involved in the installation of Community Antenna Television (CATV) auxiliary equipment on company poles. Equipment addressed in this standard does not include meters or any other metering equipment.

# General

- 1. CATV auxiliary equipment consists mainly of power supplies and separate service protection disconnects. An installation usually consists of a 120 V service in conduit to a service disconnect, a metal cabinet with a 120 V AC to 60 V AC or DC power supply (batteries optional), and a return supply line (usually ½" coax) to the main CATV cable. An amplifier is usually supported on the CATV cable messenger at least 18" away from the pole. The return supply line terminates at the amplifier or other termination device suspended by the CATV messenger.
- 2. CATV companies are licensees and prior to installation, must make special written application to the company to use space outside the normal communications space on company poles, as well as application to receive electrical service. The company is concerned that additional equipment fastened to the pole not impair the company's use of facilities nor lessen the margin of safety for our crews. To ensure these conditions are met, future installations must meet the installation requirements below. The company will reserve the right to decline electrical service until all requirements of this specification are met.
- 3. Vertical pole space allocations for joint use distribution poles are given in company standard EU 101.

# Installation Requirements

- All CATV equipment installations on company-owned poles shall meet the requirements of the latest edition of the National Electrical Safety Code (NESC) applicable in Oregon, Idaho, Utah, and Wyoming; GO 95 in California; or the latest edition of the NESC applicable in Washington, except as superseded by the Washington Administrative Code (WAC).
- 2. CATV auxiliary equipment shall not be installed on poles having conduit risers or on poles having gangoperated switches, capacitors, reclosers, or regulators. Any rearrangement of facilities required for auxiliary CATV equipment located outside the normal communication space allocation will be made at the company's option and at the licensee's expense.
- 3. The maximum size auxiliary equipment cabinet that may be installed on the pole, is limited to 26" wide by 26" high by 20" deep, exclusive of mounting bracket(s). The service disconnect, when attached to one end of the cabinet, is also excluded from these dimensions. No more than one such cabinet may be attached to a pole. A service disconnect may be installed separately above the cabinet, and if so installed, shall be on the same side of the pole. The service disconnect may be attached directly to the pole providing the dimensions of the service disconnect are no greater than 6" wide by 12" high by 6" deep.

If the auxiliary equipment is to be supplied by a portable generator during outage conditions, the service disconnect shall have a visible-break, double pole, double-throw switch to avoid back-feeding the utility service.

Distribution Construction Standard Page I of 4 Published Date: 29 Jun I 6 Last Reviewed: 29 Jun I 6





4. Equipment mounted on a pole must not restrict the ability of an electric worker to climb past it. If the equipment cabinet is more than 12" in height, as shown in Figure 1, it must be mounted on offset brackets that provide a space for the electric worker to use a belt. This space must be at least 4½" wide by 6" high, as shown in Figure 2. These brackets shall be installed with through bolts. The through bolt ends shall not protrude more than 1" beyond the nut on other side of the pole. Use of wood crossarms or plastic mounting brackets is not acceptable. All holes bored in company poles shall be flooded with a 2% solution of copper naphthenate before bolt insertion. Any unused pole holes due to misdrilling or equipment removal shall be flooded and plugged with treated dowels.

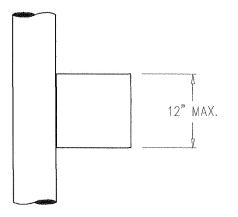
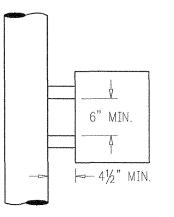


Figure I-Maximum Height of Directly-Mounted Equipment Cabinet



# Figure 2—Equipment Cabinet with Mounting Brackets

5. The auxiliary cabinet and associated service equipment shall be installed in an orientation on the pole that allows a 30"-square minimum climbing space as shown in Figure 3. This climbing space shall extend vertically 48" above the uppermost portion and below the lowest portion of any installed auxiliary equipment.

Distribution Construction Standard Page 2 of 4 Published Date: 29 Jun 16 Last Reviewed: 29 Jun 16





- 6. If the climbing space is rotated around the pole for continued climbing, the climbing spaces in different quadrants of the pole must overlap. The lowest point of any cabinet, conduit, or cable shall be 12' above the ground. If any part of an enclosure overhangs a roadway shoulder, the minimum distance to the lowest portion shall be 15'. Enclosures overhanging roadways shall have at least a 16' clearance.
- 7. All work that is done above the joint use communications space shall be performed only by workers who are trained and qualified to work in the electric utility space, and have company authorization to perform the specific work. The electric service riser shall be provided and installed at the cost of the licensee. The riser, as shown in Figure 4, shall be run in PVC Schedule 40, electrical grade conduit, attached to the pole at no greater than 30" intervals. A PVC service entrance fitting shall also be used. The return supply line from the cabinet to the main CATV cable position shall be covered with plastic or wooden molding, as appropriate, where the supply line is in contact with the pole (see Figure 3).

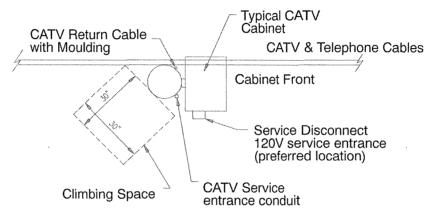


Figure 3—Climbing Space

8. All metallic enclosures shall be effectively grounded. The minimum grounding conductor size shall be #6 AWG soft drawn copper. The enclosure grounding conductor shall be attached to the power system grounding conductor, if available, by means of a compression connector or other approved fitting. This connection shall be in the communications space only. If the pole ground is not available, the communication utility shall request the installation of a pole ground by the company.

The licensee shall provide and install any or all of the above grounding material if it is not already existing at the pole (see Figure 4).

- 9. The communication utility shall not attach their guy wires to the company's anchors unless explicit written permission is given for each specific location. Anchor rod auxiliary eyes are not permitted on company anchors. Additionally, all guy wires installed on company anchors to support the communication utility's equipment or cable shall be insulated as defined by Rule 279A2a of the NESC, and in accordance with company standard practice. In addition to meeting code, this practice prevents galvanic corrosion of anchors. The insulator shall meet NESC flashover and strength requirements. If, by written permission, the company allows the guy wire to be bonded at the pole, an insulator is still required that meets NESC strength requirements as stated in NESC Rules 279A1c and 279B3.
- 10. Slack span installations and unguyed deadend pole installations by communications licensee companies are not allowed on company-owned poles unless:

Distribution Construction Standard Page 3 of 4 Published Date: 29 Jun 16 Last Reviewed: 29 Jun 16





- a. The communications company provides a complete engineering design and review, signed and stamped by a licensed professional engineer.
- b. The engineering review shall be included in the application, with all tensions, strengths, angles, and calculations associated with the proposed slack span or unguyed deadend installation
- c. Receipt of the professional engineer's design and review is acknowledged in writing by the company.

All guy wires attached to the communication utility's own anchors shall meet NESC requirements.

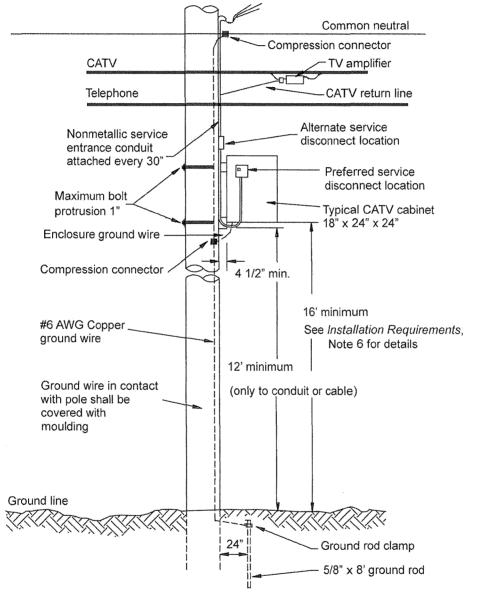


Figure 4—Typical Installation of CATV Auxiliary Equipment with Grounding

Distribution Construction Standard Page 4 of 4 Published Date: 29 Jun 16 Last Reviewed: 29 Jun 16



