

POLE ATTACHMENT AGREEMENT

BETWEEN

PACIFICORP

AND

ALLIANT TECHSYSTEMS INC.

THIS POLE ATTACHMENT AGREEMENT (this "Agreement"), dated as of May 7th, 2010 is entered into by and between PACIFICORP, an Oregon Corporation, d.b.a. PACIFIC POWER and ROCKY MOUNTAIN POWER, hereinafter "PacifiCorp," and ALLIANT TECHSYSTEMS INC., hereinafter "Licensee," a Utah Corporation .

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

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

WHEREAS, Licensee desires to attach its communications Equipment to Poles owned by PacifiCorp within the state of Utah and PacifiCorp 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:

"Attachment" means each individual contact of Equipment to a Pole.

"Audit" means a periodic effort to collect information through Inspection by PacifiCorp of all or any number of Poles that may have Licensee Attachments.

"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.

"Distribution Construction Standards" means the current PacifiCorp Distribution Construction Standards attached hereto as Exhibit C, and any subsequent revisions thereof.

"Electronic Notification System" or "ENS" means the electronic system, or combination of electronic systems designated by PacifiCorp in its sole discretion, the 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, 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. Equipment specifically excludes Licensee wireless communication devices.

“Fee Schedule” means the fees set forth in Exhibit B attached hereto.

“Inspection” means examination by PacifiCorp 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.

“Make-ready Work” means all engineering, Inspection, design, planning, construction, or other work necessary, in PacifiCorp’s reasonable judgment, to prepare PacifiCorp’s Poles for the installation of Licensee’s Attachments, including without limitation, work related to transfers, rearrangements and replacements of existing Poles or Equipment, and/or the addition of new Poles or Equipment.

“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.

“Non-recurring Charges” means amounts payable by Licensee under this Agreement other than rental charges, including, without limitation: application fees; charges to correct nonconforming Equipment; charges for Make-ready Work; costs of mitigating interference with PacifiCorp’s equipment; Pole replacements or installation for Licensee’s benefit; cost of anchors and guys; removal or relocation of Attachments or other Equipment; liability for damage to Equipment; sanctions; pre and post construction Inspections of new Attachments, modified Attachments, Pole transfers, requests for special Inspections; certain tax liabilities; late payment interest; and any other costs incurred by PacifiCorp that are caused by or attributable to Licensee’s Equipment.

“Party” means PacifiCorp or Licensee, as the context requires; “Parties” means PacifiCorp and Licensee.

“Periodic Inspection” means any inspection done at the option of PacifiCorp to review the safety and integrity of its Poles. Periodic Inspections do not include pre-construction activities, post construction inspections or Audits.

“Pole” means any pole owned by PacifiCorp that is designed to carry distribution.

ARTICLE II. SCOPE OF AGREEMENT

Section 2.01 Grant of License; Geographic Scope

In accordance with the terms and conditions of this Agreement, PacifiCorp 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 PacifiCorp's Poles within the state of Utah.

Attachments shall not be permitted by PacifiCorp on poles which are not designed to accommodate distribution. Nothing in this Agreement shall be construed to obligate PacifiCorp to grant Licensee permission to use any particular Pole or Poles.

Section 2.02 Attachments; Purpose

Licensee's use of Poles shall be confined to the Attachments which PacifiCorp may give Licensee prior written permission to install for the sole purpose of providing: communications (the "Permitted Purpose") service. This Agreement does not apply to Licensee wireless communications equipment.

In the event Licensee intends to expand or modify its Permitted Purpose, Licensee shall provide at least ninety (90) days advance written notice to PacifiCorp. Following receipt of such notice, PacifiCorp 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

PacifiCorp reserves the right, in its sole judgment, to reject applications for Attachment to its Poles for the following reasons:

- a. Insufficient capacity - once all reasonable potential accommodations have been considered by PacifiCorp and communicated to Licensee.
- b. Necessary for PacifiCorp's own sole use or would threaten PacifiCorp's system reliability.
- c. Proposed Licensee Attachment is considered to be unsafe according to the NESC, PacifiCorp's Distribution Construction Standards (Exhibit C) or Commission safety rules.
- d. Unreasonable interference with PacifiCorp or a third Party's Equipment.
- e. Licensee's account with PacifiCorp is not in good standing.
- f. If 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 3.02, 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 PacifiCorp 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 PacifiCorp's Pole numbers; Equipment to be attached; engineering information for the calculation of Pole loading, clearances and viability of each Pole; indication of required Make-ready Work as outlined in Section 3.02; and all applicable contact information for the Licensee or Licensee's qualified contractor. PacifiCorp will either approve or deny applications in writing within forty-five (45) days of receipt of the application.

Licensee shall promptly submit payment for all fees applicable to the assessment of proposed Attachments pursuant to the Fee Schedule (Exhibit B) upon receipt of an invoice from PacifiCorp. Rental charges for each approved Attachment shall commence as of the date of PacifiCorp's approval of the application pursuant to the Rental Rate Schedule (Exhibit A) and the first charge for annual rent on the Attachment shall be charged at this time, with no abatement for the period of the current annual billing period prior to the Attachment approval. For illustrative purposes only, if the Attachment is approved in December and the current annual billing period is the prior July through the following June, for \$100 per Attachment, the Licensee will be charged \$100 in December for the new approved attachment and then \$100 for the Attachment the following July for the next annual billing period.

Section 3.02 Make-ready Work

If in the reasonable judgment of PacifiCorp the accommodation of any of Licensee's Attachments necessitates Make-ready Work, in the response to Licensee's application PacifiCorp will indicate the Make-ready Work that will be necessary to accommodate the Attachments requested and the estimated cost thereof within the application processing time period identified in Section 3.02. If Licensee is willing to bear the cost of all Make-ready Work necessary, as determined by PacifiCorp, Licensee shall so indicate by submitting a check in accordance with UAR 746-345-3.C.7 and notifying the PacifiCorp via ENS (if applicable) or in writing within thirty (30) days of the date of PacifiCorp's response to Licensee's initial application. PacifiCorp will provide Licensee an estimated completion date for any Make-ready Work, taking into account the timeframes set by R746-345-3, the overall scope of the Licensee's project, the volume of applications received from other licensees, as well as the availability of crews to perform the work. The Licensee and the PacifiCorp shall negotiate solutions in good faith when the estimated time to perform the Make-ready Work does not meet the Licensee's project requirements. At Licensee's option and upon approval from PacifiCorp, Licensee may request either assistance with the work by Licensee or by qualified contractors hired by the Licensee, payment of premium rates for PacifiCorp's employees to be dedicated to perform work solely on Licensee's project, or similar measures designed to augment the PacifiCorp's capabilities. If Licensee chooses to employ a qualified contractor to complete the Make-ready Work, to ensure safety and reliability, the contractor and the schedule must be approved by PacifiCorp.

PacifiCorp will perform such Make-ready Work as may be required and Licensee will pay the PacifiCorp for the Make-ready Work in accordance with the procedures outlined in R746-345-3. Licensee shall pay the costs of all Make-ready Work undertaken by PacifiCorp 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 PacifiCorp shall provide Licensee, a statement detailing the actual material, hours, equipment costs, and any other associated costs will be provided to Licensee for payment of Make-ready Work.

Section 3.03 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 PacifiCorp. Licensee shall provide written notice to PacifiCorp of its completion within five (5) business days of the actual installation.

If the Licensee requires a more than one hundred (180) days following PacifiCorp's approval of its Application to install its equipment, the Licensee shall notify PacifiCorp in writing, within the required one hundred eighty (180) day time limit, of its request for an extended period to install its Attachment. PacifiCorp and Licensee shall discuss the additional time requested to complete the Attachment, and PacifiCorp, in its discretion, may grant Licensee an agreed upon additional time to complete the Attachment.

In the event Licensee fails to complete installation of its Attachments within the prescribed time limit, the permission granted by PacifiCorp 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 PacifiCorp, 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 PacifiCorp. 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 PacifiCorp no later than five (5) Business Days after installation. Should PacifiCorp 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 PacifiCorp requesting a reasonable extension within the five (5) Business Day period, or in the case of emergencies, within the period specified by PacifiCorp, PacifiCorp may remove Licensee's Equipment at Licensee's sole risk and expense, and Licensee shall pay, upon demand, for all costs thereby incurred by PacifiCorp.

Section 3.04 Identification of Equipment

Licensee shall clearly mark each Attachment with suitable identification as determined in advance by PacifiCorp. Licensee's identification must be visible from the ground and not interfere with other facility identification.

Section 3.05 Conformance to Requirements and Specifications

Licensee shall, at its sole risk and expense, place and maintain its Equipment upon the Poles in conformity with the requirements and specifications of the NESC and such requirements and specifications as PacifiCorp shall from time to time prescribe, including without limitation, the current PacifiCorp Distribution Construction Standards (Exhibit C). In the event of any conflict between any of the requirements and specifications of the NESC, of the Commission, and those prescribed by PacifiCorp, the more stringent requirements and specifications shall govern. In the event there are changes in any such requirements or specifications, including but not limited to changes in required clearances, Licensee shall modify its Equipment to comply with such changes at its sole risk and expense.

Licensee (including its employees and contractors) shall not enter PacifiCorp's electric utility space for any purpose including making connections to the PacifiCorp neutral. If Licensee requires grounding on an existing Pole where a grounding conductor does not exist, Licensee shall request that PacifiCorp 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 PacifiCorp as energized at all times.

Licensee shall have in place a facility inspection program that ensures compliance with the requirements and specifications of this section, and Licensee shall provide PacifiCorp with comprehensive documentation of Licensee's program upon request.

Section 3.06 Nonconforming Equipment

If any Attachment is not placed and maintained in accordance with the requirements and specifications of Section 3.04 PacifiCorp 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. PacifiCorp will attempt to notify Licensee in writing prior to performing such work, whenever practicable. However, if PacifiCorp determines the conditions pose an immediate threat to the safety of utility workers or the public, interfere with the performance of PacifiCorp's service obligations, or pose an immediate threat to the integrity of PacifiCorp's Poles or Equipment, PacifiCorp may perform such work, without prior notice, at the sole risk and expense of the Licensee. As soon as practicable thereafter, PacifiCorp will notify Licensee in writing of the work performed. Licensee shall pay, upon demand, all costs thereby incurred by PacifiCorp including any applied sanctions.

Section 3.07 Interference with PacifiCorp's Equipment

If, in PacifiCorp's judgment, Licensee's existing Attachments on any Pole interfere with PacifiCorp's existing Equipment or prevent the placing of any additional Equipment by PacifiCorp, PacifiCorp will notify Licensee in writing of rearrangements or transfers of Licensee's Equipment, Pole replacements or other changes required in order to continue to accommodate Licensee's Attachments. If appropriate, this notice will include an estimate of any applicable cost for PacifiCorp to complete work to accommodate Licensee's continued attachment.

If Licensee desires to continue to maintain its Attachments on a Pole where an estimate has been provided for accommodation work to be completed by PacifiCorp, it will return PacifiCorp's notice of the estimated cost, 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 PacifiCorp; provided, however, that PacifiCorp in any emergency may require Licensee to remove its Attachments within the time required by the emergency. Licensee shall notify PacifiCorp 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 PacifiCorp, PacifiCorp may remove Licensee's Equipment at Licensee's sole risk and expense, and Licensee shall pay, upon demand, for all costs thereby incurred by PacifiCorp.

Section 3.08 Pole Replacement for Licensee's Benefit

Where an existing Pole is prematurely replaced by a new Pole for the benefit of the Licensee, the Licensee shall reimburse PacifiCorp for all costs, including, but not limited to, the cost to replace the Pole, transfer of existing PacifiCorp 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 NESC.

PacifiCorp shall remove and may retain or dispose of such Pole as the sole owner thereof. Any payments for Poles made by the Licensee shall not entitle Licensee to ownership of any part of said Poles.

Section 3.09 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.

Section 3.10 Mid-span Poles

Any Poles erected by Licensee shall not interfere with, or be in-line with PacifiCorp'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 PacifiCorp of its need and PacifiCorp shall determine whether it wishes to place Pole facilities in such location. Licensee shall pay, upon demand, PacifiCorp for all costs incurred by PacifiCorp in installing such additional Poles. PacifiCorp will have sole ownership of the mid-span Pole and Licensee will pay rental fees to PacifiCorp in accordance with Article IV.

Section 3.11 Vegetation Management

All vegetation management in connection with the initial placement of wires or other Equipment shall be undertaken entirely by the Party placing the wires or other Equipment 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 Equipment it owns. If Licensee fails to fulfill its obligations of this section, PacifiCorp shall provide written notice to Licensee that if the issue is not resolved within thirty (30) days, PacifiCorp will perform the required remedy at Licensee's sole risk and expense.

Section 3.12 Third-Party Consents, Permits, Licenses, or Grants

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 PacifiCorp hereunder. PacifiCorp, at any time, may require Licensee to submit written documentation of compliance with this Section. Upon notice from PacifiCorp 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, PacifiCorp may remove Licensee's Equipment from such Poles without incurring any liability and Licensee shall, upon demand, pay PacifiCorp all costs incurred by PacifiCorp in the removal of Licensee's Equipment.

Section 3.13 Relocation of Attachments at PacifiCorp's Option

Licensee shall at any time at its own sole risk and expense, upon notice from PacifiCorp, relocate, replace, repair, or perform any other work in connection with the Attachments that may be required by PacifiCorp, within thirty (30) days unless another timeframe is specified in writing by PacifiCorp. Licensee shall provide written notification to PacifiCorp within five (5) Business Days of its completion. Provided, however, that in cases of emergency or if Licensee does not complete required work at the end of the thirty (30) day period, PacifiCorp may complete any work in connection with the

Licensee's Attachments that may be required, and Licensee will, upon demand, reimburse PacifiCorp for the entire expense thereby incurred.

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

Section 3.14 Removal of Attachments by Licensee

Licensee may at any time remove its Attachments from any of the Poles and, in each case, Licensee shall immediately give PacifiCorp written notice of such removal. Application and Inspection fees will apply to notices to remove attachments pursuant to the Fee Schedule (Exhibit B). 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 will be reduced in the next annual billing cycle following Licensee's proper notice to PacifiCorp of the removal. When Licensee performs maintenance to or removes or replaces its Equipment on a PacifiCorp Pole, Licensee shall chemically treat all field drilled holes and plug any unused holes, including those resulting from removal of Equipment; if Licensee fails to adequately plug and treat such holes, PacifiCorp may do so at Licensee's sole risk and expense.

Section 3.15 Damage to Equipment

Licensee shall exercise all necessary precautions to avoid causing damage to PacifiCorp'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 the PacifiCorp of the damaged Poles or Equipment for the entire expense incurred in making repairs.

Section 3.16 Inspections and Audits

Inspections. PacifiCorp shall have the right to perform an Inspection of each of Licensee's Attachments and other Equipment upon and in the vicinity of PacifiCorp Poles at any time. Except for routine periodic inspections, PacifiCorp may charge Licensee for the expense of any such Inspections, including Inspections for Make-ready Work, pre-construction Inspections, Inspections during installation of Licensee's equipment, post-construction (including any modifications or Pole transfers) Inspections, and any other Inspections requested by the Licensee or deemed necessary by PacifiCorp. The frequency of periodic Inspections will be determined in PacifiCorp's reasonable discretion,

Audits. PacifiCorp may conduct an Audit of Attachments made to its Poles no more frequently than once every five (5) years. PacifiCorp shall give Licensee at least ninety (90) days prior notice of an initial meeting to plan the next Audit. At such meeting, PacifiCorp, 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, PacifiCorp shall notify Licensee at least sixty (60) days prior to the commencement of the Audit. Licensee shall advise PacifiCorp if Licensee desires to participate in the Audit with PacifiCorp not less than thirty (30) days prior to the scheduled date of such Audit. The cost of the Audit shall be included in the rental rate pursuant to the methodology approved by the Commission for such purposes. The data from the Audit shall be made available to 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.

Section 3.17 Tax Liability

Licensee shall promptly pay any tax, fee, or charge that may be levied or assessed against PacifiCorp'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, PacifiCorp, at its own option, may pay such tax on account of Licensee and Licensee shall, upon demand, reimburse PacifiCorp for the full amount of tax and any penalties so paid.

ARTICLE IV. RENTAL PAYMENTS

Section 4.01 Rental Amount

For authorized Attachments covered under this Agreement, Licensee shall pay to PacifiCorp, in advance, on an annual basis, a rental amount computed in accordance with UAR R746-345-5.A. as set forth in Exhibit A, on a billing cycle beginning July 1 of each year. The rental amount for each year shall be based on PacifiCorp's tabulation of Licensee's Attachments situated upon PacifiCorp's Poles and based upon PacifiCorp'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 and in accordance with UAR R746-345-3.A.1., and as otherwise approved by the Commission. Parties recognize that rates may change consistent with the methodology, but such changes will be pre-approved by the Commission.

Section 4.02 Unauthorized Attachments

Licensee shall not make Attachments to PacifiCorp's Poles without obtaining the PacifiCorp's written permission as provided for in this Agreement. PacifiCorp may charge Licensee the amounts contained in the Fee Schedule attached hereto as Exhibit B upon the discovery of unauthorized Attachment, on each Pole, belonging to Licensee. The imposition of such charges shall be without prejudice to PacifiCorp's right to utilize additional other remedies, including, but not limited to, the remedies available for default under Article VI of this Agreement and any remedies available under Commission rules. The Licensee may avoid unauthorized attachment fees, except back rent, if it self-discloses unpermitted attachments and provides an application for said attachment permits prior to PacifiCorp's discovery.

Section 4.03 Billing and Payments

PacifiCorp shall send invoices to Licensee via regular U.S. Mail at the address specified below, or at such other address as Licensee may designate from time to time 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 4.04.

In the event Licensee disputes an invoice, Licensee shall provide written notice of the dispute to PacifiCorp within sixty (60) days of the date of the disputed invoice, otherwise Licensee shall forfeit its right to dispute the invoice. Notice shall include an explanation of the Licensee's dispute. PacifiCorp

reserves the right to impose late fees and/or interest as specified in Section 4.05 in the event the dispute is unfounded.

Licensee's billing address:

ATK Launch Systems
Attn: Rick Cardenas
PO Box 707
Brigham City, UT 84302-0707

Section 4.04 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 maximum rate allowed by applicable law shall be assessed against all late payments.

Section 4.05 Adequate Assurances

PacifiCorp shall have the right to request adequate assurances from Licensee, including, but not limited to, the posting of security, in a form reasonably satisfactory to PacifiCorp in the event, the credit rating of Licensee falls below the rating level of CCC. Licensee shall provide adequate assurances in a form acceptable to PacifiCorp within ten (10) Business Days following demand thereof.

ARTICLE V. INDEMNIFICATION; LIMITATIONS OF LIABILITY; WARRANTIES

Section 5.01 Indemnification/Release

To the fullest extent permitted by law, Licensee shall indemnify, protect, and hold harmless PacifiCorp and its directors, officers, employees and agents (collectively, the "PacifiCorp 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 PacifiCorp 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 PacifiCorp's negligence or willful misconduct. Licensee shall also indemnify and release, protect and hold harmless the PacifiCorp 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 PacifiCorp undertaken in furtherance of the purposes of this Agreement. 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 PacifiCorp, or its successors or assigns, on any claim, demand, or cause of action arising from any interruption, discontinuance, or interference with PacifiCorp's service to PacifiCorp's customers which may be caused, or which may be claimed to have been caused, by any action of Licensee. Provided PacifiCorp has tendered defense to Licensee, Licensee shall pay and satisfy any judgment or decree which may be rendered against PacifiCorp, or its successors or assigns, in any such suit, action, or other legal proceeding; and further, Licensee shall reimburse PacifiCorp for any and all legal expenses, including attorneys' fees, incurred in connection

therewith, including appeals thereof. Licensee hereby releases PacifiCorp 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 such removal, including damages caused by PacifiCorp's ordinary negligence. Under no circumstances shall either Party be liable for economic losses, costs or damages, including but not limited to special, indirect, incidental, punitive, exemplary or consequential damages.

Section 5.02 Warranty

PacifiCorp warrants that its work in constructing and maintaining the Poles covered by this Agreement shall be consistent with prudent utility practices. **PACIFICORP 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 either Party be liable for economic losses, costs or damages, including but not limited to special, indirect, incidental, punitive, exemplary or consequential damages.

ARTICLE VI. INSURANCE AND BOND

Section 6.01 Insurance

At all times during the term of this Agreement, Licensee shall maintain and shall require its subcontractors that do any work pursuant to this Agreement to maintain, the minimum insurance coverage set forth below and limits and any additional insurance and/or bonds required by law PacifiCorp shall be named as an additional insured on the policy:

- a. Workers Compensation Insurance: Workers' Compensation Insurance with benefits afforded under the laws of each state included in the Attachment Area as well as Employers Liability insurance with a minimum single limit of \$1,000,000 bodily injury by accident for each employee and each accident, and \$1,000,000 bodily injury by disease.
- b. Commercial General Liability Insurance: Commercial General Liability insurance with a minimum of \$2,000,000.
- c. Automobile Liability Insurance: Business Automobile Liability insurance with a minimum single limit of \$1,000,000 for bodily injury and property damage with respect to Licensee's vehicles whether owned, hired or non-owned, assigned to or used in Licensee's operations hereunder.
- d. Umbrella Liability Insurance with a minimum combined single limit of \$5,000,000 each occurrence / aggregate where applicable to be excess of the coverages and limits required in a., b. and c. above.
- e. Business Interruption Insurance with a minimum of \$1,000,000.

Section 6.02 Proof of Compliance

Licensee shall provide written proof of current compliance with this Article in a form acceptable to PacifiCorp on an ongoing basis. Licensee's proof shall also contain written verification from its insurance provider that Licensee's insurance shall not be terminated, reduced or cancelled unless PacifiCorp is provided advance notice of not less than thirty (30) days.

Section 6.03 Bonding

PacifiCorp may require Licensee to furnish a bond to cover the faithful performance by Licensee of its obligations hereunder. Any such bond shall be issued by a commercial bonding company selected by Licensee and satisfactory to PacifiCorp; shall not be subject to termination or cancellation except upon one hundred twenty (120) days prior notice to PacifiCorp; shall be in such form and in such amount as PacifiCorp shall specify from time to time; and, subject to termination or cancellation as aforesaid, shall be maintained in full force and effect throughout the term of this Agreement, including any renewals thereof. Such bond shall be furnished within ninety (90) days written notice to Licensee by PacifiCorp. The furnishing of a bond shall not relieve Licensee of any of its obligations under this Agreement, and the bond shall not be released until all of Licensee's obligations under this Agreement have been discharged.

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 ninety (90) days written notice to the other Party. Licensee shall remove its Equipment from Poles within said ninety (90) day notice period. Should Licensee fail to remove its Equipment within such period, PacifiCorp 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.

PacifiCorp 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 PacifiCorp's Pole or Poles within the thirty (30) day period and provide written notice to PacifiCorp upon its completion.

Section 7.02 Default

The following shall constitute a default hereunder if not cured within thirty (30) days following notice: (a) any material breach of this Agreement; (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.

Section 7.04 Remedies for Default

PacifiCorp may utilize any and all remedies available to it at law and in equity in the event Licensee 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 Licensee from PacifiCorp pursuant to this Agreement or another agreement; (d) cure the default 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 any prior agreements. Any amendments hereto shall be in writing.

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 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 PacifiCorp's property.

Section 8.06 Headings and Exhibits

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 payment of monies due under this Agreement, neither Party shall be deemed in default hereunder to the extent that any delay or failure in the performance of its obligations hereunder is caused by an event of Force Majeure, including acts of the United States of America or any state, territory or political subdivision thereof, acts of God or a public enemy, fire, flood, freight embargos, civil disturbances or any other cause beyond the reasonable control of the Party claiming Force Majeure. The Party claiming Force Majeure shall provide prompt written notice to the other Party and shall immediately commence default and so notify the other Party once it is reasonably practicable to do so.

Section 8.08 Assignments

Licensee may assign or transfer this Agreement to a controlling or controlled affiliate or to a successor in the event of reorganization, including a merger or sale of substantially all of its assets, without the consent of PacifiCorp; provided, however, that Licensee first notifies PacifiCorp of such assignment or transfer in writing and assignee assumes all obligations and liabilities of Licensee hereunder and takes

reasonable measures to cooperate with PacifiCorp to update PacifiCorp's records regarding the proper attaching entity. Any Assignment made in violation of this section 8.09 shall be void.

Section 8.09 Waiver

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 Time is of Essence

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 No Third Party Beneficiaries

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

Section 8.13 Attorneys' Fees

If either Party files any action or brings any 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 Notices

Except as otherwise provided herein for use of PacifiCorp's designated ENS, both Parties will provide notice to each other in writing and shall be considered given if personally delivered, transmitted by facsimile, sent via overnight delivery, or via US Mail, shall be addressed to the Party to be notified at the addresses set forth below or at such other address as a Party may designate for itself from time to time by notice:

If to Licensor:

PacifiCorp
825 NE Multnomah St., Suite 1700
Portland, OR 97232
Attn: Joint Use Administration

FAX: 503-813-6005

If to Licensee:

Alliant Techsystems, Inc.
PO Box 160362 Freeport
Clearfield, UT 84016
Attn: Paul J. Widdison

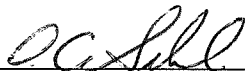
FAX: 435-863-4662

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
ALLIANT TECHSYSTEMS INC.

PACIFICORP, doing business as
PACIFIC POWER and
ROCKY MOUNTAIN POWER

Signed



Printed

DAVID A. SEBAHAR

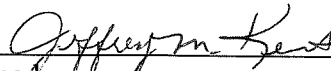
Title

ATK AEROSPACE VP OPS

Date Signed

3/17/10

Signed



Printed

Jeffrey M. Kent

Title

Director Distribution Support

Date Signed

5/7/10



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)

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

FILED: December 7, 2006

EFFECTIVE: December 11, 2006



P.S.C.U. No. 47

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, \$7.02 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.

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.

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

FILED: December 7, 2006

EFFECTIVE: December 11, 2006

Exhibit B

Page 1 of 2

Fee Schedule for non-recurring charges

1. Application Processing Fee (ENS or written) \$26.65 + \$4.00 per pole

Exception: PacifiCorp will invoice Licensee the actual cost associated with processing applications on Rebuild projects.

2. Inspections

In instances when PacifiCorp has sufficient electronic pole attachment data existing in its system of record, PacifiCorp may elect to perform a desktop inspection, which is defined as an inspection performed using only existing electronic data, maps and pictures. There are no inspection fees associated to a desktop inspection.

In instances when PacifiCorp does not have sufficient electronic data to perform a desktop inspection or the desktop inspection results in findings that require a field visit, the following inspection fees apply:

2(a) Pre-Inspection Fees - these fees are based upon applications by various entities that wish to attach a cable, or other device, to PacifiCorp's facilities and also occurs prior to when a Licensee wishes to place new cables and/or additional equipment. All pre and post-inspections are broken into three levels of time usage and complexity.

- Level 1 (Visual Inspection) \$31.30 first pole; \$17.65 each pole thereafter
Level 1 inspections are defined as a "drive by" that does not require the inspector to exit the vehicle and are intended to identify that clearances and strength of the structure are visibly verifiable. These inspections are typically performed when the Licensee has provided all required information given the type of request on the Application form.
- Level 2 (Measured Inspection) \$41.20 first pole; \$30.40 each pole thereafter
Level 2 inspections are most commonly performed when the poles do not appear to have proper clearance to accommodate the newly proposed attachment or when the Licensee has failed to provide all required information given the type of request on the Application form.
- Level 3 (Pole Analysis Inspection) \$88.55 first pole; \$75.90 each pole thereafter
Level 3 inspections are most commonly performed when the poles do not appear to have proper strength to accommodate the newly proposed attachment or when the Licensee has failed to provide all required information given the type of request on the Application form. This level of inspection is highly common on requests for use of transmission poles.

PacifiCorp will not charge Pre-Inspection Fees for an application to remove attachments.

2(b) Post-Inspection Fees - these inspections are completed after a pre-inspection has been approved, and the installation by the original requesting company has been completed.

Level 4 (Visual Inspection) \$31.30 first pole; \$17.65 each pole thereafter
Level 4 inspections are defined as a “drive by” that does not require the inspector to exit the vehicle and are intended to identify that the Licensee has complied with the engineering data provided in the Application form. This level of inspection will be used for all removals of attachments, unless the removal has resulted in damage to the pole in which case additional fees to assess the damage may apply.

Level 5 (Measured Inspection) \$41.20 first pole; \$30.40 each pole thereafter
Level 5 inspections are most commonly performed when it appears that the Licensee has failed to perform construction in accordance with the specifications on their Application form, has created a NESC violation or has attached to the pole prior to receiving approval from PacifiCorp.

Level 6 (Pole Analysis Inspection) \$88.55 first pole; \$75.90 each pole thereafter
Level 6 inspections are most commonly performed when it appears that the Licensee has attached to a pole prior to receiving approval from PacifiCorp and appears to have compromised the integrity of the existing structure. This level of inspection is highly common on requests for use of transmission poles.

3. Unauthorized Attachment Charge
\$100.00 + Back Rent, per Pole
Back Rent shall consist of 5 years of rent at the current rental rate.

4. Topping Fee
A charge of \$64 per Pole will be assessed, where PacifiCorp completes a Pole replacement with an Attachment by the Licensee and the transfer of the Attachment requires removal of the top of the pole to be completed by PacifiCorp.

5. Return Trip Fee
A charge of \$255 per Pole will be assessed, where PacifiCorp completes a Pole replacement with an Attachment by the Licensee and the removal of the replaced Pole cannot be completed at the time of construction due to the Licensee's Attachment; therefore, PacifiCorp will return to the site once the Licensee transfer is complete. This charge is for the return trip, removal of the Pole is not included in this charge.

Exhibit C

Page 0 of 37 (Page 0 left blank intentionally)

PacifiCorp's Distribution Construction Standards

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EU - Joint Use**Table of Contents*****Information Standards***

<u>Standard</u>	<u>Title</u>	<u>Revision Date</u>
EU 001	Joint Use—General Information	10 Nov 98
EU 101	Joint Use—Pole Space Allocation	22 Mar 07
EU 211	Joint Use—Climbing Space Through Communication Circuits	31 May 93
EU 221	Joint Use—Clearances, Communication to Supply Circuits	8 Nov 07
EU 231	Joint Use—Clearances, Communication Above Ground, Roadway or Water	17 Mar 00
EU 241	Joint Use—Clearances, Communication Equipment to Risers	17 Mar 00
EU 251	Joint Use—Clearances, Communication Equipment to Transformers	17 Mar 00
EU 261	Joint Use—Clearances, Communication Equipment to Street Lights	17 Mar 00
EU 281	Joint Use—Clearances, Low Voltage Service Drops	31 May 93
EU 401	Joint Use—CATV on Poles	22 Mar 07

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Joint Use—General Information

A. 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, ANSI C2-1997 (NESC); California Public Utility Commission General Order No. 95 (G.O. 95); and other state and local requirements.

B. 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 PacifiCorp, 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 case-by-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 PacifiCorp 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 PacifiCorp 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

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Engineer (S. Waddoups):

Stds Team Leader (D. Jones):

Joint Use General Information



10 Nov 98

EU 001

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EU 001

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EU 001
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10 Nov 98

**Joint Use
General Information**

**Distribution
Construction Standard**

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Engineer (S. Waddoups):

Stds Team Leader (D. Jones):

Handwritten initials 'RW' and 'DJ' next to the Engineer and Stds Team Leader names respectively.

Joint Use—Pole Space Allocation

A. Scope

This standard provides information regarding the allocation of space on joint use poles for attachment of telephone, cable TV, and PacifiCorp facilities.

B. 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 which 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 Includes Telephone and Cable TV

The term "communication" is considered to include both telephone and cable TV. This is how the term is used by the NESC.

3. Available Pole Space

The setting depth of a pole in normal soil is approximately 10% of the pole length plus 2 feet. Thus a 40-foot pole will be set 6 feet into the ground with 34 feet remaining above ground; and a 45-foot pole will be set 6 1/2 feet deep with 38 1/2 feet 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 communication utility and does not exist on the pole, the communication utility shall request the installation of a pole ground by PacifiCorp. This allows PacifiCorp to ground the neutral conductor attached to the pole. The communication company shall pay for all expenses incurred. At no time shall the communication utility personnel be in PacifiCorp's pole space.

6. Guying and Anchoring

The communication utility shall not attach their guy wires to PacifiCorp's anchors unless explicit written permission is given for each specific location. Anchor rod auxiliary eyes are not permitted on PacifiCorp anchors. Additionally, all guy wires installed on PacifiCorp anchors to support communication utility's equipment or cable shall be insulated as defined by Rule 279A2a of the NESC and in accordance with PacifiCorp 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, PacifiCorp 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 279A3 and 279A1c.

Distribution Construction Standard

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Engineer (D. Asgharian):

DDA

Standards Manager (G. Lyons):

GS

Joint Use Pole Space Allocation



22 Mar 07

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

7. Replacing an existing pole

When PacifiCorp 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 traveling time. The following criteria must be satisfied prior to such action:

1. The pole is positioned close enough to allow attachment by this method.
2. The condition of the old pole section will maintain the integrity of the attachments.
3. 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 utilities must remove their facilities within a reasonable time frame. Additionally, the last joint use utility to work on the structure must remove and dispose of the old section of the pole and DA bolts.

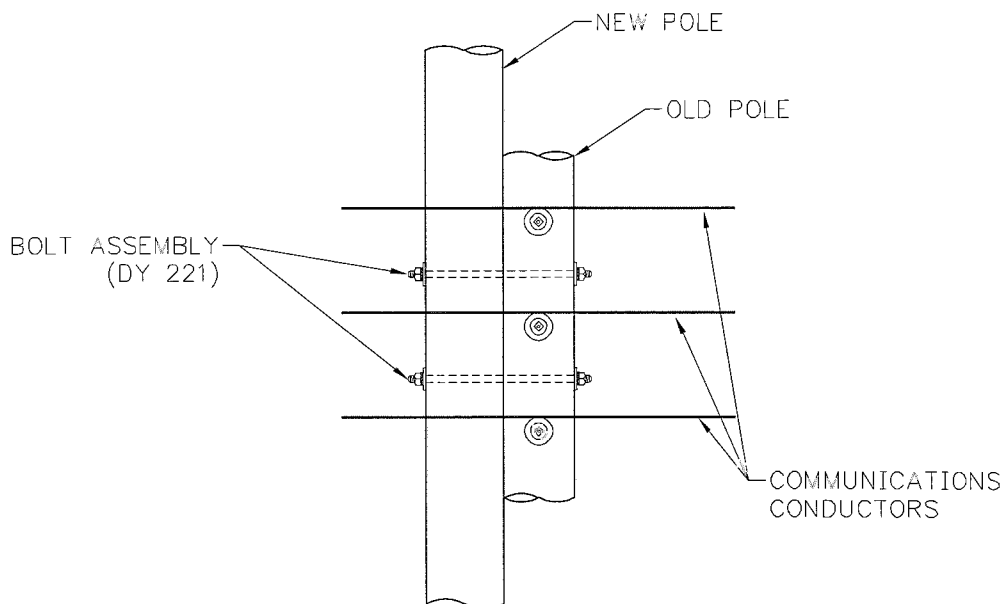


Figure 1—Pole Replacement with Existing Communications Conductors

C. Allocation of Pole Space

1. Separation Space - Permitted Uses

- a) There shall be a minimum of 40 inches 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).
- b) Communication equipment is not permitted to be mounted in the 40-inch 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.

2. 40-Foot Basic Pole

The allocation of space and the usual points of attachments for telephone, TV cable, and electric facilities depends on the length of the "basic pole". In some areas, the basic pole is 40 feet in length (about 34 feet above ground). Figure 1 shows the space allocations and the usual points of attachment for a 40-foot joint use pole.

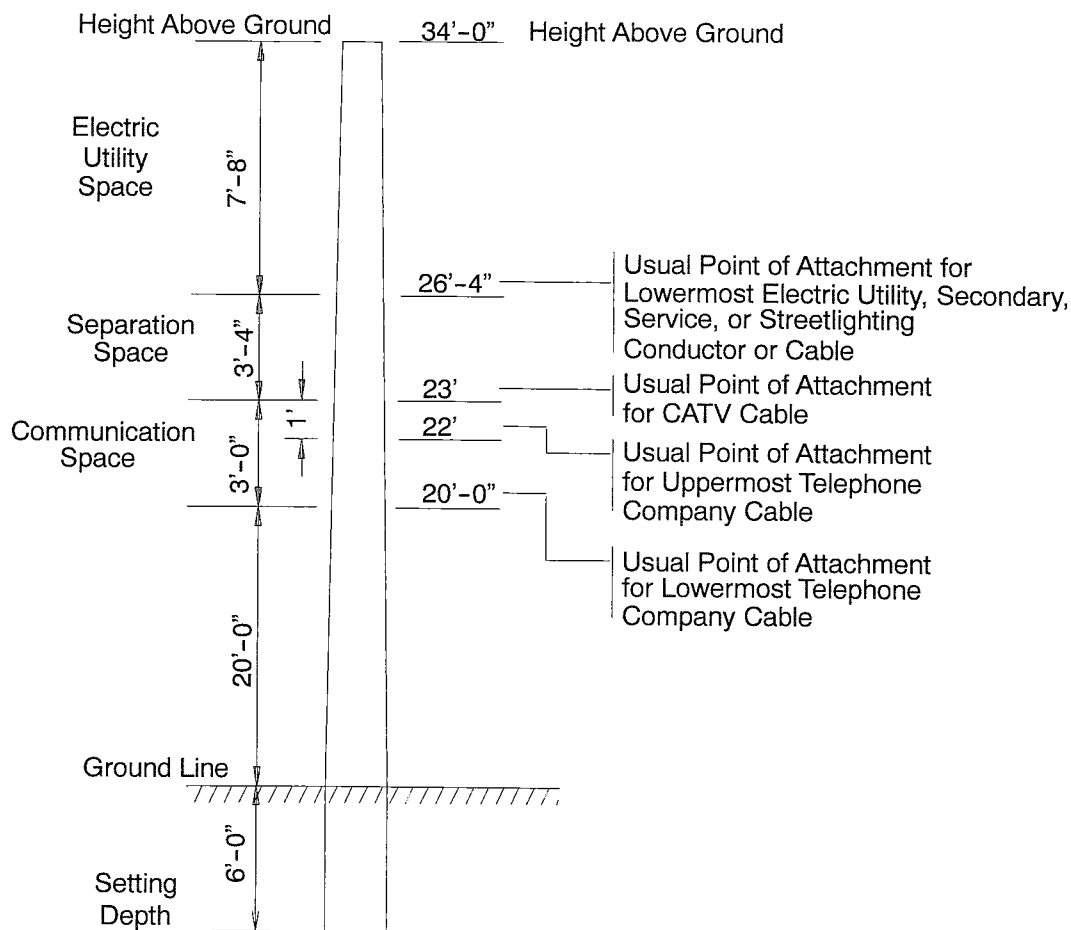


Figure 1 - Space Allocation on 40Foot Basic Joint Use Pole

Distribution Construction Standard

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Engineer (D. Asgharian): *DDA*
Standards Manager (G. Lyons): *GL*

Joint Use Pole Space Allocation



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3. Poles Taller Than the 40-Foot Basic Pole

The company requiring extra pole height pays the extra cost and gets to use the extra height, less the 10% used by the deeper pole hole.

	Basic Pole	Taller Than Basic Pole Extra Height Required By		
		Electric	Commun.	Both
Electric Utility Space	7'-8"	7'-8" + 0.9 L	7'-8"	7'-8"
Separation Space	3'-4"	3'-4"	3'-4"	3'-4"
Communication Space	3'-0"	3'-0"	3'-0" + 0.9 L	3'-0"
As Required But Not Less Than 20'-0"	20'-0"	20'-0"	20'-0"	20'-0" + 0.9 L
Ground Line				
Setting Depth (As Required)	6'	6' +0.1 L	6' +0.1 L	6' +0.1 L
Pole Length	40'	40'+L	40'+L	40'+L

L = Extra Pole Length

Figure 2 - Space Allocation on Poles Taller Than the 40-Foot Basic Pole

4. 45-Foot Basic Pole

The allocation of space and the usual points of attachments for telephone, TV cable, and electric facilities depends on the length of the "basic pole". In many areas, the basic pole is 45 feet in length (about 38 1/2 feet above ground). Figure 3 shows the space allocations and the usual points of attachment for a 45-foot joint use pole.

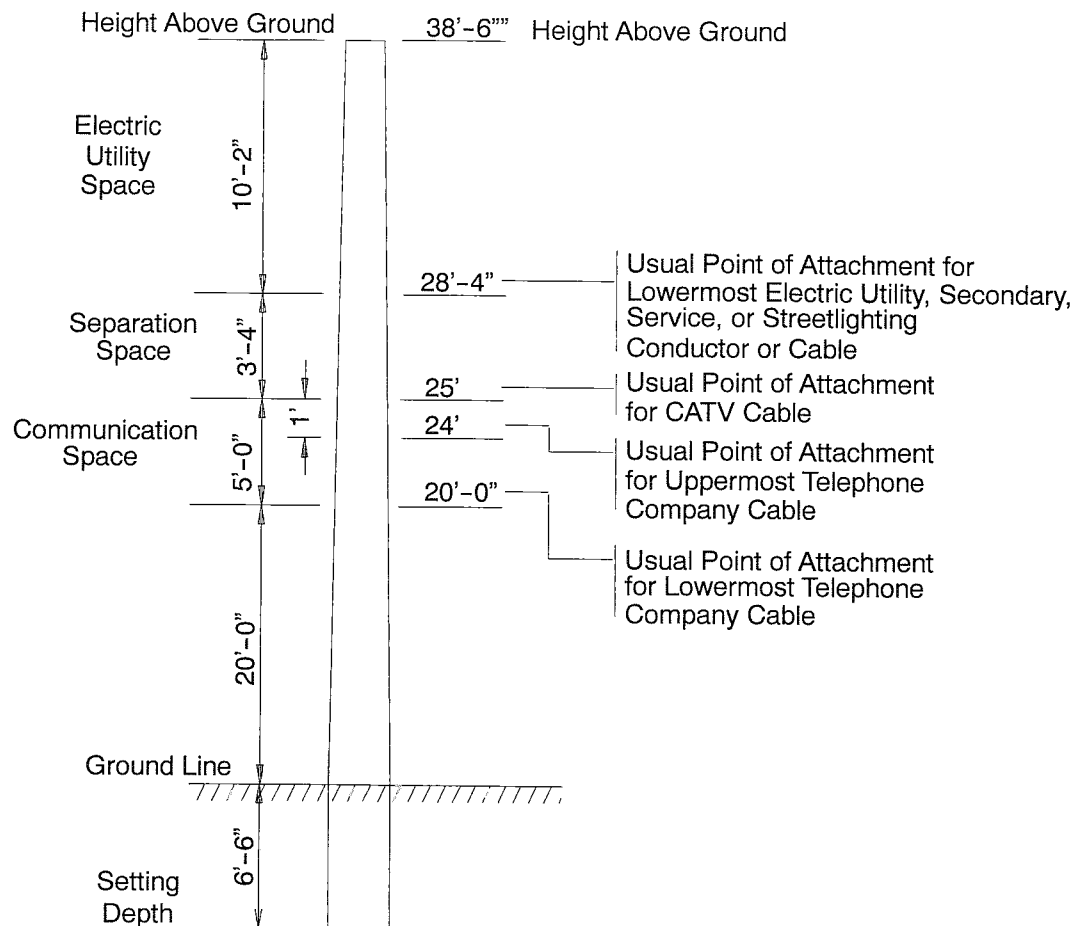


Figure 3 - Space Allocation on the 45-Foot Basic Joint Use Pole

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Standards Manager (G. Lyons): *GL*

Joint Use Pole Space Allocation

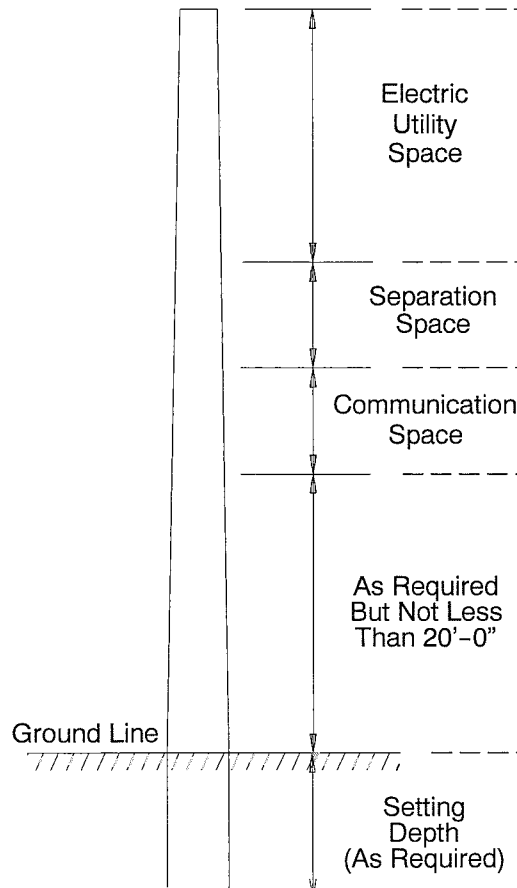


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5. Poles Taller Than the 45-Foot basic Pole

The company requiring extra pole height pays the extra cost and gets to use the extra height, less the 10% used by the deeper pole hole.



	Basic Pole	Taller Than Basic Pole Extra Height Required By		
		Electric	Commun.	Both
Electric Utility Space	10'-2"	10'-2" + 0.9 L	10'-2"	10'-2"
Separation Space	3'-4"	3'-4"	3'-4"	3'-4"
Communication Space	5'-0"	5'-0"	5'-0" + 0.9 L	5'-0"
As Required But Not Less Than 20'-0"	20'-0"	20'-0"	20'-0"	20'-0" + 0.9 L
Setting Depth (As Required)	6'-6"	6'-6" +0.1 L	6'-6" +0.1 L	6'-6" +0.1 L
Pole Length	45'	45' + L	45' + L	45' + L

L = Extra Pole Length

Figure 4 - Space Allocation on Poles Taller Than the 45-Foot Basic Pole

Joint Use—Climbing Space Through Communication Circuits

A. 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.

B. 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 inches 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.

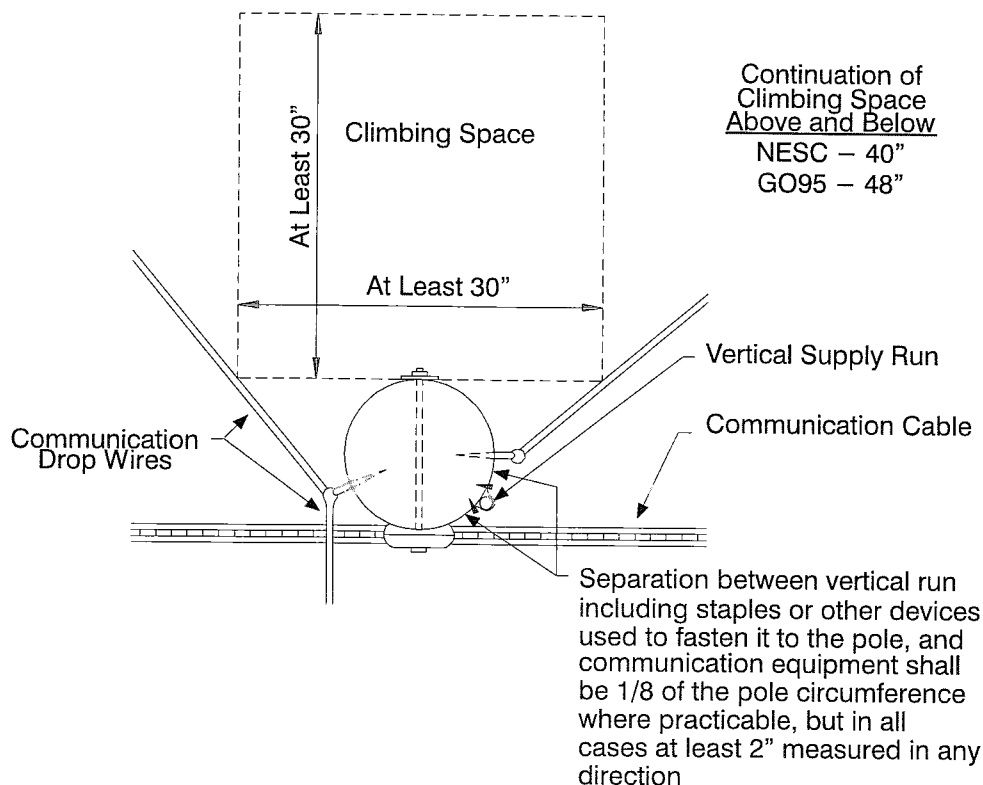


Figure 1 – Climbing Space

Distribution Construction Standard

Engineer (N. J. Johnson):
Distribution Engrg. (D. Horman):
Standards Services (M. Brimhall):

Joint Use Climbing Space Through Communication Circuits



31 May 93

EU 211
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Joint Use—Clearances, Communication to Supply Circuits

A. Scope

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

B. 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.

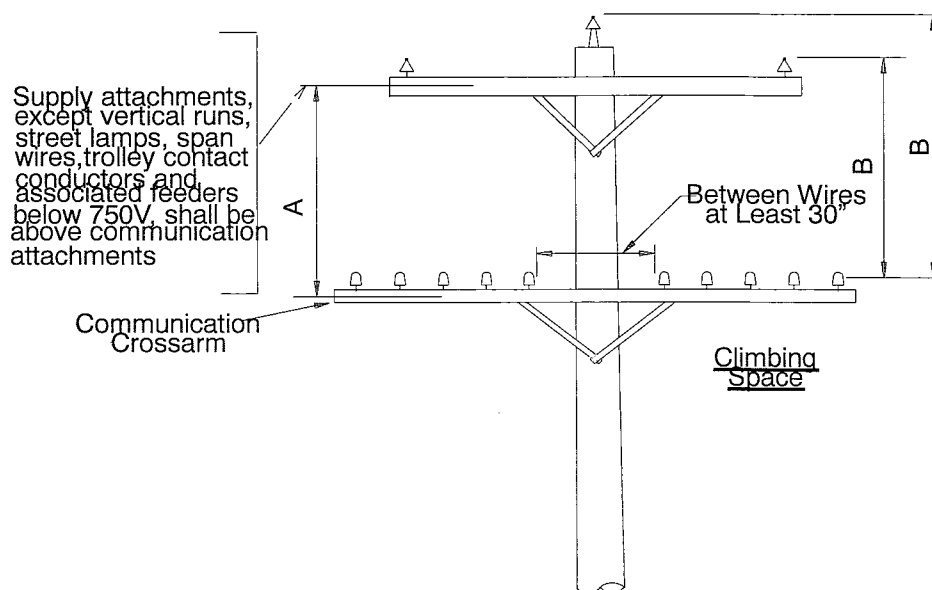


Figure 1 – Vertical Spacing of Crossarms and Circuits, Communication & Supply

Distribution Construction Standard

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Standards Manager (G. Lyons): *LS*

Joint Use—Clearances, Communication to Supply Circuits



8 Nov 07

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Table 1 - Vertical Clearance Between Supply and Communication Facilities

Voltage of Supply Circuit	Min. X-arm Spacing (In.) (Dimension A)	Min. Conductor Spacing (In.) (Dimension B)
NESC [1]		
0-8700	48	40
8700-50000	72	60
Washington [2]		
0-7500	48	40
Over 7500	84	84
California [2]		
0-7500	48	48
7500-75000	72	72

- [1] Voltage is to ground if an effectively grounded circuit, otherwise voltage is highest voltage between any two conductors.
- [2] Voltage is highest voltage between any two conductors.

California G. O. 95
exceptions, Dim. A
Rule 92.1B
0-750V supply on racks—A = 72"
Supply cables—A = 48"

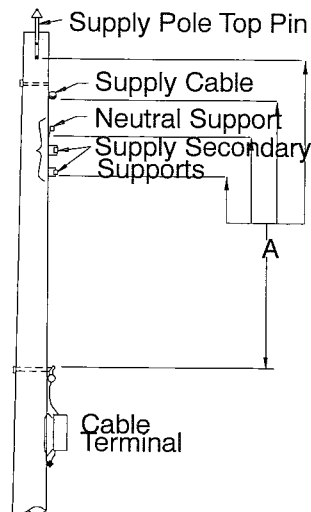


Figure 2 - Vertical Clearances Between Conductors and Noncurrent Carrying Metal Parts of Communication Equipment and Supply Circuits

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

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



- ① Voltage is to ground if an effectively grounded circuit, otherwise same as ②.
- ② Voltage is 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, PacifiCorp 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.)

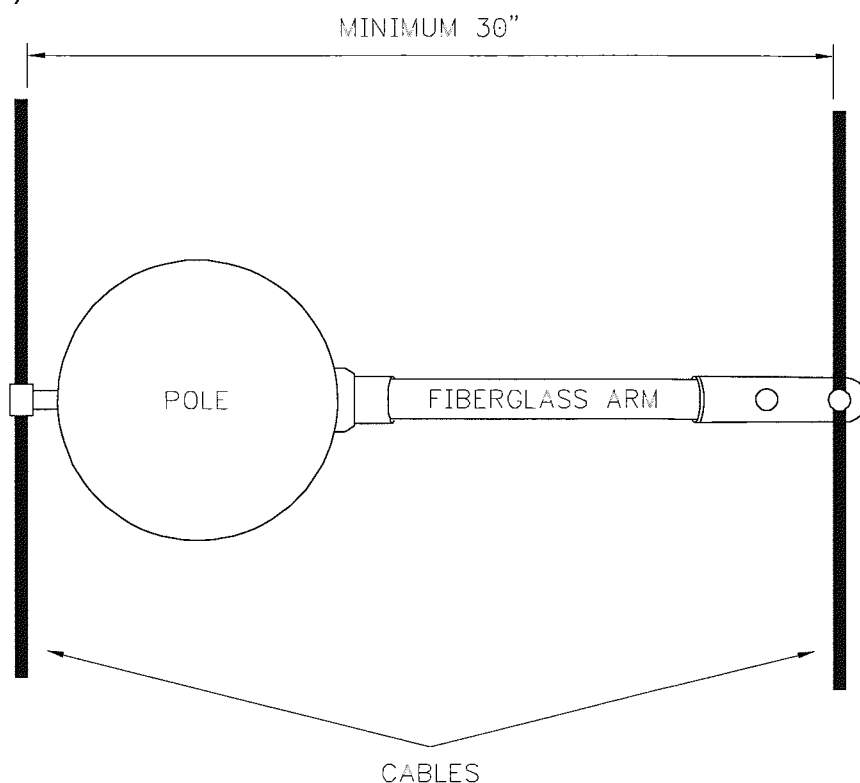


Figure 3 – Horizontal Spacing Using Fiberglass Arm

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Engineer (D. Asgharian):

DDA

Standards Manager (G. Lyons):

GL

Joint Use—Clearances, Communication to Supply Circuits



8 Nov 07

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Joint Use—Clearances, Communication Above Ground, Roadway or Water

A. Scope

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

B. General

The vertical clearances of all facilities attached to PacifiCorp 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 PacifiCorp 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 PacifiCorp 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).

C. Application

1. Clearances shall be maintained at maximum loading conditions as defined by NESC rule 232.
2. PacifiCorp clearance requirements are found in section DC of the Distribution Construction Standards. PacifiCorp ground clearance requirements are found in section DC 111.
3. In the event of conflicting requirements, the requirement which provides more clearance shall apply.

D. Special Requirements by State

1. Utah

For state and federal highways, the following requirements are to be followed:

- a) At intersections, minimum clearances are the applicable NESC clearance plus 13 feet.
- b) At other points adjacent to or crossing a state highway, minimum clearances are NESC clearances plus 8 feet.
- c) Crossing any public roadway, the minimum ground clearance is 18 feet.

2. Washington

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

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Joint Use—Clearances, Communication Equipment to Risers



A. 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.

B. 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 051). 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 (see Figure 3).

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**Joint Use
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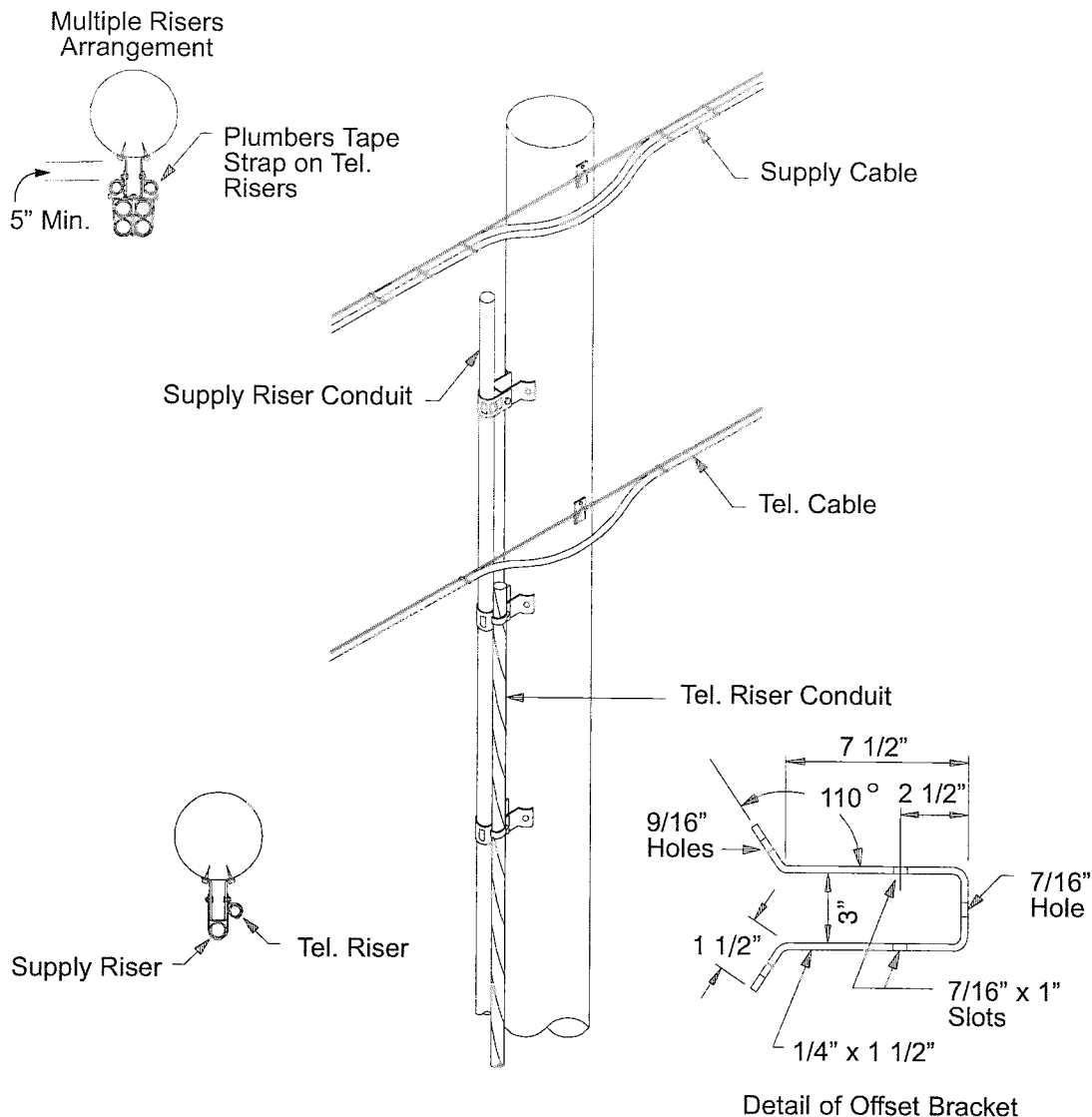


Figure 1 – Typical Arrangement of Supply and Communications Risers

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 feet and provide as much clearance as possible between pole and conduit surfaces but not less than 5 inches.

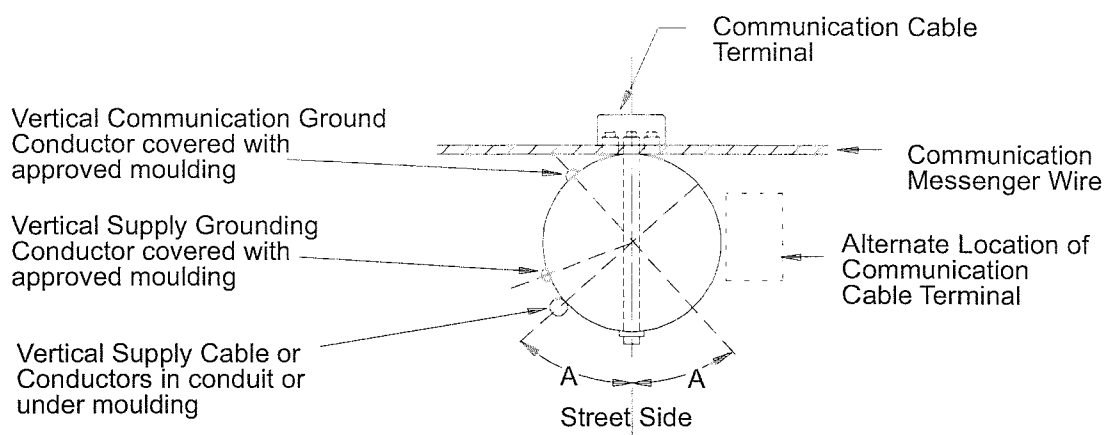


Figure 2 – Preferred Locations for Risers, etc. on Joint Use Poles

NOTES:

1. Whenever practicable, angle A should be approximately 45 degrees. 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 feet and provide as much clearance as possible between pole and conduit surfaces but not less than 5 inches.
4. The clearance between supply hardware and communications hardware shall be as much as practicable but in no case less than 2 inches 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.

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Joint Use Clearances, Communication Equipment to Risers

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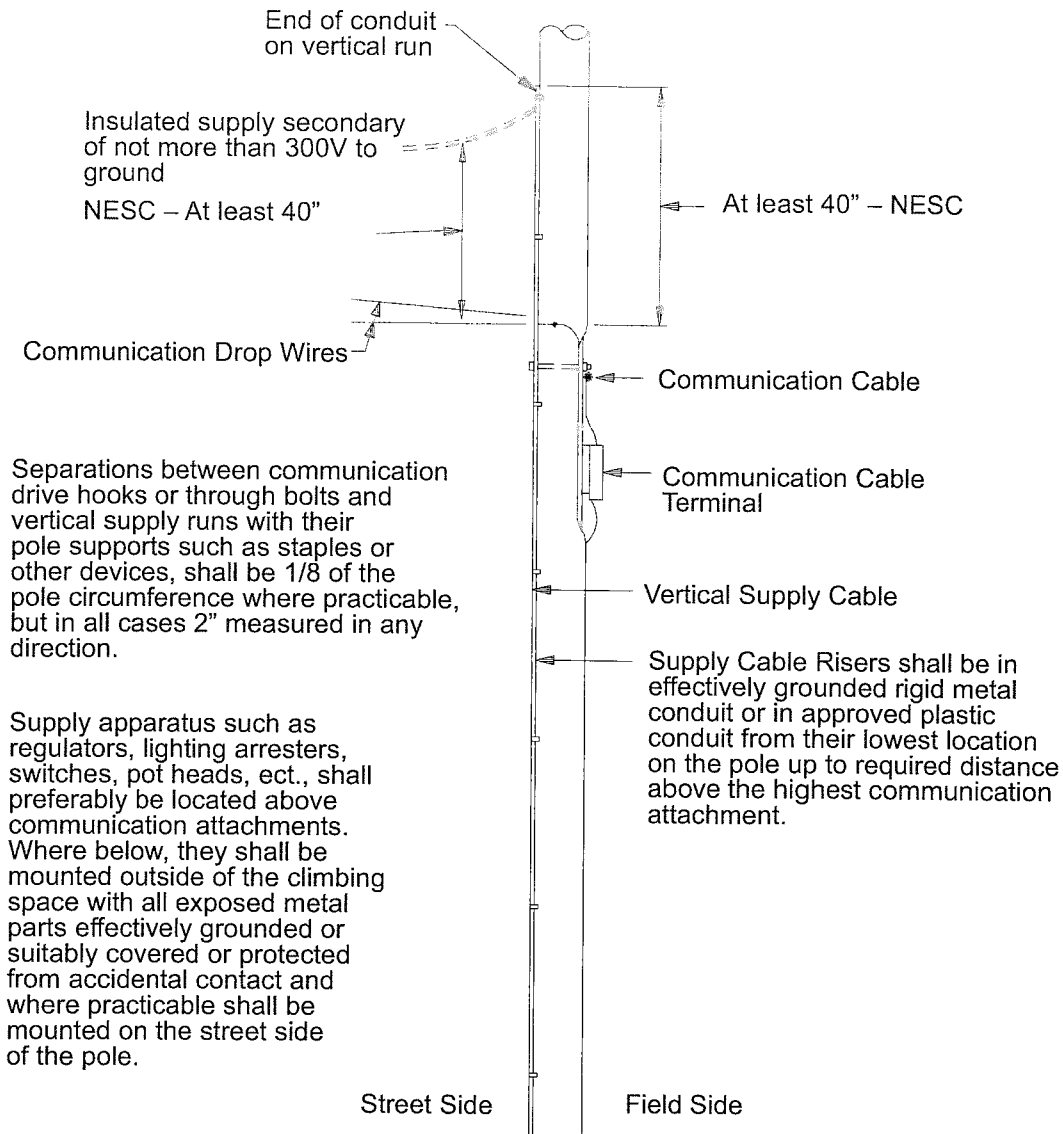


Figure 3 – Supply Riser on Joint Use Pole

Joint Use—Clearances, Communication Equipment to Transformers

A. Scope

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

B. 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).

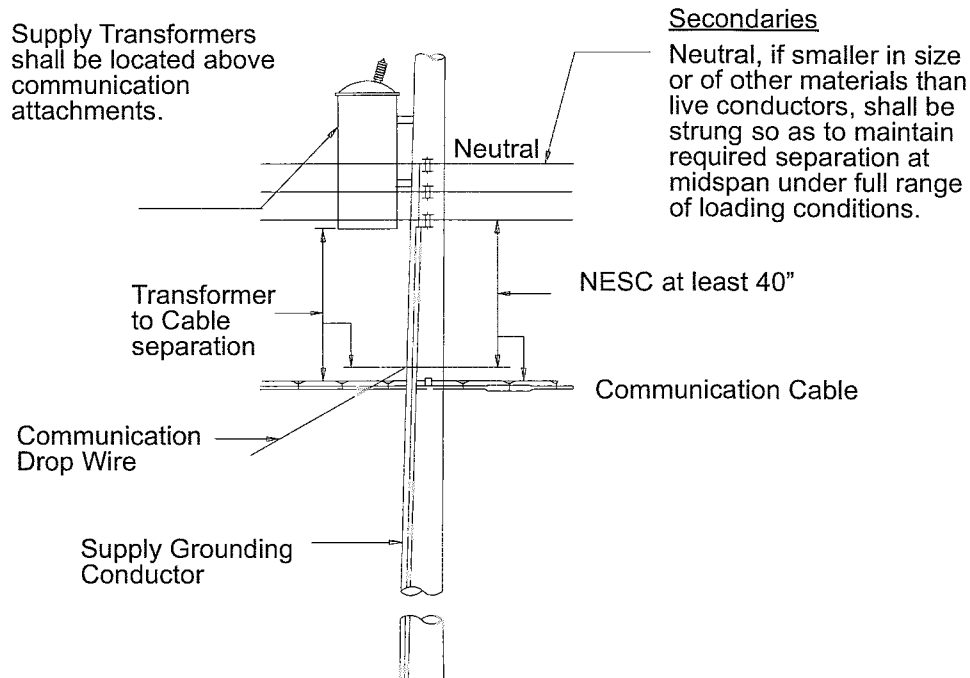


Figure 1 – Clearances Between Transformers and Communications Cables

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Table 1 – Clearance from Transformers for Communication Cables

Transformer Primary Voltage	Minimum Clearance In Inches
NESC & Washington	
0–8700	40 ¹
8700–50000	60 ¹

NOTES:

- ¹ If transformer cases are effectively grounded, these clearances may be reduced to 30 inches.
- ² With guard arm above communication cable, may be reduced to not less than 48 inches.

Joint Use—Clearances, Communication Equipment to Street Lights

A. Scope

This standard provides information regarding vertical clearances between street lights and joint use facilities. Included are clearances from communication circuits and cable T.V. to street lights and street lighting supply drip loops.

B. General

The vertical clearances between street lights, street lighting service drip loops, and communication facility attachments are specified in this standard.

1. Vertical Clearance—Communication Cable

The vertical clearances required between street lighting equipment and communication cables attached to the pole are defined on pages 2 and 4 of this standard. Street lighting may be installed above or below the communication level, provided that required clearances shown on pages 2 through 5 are met.


2. Vertical Clearance—Open Wire Telephone on Crossarm

The vertical and horizontal clearances required between street lighting equipment and open wire communication circuits on wood crossarm are defined on pages 3 and 5 of this standard. Street lighting may be installed above or below open wire communication circuits provided that required clearances shown on pages 2 through 5 are met.

Applicable in All States

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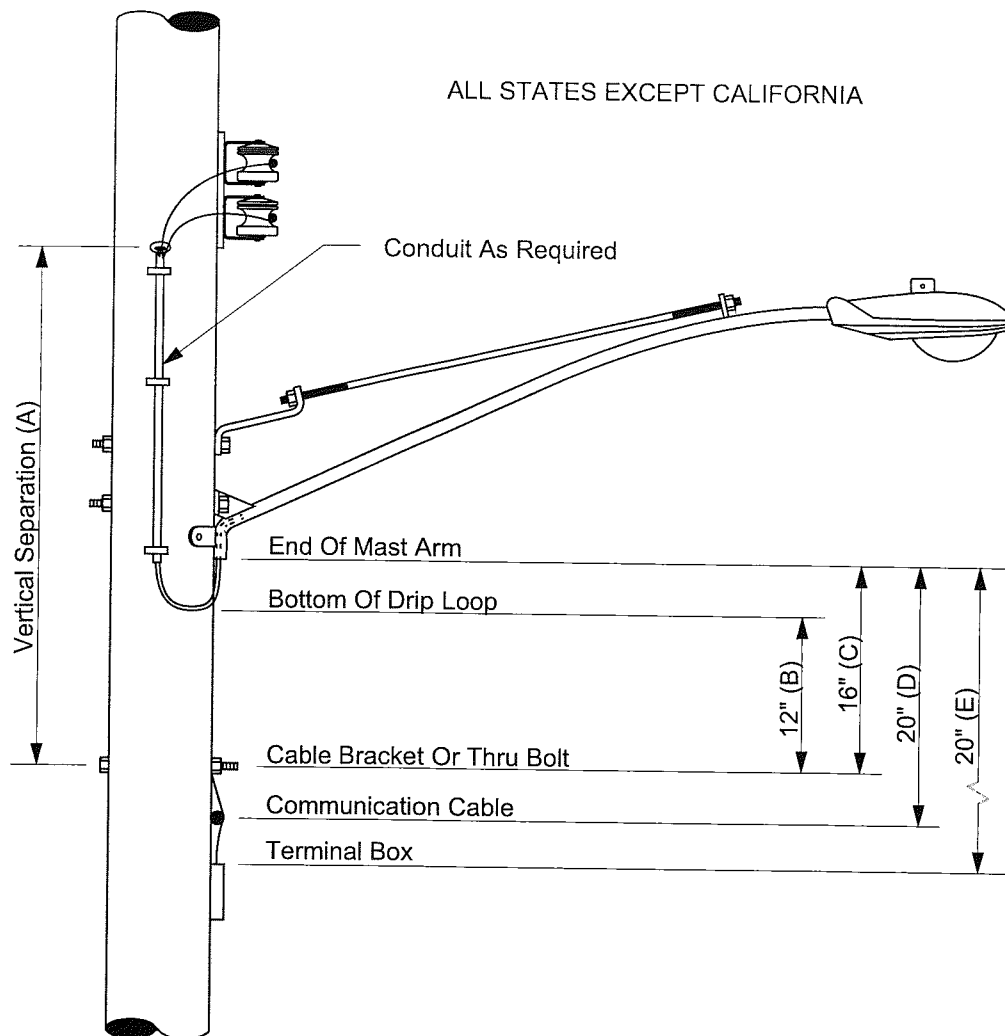
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Joint Use Clearances, Communication Equipment to Street Lights



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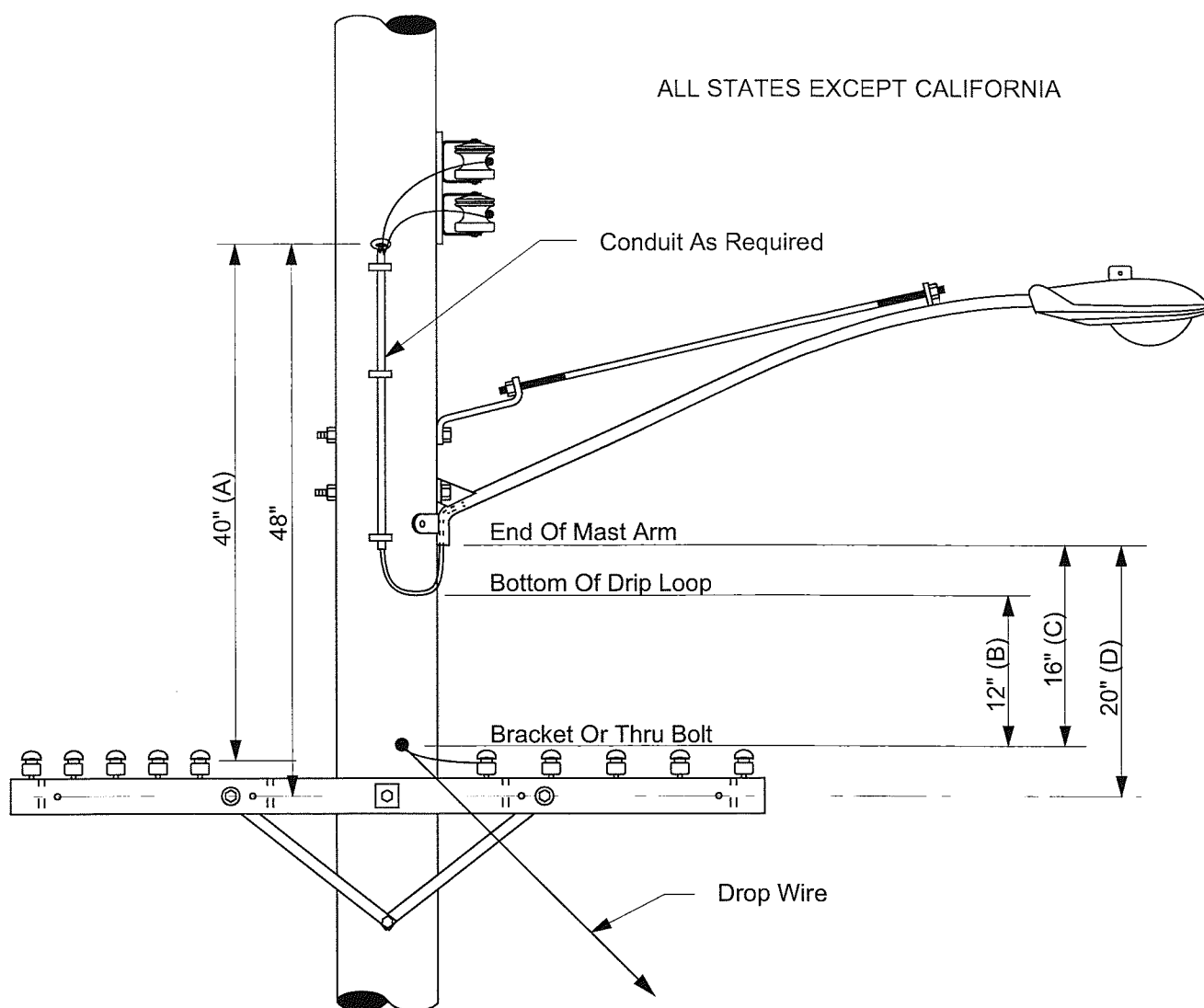


NOTE:

- A. Vertical Separation (NESC SEC. 23, #238-1)**
40" If supply voltage is 0 – 8700 V
60" If supply voltage is over 8700 V
- B. Separation from Drip Loops of Street Light Brackets (NESC SEC. 23, #238.D)**
- C. Separation from Communication Brackets (NESC SEC. 23, #238.2)**
- D. Separation from Messengers Carrying Communication Cables (NESC SEC. 23, #238.2)**
- E. Separation from Terminal Box of Communication Cable (NESC SEC. 23, #238.2)**

EXCEPTIONS TO CLEARANCE REQUIREMENTS
AND ADDITIONAL NOTES, SEE PAGE 6

Figure 1 – Street Lighting Facilities Above Communication





NOTE:

- A. Vertical Separation (NESC SEC. 23, #238-1)**
 40" If supply voltage is 0 – 8700 V
 60" If supply voltage is over 8700 V
- B. Separation from Drip Loops of Street Light Brackets (NESC SEC. 23, #238.D)**
- C. Separation From Communication Brackets (NESC SEC. 23, #238.2)**
- D. Separation above Communication Crossarms (NESC SEC. 23, #238.2)**

EXCEPTIONS TO CLEARANCE REQUIREMENTS
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Figure 2 – Street Lighting Above Communication Open Wire Crossarm

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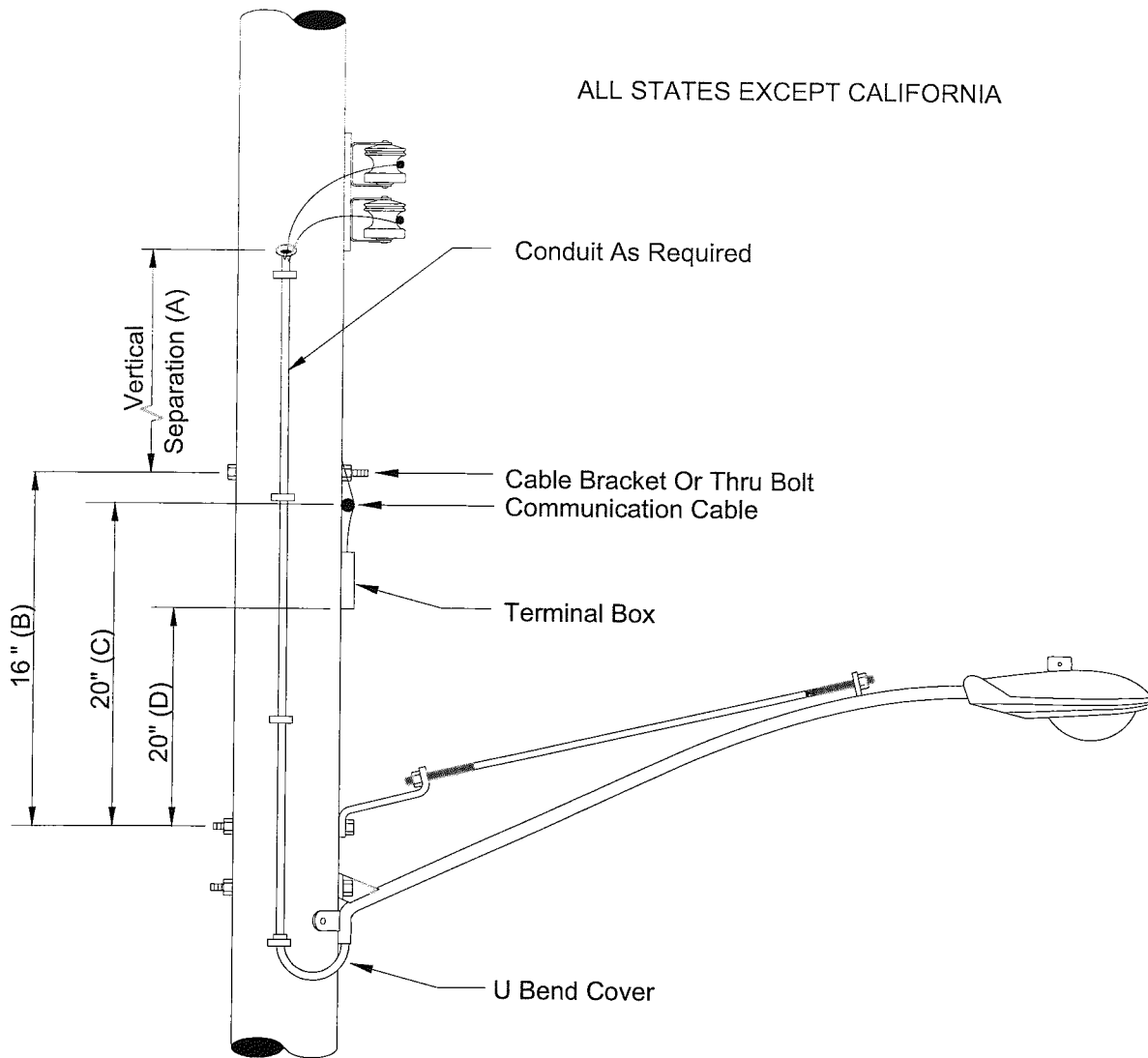
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ALL STATES EXCEPT CALIFORNIA



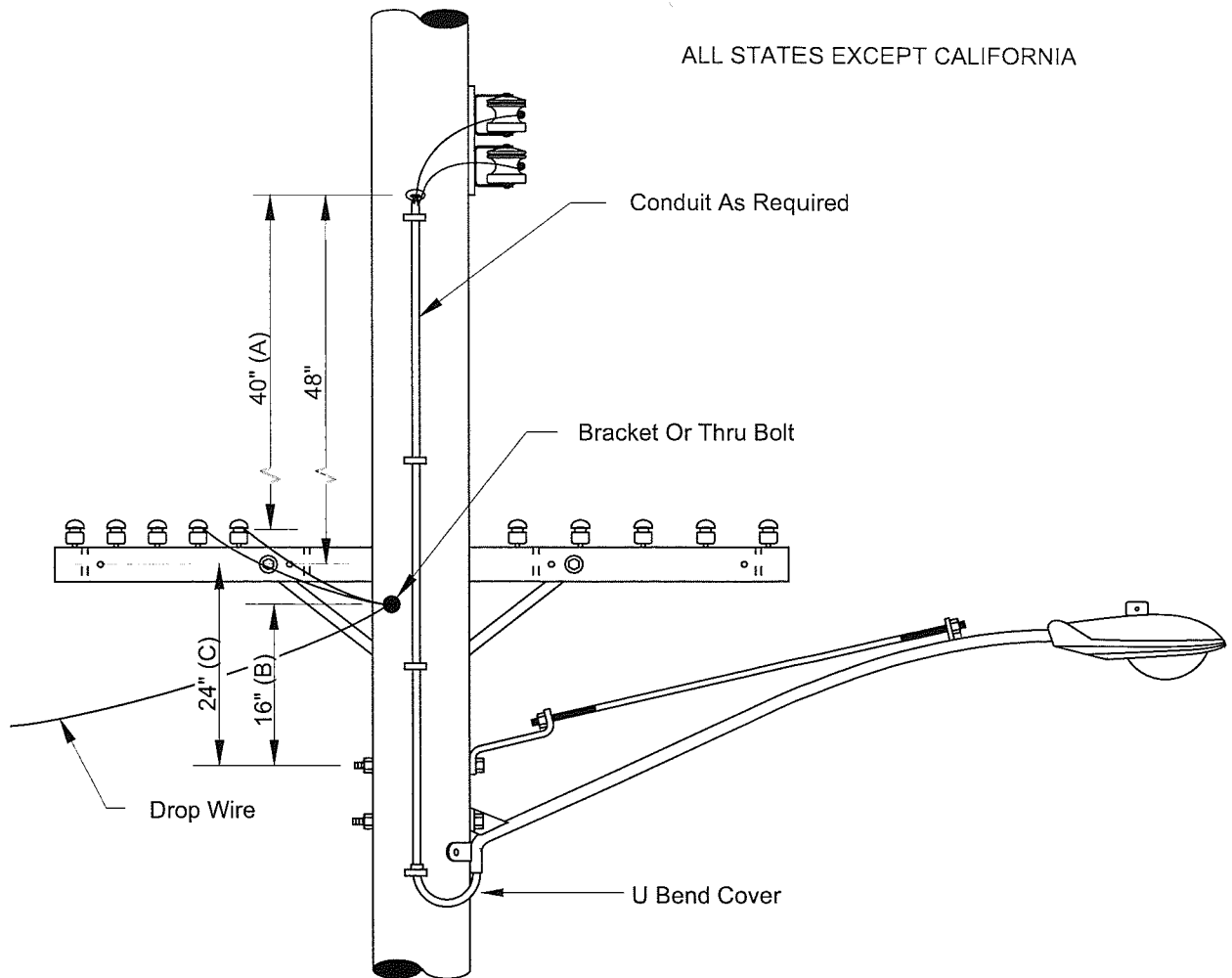
NOTE:

- A. Vertical Separation (NESC SEC. 23, #238-1)**
40" If supply voltage is 0 – 8700 V
60" If supply voltage is over 8700 V
- B. Separation from Communication Brackets (NESC SEC. 23, #238.2)**
- C. Separation From Messengers Carrying Communication Cables (NESC SEC. 23, #238.2)**
- D. Separation From Terminal Box of Communication Cable (NESC SEC. 23, #238.2)**

EXCEPTIONS TO CLEARANCE REQUIREMENTS
AND ADDITIONAL NOTES, SEE PAGE 6

Figure 3 – Street Lighting Facilities Below Communication

ALL STATES EXCEPT CALIFORNIA





NOTE:

- A. Vertical Separation** (NESC SEC. 23, #238-1)
 40" If supply voltage is 0 – 8700 V
 60" If supply voltage is over 8700 V
- B. Separation from Communication Brackets** (NESC SEC. 23, #238.2)
- C. Separation Below Communication crossarms** (NESC SEC. 23, #238.2)

EXCEPTIONS TO CLEARANCE REQUIREMENTS
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Figure 4 – Street Lighting Below Communication Open Wire Crossarm

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C. Exceptions to Clearance Requirements Shown

1. Vertical Separation A as Illustrated on Sheets 2, 3, 4, and 5

Where noncurrent carrying parts of equipment and supply cables are effectively grounded consistently throughout well-defined areas, and where communication is at lower levels, separations may be reduced to 30 inches.

2. Conditions for a Reduction in Required Separation

The following dimensions may be reduced in special cases:

- d) C, D, and E as illustrated on sheet 2
- e) C, and D as illustrated on sheet 3
- f) B, C, and D as illustrated on sheet 4
- g) B, and C as illustrated on sheet 5

These special cases are as follows:

- a) The separation may be reduced to 12 inches for either span wires or metal parts of brackets at points 40 inches or more from the pole surface.
- b) The separation may be reduced to 4 inches if the noncurrent carrying metal parts of the street light assembly are effectively grounded.

3. Other Exceptions

For dimension B of sheets 2 and 3, the distance of 12 inches may be reduced to 3 inches if the loop is covered by a suitable nonmetallic covering which extends at least 2 inches beyond the loop.

Drip loop requirements do not have to be followed if the supply run is in continuous conduit or covered by a U bend.

Applicable in All States



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**Joint Use
Clearances,
Communication
Equipment to Street Lights**

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Stds Team Leader (D. Jones):

Joint Use—Clearances, Communication Equipment to Street Lights—California

A. Scope

This standard provides information regarding clearances between streetlights 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.

B. General

Joint use clearances for streetlights installed in California are under the jurisdiction of GO 95 which equals or exceeds NESC requirements. Streetlights may be installed above or below communication circuits provided that required clearances are met (see Figure 1 below for clearances).

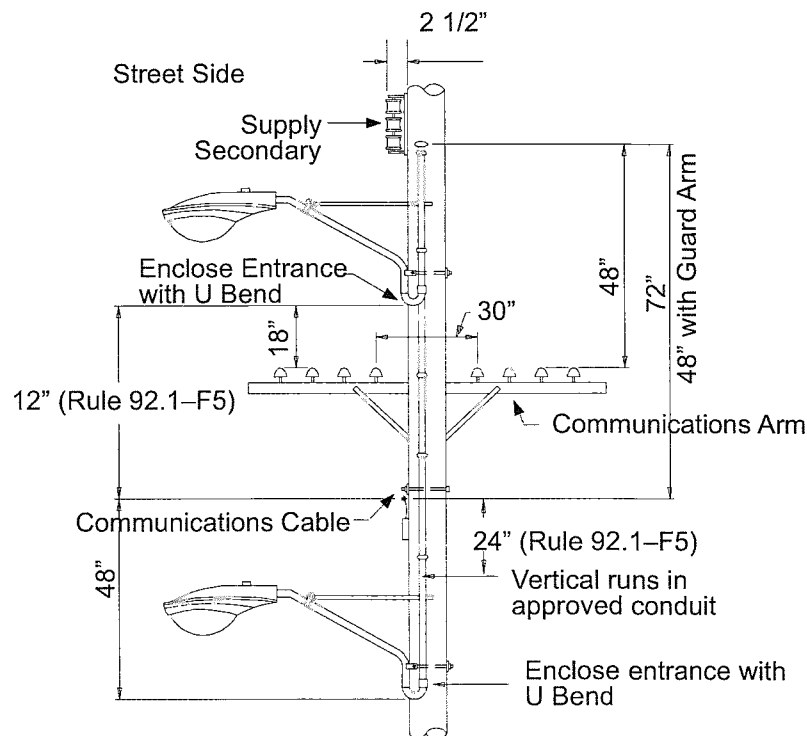


Figure 1 – Clearances Between Street Lights and Communication Attachments

NOTE:

1. Hardware Clearances 2 Inches

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 Stds Team Leader (D. Jones): *[Signature]*
 Standards Services (M. Brimhall): *[Signature]*

Joint Use Clearances, Communication Equipment to Street Lights California



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**Joint Use
Clearances, Communication
Equipment to Street Lights
California**

**Distribution
Construction Standard**

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Stds Team Leader (D. Jones): *RDJ*
Standards Services (M. Brimhall): *MBB*

Joint Use—Clearances, Low Voltage Service Drops

A. 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.

B. 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).

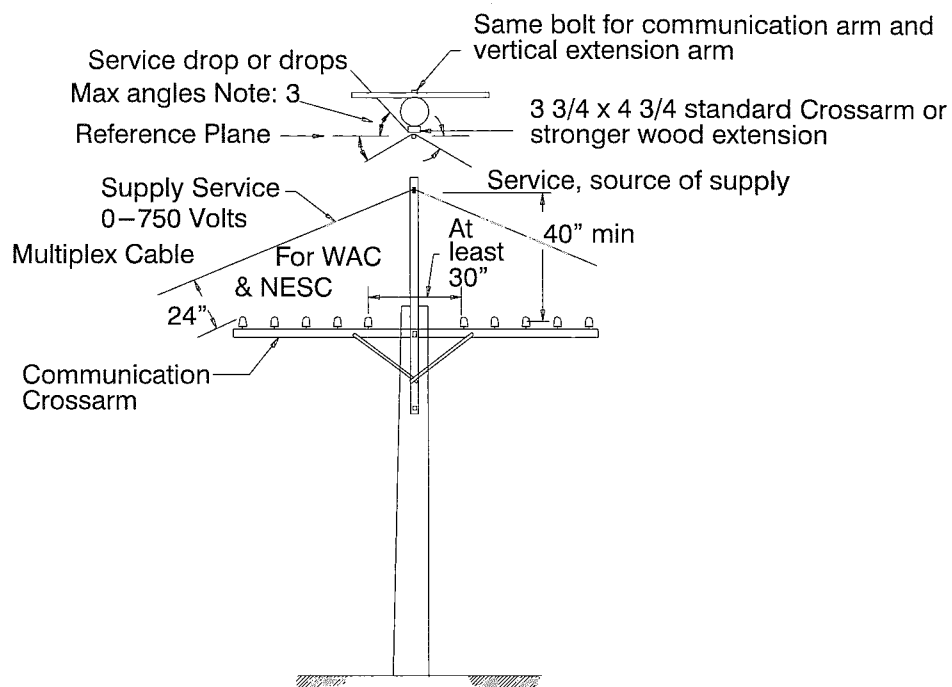


Figure 1 – Service Drop Contacts on Communications Poles

Notes:

1. Use pole top fixture when following conditions exist:
 - a. Not more than 2 branches to service
 - b. Span from supply pole to communication pole not over 100 Ft. and span from communication pole to house not over 100 ft.

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Engineer (N. J. Johnson):
Distribution Engrg. (D. Horman):
Standards Services (M. Brimhall):

Joint Use Clearances, Low Voltage Service Drops



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- c. Maximum size of service wire from communication pole to house is # 2 triplex.
2. Where conditions are more severe than shown by drawing or as limited by note 1, then each such case must be individually planned.
3. Angle of service crossing and service drop or drops to a plane normal to the alignment of the pole line shall not exceed 45 degrees.



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**Joint Use
Clearances, Low
Voltage Service Drops**

**Distribution
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Engineer (N. J. Johnson):
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Standards Services (M. Brimhall):

Joint Use—CATV on Poles

A. Scope

This specification details the clearances, locations and equipment involved in the installation of Community Antenna Television (CATV) auxiliary equipment on PacifiCorp poles.

B. General

1. CATV auxiliary equipment consists mainly of power supplies and separate service protection disconnects. An installation usually consists of a 120V service in conduit to a service disconnect, a metal cabinet with a 120V AC to 60V AC or DC power supply (batteries optional), and a return supply line (usually 1/2-inch coax) to the main CATV cable. An amplifier is usually supported on the CATV cable messenger at least 18 inches 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 PacifiCorp to use space outside the normal communications space on PacifiCorp poles, as well as application to receive electrical service. PacifiCorp is concerned that additional equipment fastened to the pole not impair PacifiCorp's use of facilities nor lessen the margin of safety for our crews. In order that these conditions may be met, future installations must meet the requirements in Section C. PacifiCorp 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 PacifiCorp Standard EU 101.

C. Installation Requirements

1. 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, Montana, 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 poles having gang-operated 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 PacifiCorp's option and at the Licensee's expense.
3. The maximum size auxiliary equipment cabinet which may be installed on the pole, is limited to 26 inches wide by 26 inches high by 20 inches 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 inches wide by 12 inches high by 6 inches deep.

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Joint Use—CATV on Poles



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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.

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 inches 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 4 1/2 inches wide by 6 inches high, as shown in Figure 2. These brackets shall be installed with through bolts. The through bolt ends shall not protrude more than 1 inch beyond the nut on other side of the pole. Use of wood crossarms or plastic mounting brackets is not acceptable. All holes bored in PacifiCorp's poles shall be flooded with a 2 percent 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.

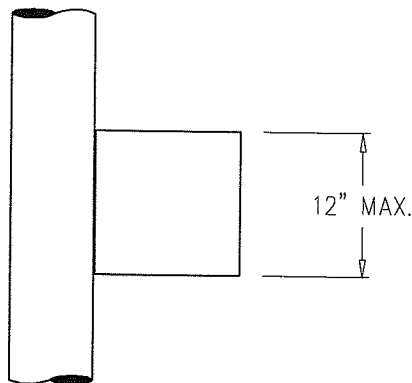


Figure 1 - Maximum Height of Directly Mounted Equipment Cabinet

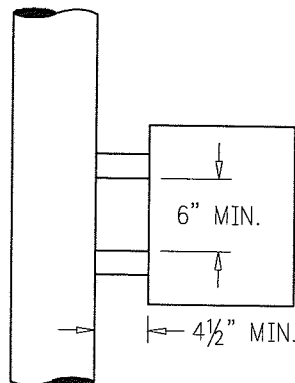


Figure 2 - Equipment Cabinet with Mounting Brackets

5. The auxiliary cabinet and associated service equipment shall be installed in an orientation on the pole that allows a 30-inch-square minimum climbing space as shown in Figure 3. This climbing space shall extend vertically 48 inches above the uppermost portion and below the lowest portion of any installed auxiliary equipment.
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 feet above the ground. If any part of an enclosure overhangs a roadway shoulder, the minimum distance to the lowest portion shall be 15 feet. Enclosures overhanging roadways shall have at least a 16-foot 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 PacifiCorp 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 inch 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).

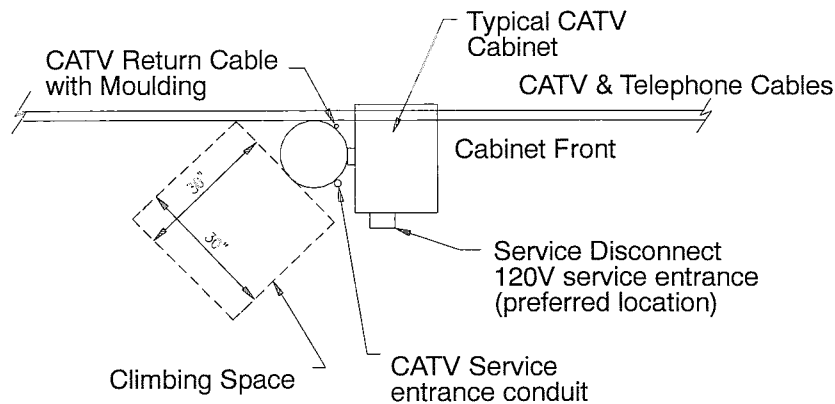


Figure 3 - Climbing Space

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 PacifiCorp. 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 PacifiCorp's anchors unless explicit written permission is given for each specific location. Anchor rod auxiliary eyes are not permitted on PacifiCorp anchors. Additionally, all guy wires installed on PacifiCorp anchors to support communication utility's equipment or cable shall be insulated as defined by Rule 279A2a of the NESC, and in accordance with PacifiCorp 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, PacifiCorp 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 279A3 and 279A1c.
10. All guy wires attached to the communication utility's own anchors shall meet NESC requirements.

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Joint Use—CATV on Poles



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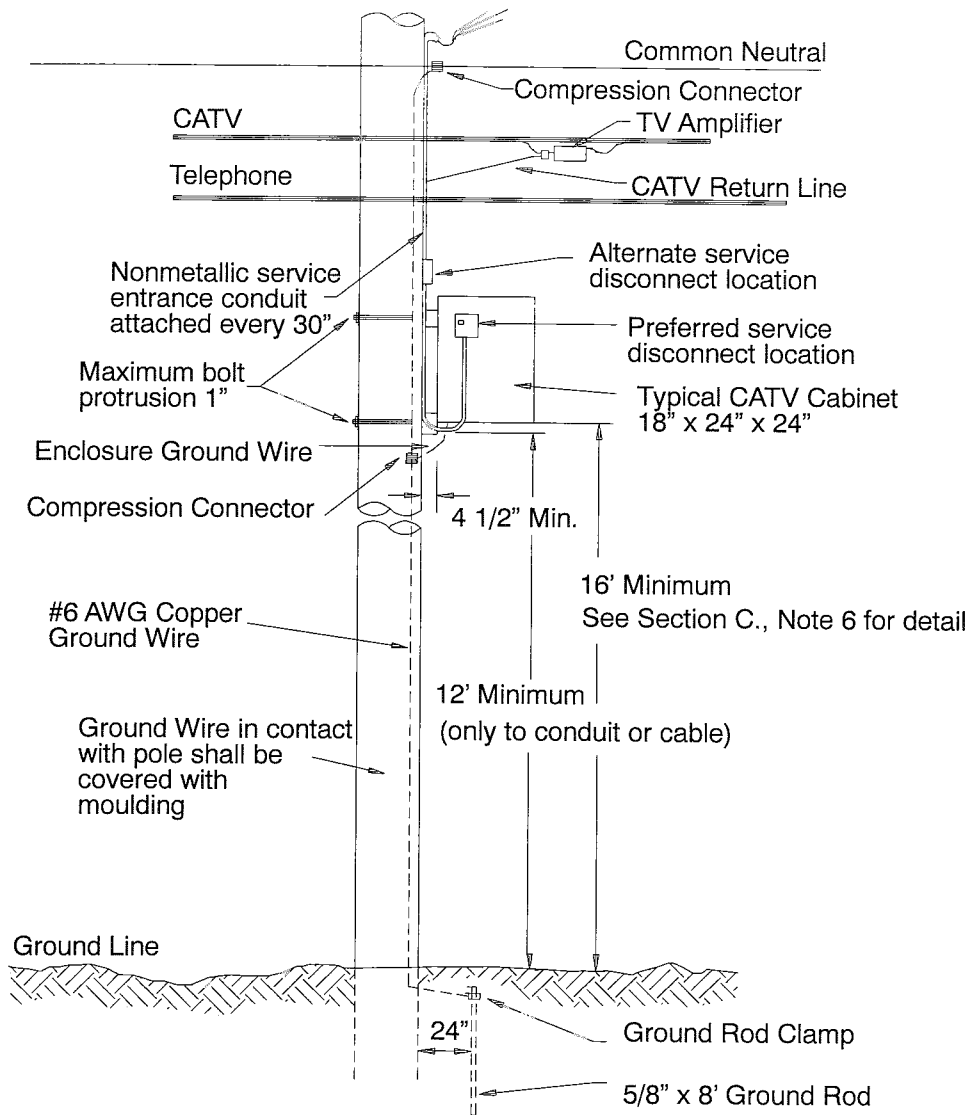


Figure 4 - Typical Installation of CATV Auxiliary Equipment with Grounding

