

# Jefferson County PUD

## Pole Attachment Rate Study Final Report December 2014

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December 1, 2014

Mr. Jim Parker  
Jefferson County PUD  
3104 Corners Road  
Port Townsend, WA 98368-9368

SUBJECT: Draft Pole Attachment Report

Dear Jim:

Please find attached the final report on the pole attachment rate study prepared by EES Consulting. The conclusions and recommendations contained within this report are intended to enable Jefferson County PUD (PUD) to negotiate a rate that fairly and equitably recovers costs from those that are attached to the utility's poles.

This study has been developed through the assistance of PUD staff and has been performed in a manner consistent with generally accepted ratemaking practices. Furthermore, it is based upon information and records provided by the PUD to EES Consulting.

Thank you for the opportunity to assist the PUD. Please contact me directly if there are any questions about the report.

Very truly yours,

A handwritten signature in blue ink that reads "Gary".

Gary Saleba  
President

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# Section 1—Introduction and Overview

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## 1.1 Introduction

Jefferson County PUD (“PUD”) engaged the services of EES Consulting (“EES”) to update its pole attachment rates. This report provides an overview of pole attachment regulations, rate determination methodologies and provides the results of specific calculations for the PUD.

## 1.2 Background

Most pole attachment contracts in use today are based on agreements that were negotiated many years or even decades ago. In the past, poles, ducts, conduits and rights of way were typically occupied by a maximum of three users – a single telephone company, a single cable television provider and a single electric utility.

Few, if any, pole attachment agreements were written to cope with the possibility that many additional entities might seek attachments that would strain capacity, require complex relocations or change-outs, increase safety risks, create accounting problems, and swell administrative costs. None could foresee the changes to the legal landscape that followed the Telecommunications Act, or could anticipate that all pole attachers could someday become competitors in the provision of a wide range of communications (and energy) services.

Today, much has changed in the telecommunications arena and pole attachment rates, terms, and conditions for many utilities are now subject to federal and state regulations. In most states, the rules of the Federal Communications Commission (FCC) still govern, but 18 states and the District of Columbia<sup>1</sup> have opted to certify themselves with the FCC to establish their own rules regarding pole attachment rates. All federal regulations are binding on privately owned utilities only.

Washington State is one of the 18 states certified to establish rules regarding pole attachment rate. In 2008, Washington State Legislature amended RCW 54.04.045 to include a specific pole attachment rate formula.

## 1.3 Organization of the Report

Section 1 provides an introduction and overview of pole attachment rate making. Section 2 of this report presents a synopsis of pole attachment rate regulations on the federal level and in

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<sup>1</sup> Alaska, California, Connecticut, Delaware, District of Columbia, Idaho, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Michigan, New Jersey, New York, Ohio, Oregon, Utah, Vermont and Washington.

the State of Washington. This is followed by a discussion of the implications of federal and state regulations for municipal utilities and their recovery of pole attachment costs under current conditions.

Section 3 describes the pole attachment rate determination methodology that is relevant to the PUD. Computations of the PUD's pole attachment rates are presented in Section 4. The report concludes with a summary and recommendations in Section 5.

# Section 2—Pole Attachment Regulations

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## 2.1 Federal Regulations

Current federal oversight of pole attachment rates was established by two major pieces of legislation. They are:

- The Pole Attachment Act of 1978
- The Telecommunications Act of 1996

In 1978, Congress enacted the Pole Attachment Act<sup>2</sup> (the “Act”), which gave the Federal Communications Commission (FCC) authority to regulate the terms and rates of cable pole attachments for privately-owned utilities. Publicly-owned utilities are exempt from these FCC regulations. Section 224 of the Act provides that FCC authority to regulate pole attachment rates, terms and conditions, is preempted when a state regulates those matters. It further provides that a state shall not be considered regulators of those matters unless it has made effective rules and regulations implementing its regulatory authority over pole attachments. Section 703 of the Telecommunications Act of 1996 (Communications Act) expanded the scope of Section 224 to include telecommunications carriers.

### 2.1.1 The Pole Attachment Act of 1978

In 1978, Congress enacted the Pole Attachment Act to ensure that telephone companies and electric utilities would not stifle the growth of the then-fledgling cable television industry by charging excessive rates for essential pole attachments. Highlights of the Pole Attachment Act are as follows:

- A new Section 224 was added to the Communications Act of 1934. It authorized the FCC to regulate the rates that utilities could charge cable television systems for pole attachments.
- Utilities under FCC jurisdiction were not required to give cable operators access to their facilities but if they voluntarily chose to give such access, there were limits to the rates they could charge.
- The FCC was required to “regulate the rates, terms and conditions for pole attachments to provide that such rates, terms, and conditions are just and reasonable.”<sup>3</sup> A rate was “just and reasonable” if it “assures a utility the recovery of not less than the additional costs of

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<sup>2</sup> 47 U.S.C. § 224

<sup>3</sup> Section 224(b)(1)

providing pole attachments, nor more than an amount determined by multiplying the percentage of usable space, or the percentage of total duct or conduit capacity, which is occupied by the pole attachment, by the sum of the operating expenses and actual capital costs of the utility attributable to the entire pole, duct, conduct, or right of way.”<sup>4</sup>

- The FCC’s rate ceilings were to apply only if utilities and attachers could not voluntarily reach mutually satisfactory agreements.
- The FCC was required to establish procedures to hear and resolve complaints regarding pole attachments and to enforce the requirements of the Section 224<sup>5</sup>.

The Pole Attachment Act incorporated two important exceptions:

- Congress authorized that states could preempt federal regulation by electing to regulate pole attachments themselves<sup>6</sup>. Eighteen states and the District of Columbia have subsequently done so<sup>7</sup>.
- Congress excluded railroads, cooperatives and government entities from the pole attachment requirements of Section 224 by specifying that “such term does not include any railroad, any person who is cooperatively organized, or any person owned by the Federal Government or any State.” As applied to units of local government, this exclusion is known as the “Municipal Exemption.” The PUD qualifies under this exemption.

### **2.1.2 The Telecommunications Act of 1996**

In the Telecommunications Act of 1996, Congress sought to facilitate the prompt emergence of robust competition in all communications markets. In furtherance of this objective, Congress treated poles, ducts, conduits and rights of way as potential “bottleneck” facilities and, in Section 703 of the Act, broadly expanded the FCC’s authority by including the following provisions:

- A new Section 224(f)(1) was added, which requires investor-owned utilities to “provide a cable television system or any telecommunications carrier with nondiscriminatory access to any pole, duct, conduit or right-of-way owned or controlled by it.” A limited exception for

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<sup>4</sup> Section 224(d)(1)

<sup>5</sup> Section 224(b)(1)

<sup>6</sup>Section 224(a)(1)

<sup>7</sup> When dealing with pole attachments in these states, one must look first to their statutes, interpretations and decisions to determine whether they have addressed the issue(s) in question.

electric utilities was created “where there is insufficient capacity for reasons of safety, reliability or generally applicable engineering purposes.”<sup>8</sup>

- The existing “cable rate” under Section 224(d) was extended indefinitely into the future for cable television systems that “solely . . . provide cable service.” Congress also made the “cable rate” applicable on an interim basis to telecommunications carriers, including cable systems that provide telecommunications services, until a new formula under Section 224(e) went into effect on February 8, 2001.
- The new “telecommunications rate” formula under Section 224(e) partially removes the subsidy inherent in the existing “cable rate” formula by dividing poles and conduits into “usable” and “other than usable space.”
  - For “usable space,” Section 224(e)(3) requires a utility to allocate recoverable costs among all attaching entities according to the percentage of usable space that each requires.
  - For “other than usable space,” Section 224(e)(2) requires a utility to allocate costs among attaching entities so that each bears 2/3 of what it would have to pay under an equal allocation of the costs attributable to that space.
- States were allowed to continue to elect to preempt federal regulation, and the exemption for railroads, cooperatives and government entities was extended so that the exemption now covers access as well as rates.

## 2.2 Washington State Regulations

Washington is one of the states that have certified with the FCC to regulate their own pole attachment rates. The Washington State Legislature passed Engrossed Second Substitute House Bill 2533 (ESSHB 2533, amended RCW 54.04.045) related to pole attachment rates for PUDs in 2008. The amended RCW was effective June 12, 2008.

The rate formula per RCW 54.04.045 reads as follows:

“(3) A just and reasonable rate must be calculated as follows:

- (a) One component of the rate shall consist of the additional costs of procuring and maintaining pole attachments, but may not exceed the actual capital and operating expenses of the locally regulated utility attributable to that portion of the pole, duct, or conduit used for the pole attachment, including a share of the required support and clearance

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<sup>8</sup> Section 224(f)(2)



space, in proportion to the space used for the pole attachment, as compared to all other uses made of the subject facilities and uses that remain available to the owner or owners of the subject facilities;

(b) The other component of the rate shall consist of the additional costs of procuring and maintaining pole attachments, but may not exceed the actual capital and operating expenses of the locally regulated utility attributable to the share, expressed in feet, of the required support and clearance space, divided equally among the locally regulated utility and all attaching licensees, in addition to the space used for the pole attachment, which sum is divided by the height of the pole; and

(c) The just and reasonable rate shall be computed by adding one-half of the rate component resulting from (a) of this subsection to one-half of the rate component resulting from (b) of this subsection.

(4) For the purpose of establishing a rate under subsection (3)(a) of this section, the locally regulated utility may establish a rate according to the calculation set forth in subsection (3)(a) of this section or it may establish a rate according to the cable formula set forth by the federal communications commission by rule as it existed on June 12, 2008, or such subsequent date as may be provided by the federal communications commission by rule, consistent with the purposes of this section.”

The rate formula described above was further clarified in the March 15, 2011 decision in the case of Pacific County PUD No. 2 v Comcast et. al. below:

“Section 3(a) of the RCW 54.04.045 (2008) reflects the FCC Telecom Method and Section 3(b) reflects the APPA Method”.

This methodology is applicable to Jefferson County PUD and the basis for the calculations provided in this report.

## **2.3 Regulation of Municipal Utilities**

### **2.3.1 Municipal Exemption**

Unless required by state law, municipal utilities (under the “Municipal Exemption”) do not have to abide by the federal access, rate and procedural requirements and interpretations. Public power utilities have substantial flexibility but cannot discriminate unreasonably. They need only to avoid erecting unreasonable barriers to entry and act in a competitively neutral and non-discriminatory manner.

Although the “Municipal Exemption” generally exempts units of local government from federal regulation of pole attachments<sup>9</sup>, municipal entities should understand and stay abreast of federal requirements and standards because of the following reasons:

- Some states<sup>10</sup> expressly incorporate federal requirements into state law, either through state statutes or regulations or through the interpretations and decisions of state public service commissions. Other states may follow their example.
- The FCC’s body of regulations, interpretations and decisions has grown to cover an increasing number of fact situations. Federal requirements and standards are often viewed as *de facto* benchmarks of what is fair and reasonable.
- Congress may eliminate the exemption at some time in the future.
- Some utilities have historically charged relatively low rates for pole attachments. Allowable rates under federal rules may be higher than current charges<sup>11</sup>.
- In situations in which a municipal entity is itself seeking to become a provider of cable or telecommunications services, local governments are careful not to adopt pole attachment requirements that the FCC or courts would view as unreasonable or discriminatory barriers to entry<sup>12</sup>.

### 2.3.2 Pole Attachment Agreements

Although exempt from FCC orders, many municipal utilities use the FCC telecommunication attachment rules as beginning guidelines. Pole attachment agreements are a vital part of the process to accommodate and recover costs from telecommunication providers who wish to have space on poles or in conduits. New agreements are now needed by many municipal utilities for many reasons, including the following:

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<sup>9</sup> Section 224(a) of the Communications Act of 1934, as amended, 47 U.S.C. § 224(a).

<sup>10</sup> E.g. Texas and Colorado

<sup>11</sup> In a survey conducted in 1997, the National Rural Electric Cooperative Association found that 75 percent of its members were not recovering third-parties’ proportionate share of costs of poles. *In the Matter of Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, CS Docket No. 97-141, *Fourth Annual Report*, FCC 97-423 ¶ 225 (rel. Jan. 13, 1998) (“*Fourth Annual Report on Cable Competition*”).

<sup>12</sup> In 2001 the Ad Hoc Committee of the National Association of Regulatory Utility Commissioners (NARUC) recommended that the states eliminate the “municipal exemption” and adopt rules applicable to municipal utilities that are comparable to the federal cable pole attachment rules. This recommendation was in part premised on the emergence of competitive municipal communications service offerings.

- Many public power utilities have contracts that are well over 20 years old and they incorporate extremely low pole attachment rates, which are outdated and do not adequately cover existing costs.
- Contracts now in effect may not promote safety standards set by the National Electrical Safety Code.
- Many existing contracts do not adequately cover costs related to additional work such as pole replacements or rearrangements needed to accommodate new attachments.

Development of pole attachment agreements is a complex undertaking for many municipal utilities because of the following reasons:

- These contracts are complicated documents which include not only rates, but many other important items such as permits required for new attachments, engineering compliance, safety, contract assignability, dispute resolution, attachment modifications and related cost recovery, etc. Contracts require specialized legal, engineering and accounting expertise that few municipal entities have in house.
- Many municipal utilities are small entities, and the revenue potential from pole attachments may be too low to justify paying for outside expertise.

Because of these considerations, state agencies, joint action groups and utilities have in recent years, been increasing their use of jointly developed agreements to gain strength in negotiating pole attachment contracts. The municipal electric associations in at least five states -- Illinois, Iowa, Texas, Virginia and Wisconsin -- have facilitated joint efforts by their members to develop model pole attachment license agreements and instructions on using them. Notably, the American Public Power Association (APPA) has also developed its own Pole Attachment License Agreement.

Model agreements are generally structured to serve as “master” license agreements that establish the general terms and conditions governing an outside party’s attachment of communications wires, cables and other facilities to a municipal entity’s poles, ducts and conduits. Specific rates and engineering issues may also be addressed in order to provide flexibility to make periodic adjustments and accommodate new developments.

Developing joint model agreements is a process that is typically lengthy and complex as there are usually significant variations among the participants. It requires cooperation and considerable work among participants to deal with numerous interpretative and policy decisions involving both federal and state laws. However, joint model agreements can offer many benefits, including the following:

- *Economies of scale*: By sharing the cost of the services of top experts, participants can secure a level of expertise they might not otherwise be able to afford

- *Increased access to important information:* Participants gain different perspectives through interactions with one another<sup>13</sup>
- *Improved contract:* Input of many ideas and experiences can enhance the quality of the final agreement
- *Advantages of standardization:* Joint agreements promote consistency in contract provisions and facilitate negotiations

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<sup>13</sup> E.g. alternative interpretations, opposing arguments, risks and benefits of more aggressive stances (particularly on issues that have recently been are currently the subject of open agency proceedings, requests for reconsideration or litigation)

## Section 3—Pole Attachment Rate Methodologies

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Pole rental rates can be either cost-based or value-based. Cost-based (or “cost-of-service-based”) fees, as the name implies, are based on the costs to the pole owner that are attributable to providing space on the pole to a renter. Value-based fees, on the other hand, consider the value to the renter of using a pole; this can be viewed as the avoided cost of using the pole. Typically such avoided cost would be the cost of installing an entirely new pole or of putting the attached facilities underground.

Cost-of-service-based pole rental fees consider the entire range of services provided with pole attachment space. Although a utility may have a pole in place for its own needs, simply charging for the space occupied by attaching telephone and cable operators does not take into account the full costs associated with owning, operating and maintaining pole plant. Such things as the portion of the pole required for support and maintenance of proper clearances, normal pole and line maintenance, inspection, treatment and change-out ultimately benefit the attaching utility. Using a cost-of-service-based formula helps account for all these factors.

The final rate applicable to the PUD, per Washington RCW 54.04.045, is equal to  $\frac{1}{2}$  FCC Telecom +  $\frac{1}{2}$  APPA rate. Therefore, the FCC and APPA cost-based methods are described below.

### 3.1 The Federal Communications Commission Method

The 1996 Telecommunications Act expanded the scope of Section 224<sup>14</sup> to require telephone and electric utilities to provide all telecommunications carriers with non-discriminatory access to poles, ducts, conduits, and rights-of-way at just and reasonable rates. Section 224 also provides for increased compensation for utilities so that they are appropriately reimbursed for this expanded use of their facilities.

The pole attachment provisions in the 1978 Pole Attachment Act plainly gave the FCC the discretion to set reasonable rates for such attachments. After enactment of the Communications Act, the FCC established a method for setting “just and reasonable” rental rates for telephone and electric utility poles and conduits. The original method established by

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<sup>14</sup> 47 U.S.C. Section 224 “The Pole Attachment Act”

the FCC only allocated the cost of usable space to pole attachers.<sup>15</sup> The cost of unusable space was not factored into the pole attachment rate.<sup>16</sup>

The original FCC method was revised on February 8, 2001. In addition to the cost of usable space, a portion of the cost related to unusable space is also allocated to telecommunications providers in the form of a telecommunications surcharge. Cable television attachments are exempt from this surcharge however, and they remain under the original formula. The new rate formula was designed to be phased in over a five-year period, but would take seven years for all provisions to be fully effective. The formula, combining the usable and unusable space, was simplified in a subsequent order issued on May 25, 2001<sup>17</sup>.

Although municipal electric utilities are not covered directly by the FCC’s jurisdiction and rate-setting, many municipal utilities use the FCC telecom attachment rules as guidelines, and the FCC rates for private utilities may be used by those who set state and local rates for attachments to municipal utility poles. The FCC’s rates may also influence a court’s review of the reasonableness of municipal pole attachment fees.

### 3.1.1 Original FCC Formula

As part of the Communications Act, Congress issued directives to the FCC to:

- Establish a formula by which rates could be calculated according to the FCC’s best judgment as to how costs should be allocated between a utility and an attaching company
- Determine a pole attachment rate somewhere between avoidable and fully allocated costs. To be “just and reasonable,” a rate must fall somewhere between the lower limit of a utility’s incremental cost associated with the pole and the attaching company’s proportionate share of the fully allocated costs that are pole-related.

The original FCC formula acknowledged that certain costs of owning and operating jointly occupied poles must be shared, and it recognized the space used for the attachment. However, it did not take into account such things as supporting structures, and did not recognize that in addition to the space required for attachment, space for mechanical support and safety clearances are also being used by the attaching utility.

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<sup>15</sup> Usable space = total pole length less unusable space. Usable space is sometimes also referred to as “assignable space.”

<sup>16</sup> Unusable space = Length of pole placed underground plus required ground clearance. Unusable space is sometimes also referred to as “common space.”

<sup>17</sup> “Consolidated Reconsideration of Telecom Order and Fee Order”, May 25, 2001.

The original FCC formula had 3 components:

- Cost of the bare pole<sup>18</sup>
- Carrying charge<sup>19</sup>
- “Use Ratio”<sup>20</sup>

That formula for determining the maximum pole attachment rate is as follows:

Maximum Rate = (Space Occupied/Total Usable Space) × (Net Cost of a Bare Pole) × (Carrying Charge Rate)

**3.1.2 Current Pole Attachment Rate Formula**

The current<sup>21</sup> 2-step FCC formula for determining pole attachment rates is described below. It is applicable to all telecommunications providers with the exception of cable TV companies (to whom the original formula still applies).

*Step 1:*

(A) Attachments for Providing Cable TV Services

Space Factor = (Space Occupied by Attachment)/ (Total Usable Space)

(B) Attachments for Providing Telecommunications Services

Space Factor = [Space Occupied + {2/3 x (Unusable Space)} / (No. of Attaching Entities)]

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Pole Height

*Step 2:*

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<sup>18</sup> Gross investment in pole plant, less the depreciation reserve for poles, less accumulated deferred taxes. Deductions are made for “pole appurtenances” that are of no value to the attacher, such as cross-arms used for power lines.

<sup>19</sup> Carrying charges include maintenance, depreciation, and administrative expenses, taxes, and a factor for state-determined rate of return. In the computation of the utility’s rate of return where the data is unavailable, it is assumed to earn a 6 percent return on equity.

<sup>20</sup> The “Use Ratio” is the portion of space occupied by an attacher.

<sup>21</sup> At the time of RCW 54.04.045 (2008).

Maximum Rate = (Space Factor) x (Net Cost of a Bare Pole) x (Carrying Charge Rate)

### 3.1.3 Current Status of the FCC Model

- As of February 8, 2001, only cable television operators that are solely providing "cable services" are entitled to the FCC's lower cable formula.
- As of February 8, 2001, the total annual cost included in pole attachment rates for cable systems and telecommunications carriers providing telecommunications services will be based on both the usable and the unusable portions of the pole. The Commission adopted formulas and rules for determining usable and unusable space for poles and conduits.
- While initially excluding pole-owning utilities from the calculation of the number of "attaching entities," the FCC subsequently ruled on reconsideration that pole-owning utilities (both electric and telephone) should be included as separate attaching entities for the purposes of allocating non-usable space on a pole. Any entity with a physical attachment to a pole would be counted as an attaching entity, including any government entity that has physical attachments to a pole other than temporary or seasonal attachments.
- In its *Order on Reconsideration*, the FCC concluded that overlashing of an existing, authorized attachment, by either the owner of the underlying attachment or a third-party, does not constitute a separate attachment for the purposes of allocating the costs of either usable or unusable space.
- A third party leasing dark fiber capacity from a cable service provider will not be required to make any payment to the pole owner separate from the payment of the host attaching entity. However, if an attachment previously used solely for providing cable service would, as a result of leasing of dark fiber, also be used to provide telecommunications services, the rate for attachment will be determined under the rate for provision of telecommunications services.
- Cable operators providing co-mingled internet and traditional cable services will be subject to the pole attachment rate applicable to cable operators; and wireless carriers will be entitled to the access provisions and just, reasonable and nondiscriminatory rates required by Section 224.
- If a rate complaint were to be filed by a telephone or cable operator, the FCC will determine whether it considers the rate to be "just and reasonable."
- The FCC declined to provide standards to govern rates for all rights-of-way situations and will proceed on a case-by-case basis.



## 3.2 American Public Power Association Method

### 3.2.1 Model Pole Attachment Licensing Agreement

The American Public Power Association (APPA) has created a Model Pole Attachment Licensing Agreement (the “Agreement”) that covers attachments to municipal utility poles, ducts, and conduits owned by municipal electric utilities around the country<sup>22</sup>. The Agreement largely reflects the FCC Model, with two exceptions:

- The Agreement does not distinguish among attachments by providers of cable, telecommunications, internet, and other communications services.
- The Agreement does not require phasing in of rate increases but allows utilities to fully recover costs as rapidly as they deem appropriate.

The APPA believes that the Municipal Exemption allows municipal utilities sufficient flexibility to accommodate these exceptions.

### 3.2.2 The APPA Model

The APPA Model Agreement’s fee and rate methodology is designed to provide the utility with full recovery of its expenses and fair compensation for use of its property. There are essentially two cost components to the methodology – non-recurring charges and annual attachment fees.

#### Non-Recurring Charges

These charges compensate the utility for the time and nonrecurring expenses of accommodating and administering a licensee’s attachments on its poles. They include:

- License/Permit Fee
- Pre-construction Inspection Fee
- Make-Ready Estimates
- Post-Installation Survey
- Miscellaneous Charges and Penalties

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<sup>22</sup> It does not cover requests for access to public rights of way.

## Annual Attachment Fees

These charges compensate the utility for the use of its poles. They include:

- *Assigned Space Charge*: Based on apportionment of the cost of “assigned space” on the pole among all attaching entities according to the percentage of the usable space required for each entity.
- *Common Space Charge*: Based on equal apportionment of the costs associated with the common space on a pole to all attaching entities including the owning utility as an additional attacher.

Fee Formula:

(A) Maximum Rate for Pole Attachment = Assignable Space Factor + Common Space Factor

where:

$$\text{Assignable Space Factor} = \left\{ \frac{\text{Space Occupied by Attachment}}{\text{Assignable Space}} \right\} \times \left\{ \frac{\text{Assignable Space}}{\text{Pole Height}} \right\} \times \text{Average Gross Cost of Bare Pole} \times \text{Carrying Charge}$$

$$\text{Common Space Factor} = \left\{ \frac{\text{Common Space}^{23}}{\text{Pole Height}} \right\} \times \left\{ \frac{\text{Average Gross Cost of Bare Pole}}{\text{Number of Attachers}} \right\} \times \text{Carrying Charge}$$

where:

(1) Average Gross Cost of Bare Pole is derived from FERC Acct. 355 and 364 (gross pole investment) plus the cost of anchors, guys, and grounding. This figure is reduced to account for costs of cross-arms (not used for communications attachers)<sup>24</sup> and divided by the number of poles owned by the utility.

(2) Carrying Charge includes administrative and general expenses, taxes, cost of capital, operation and maintenance expenses, and depreciation expenses expressed as a percentage of gross pole investment.

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<sup>23</sup> Consists of the portion of the pole beneath ground level up to the lowest place on the pole at which a telecommunications circuit may be attached, plus the safety space.

<sup>24</sup> Where data is available, this can be done by directly subtracting cross-arm costs from the calculation. If the cost of pole appurtenances is not available, the pole costs can be reduced by 15% to account for this cost. The latter method is commonly used by the FCC.

(B) Typical assumptions used by APPA if utility-specific information is not available:

- Pole height: 37.5 feet
- Space Occupied by Attachment: One foot
- Assignable Space: 10.17 feet per pole
- Common Space: 27.33 feet per pole

Although the APPA Agreement is written to be applicable to both poles and conduits, it does not incorporate a conduit rate calculator.

### **3.3 Comparison of Methods**

Major differences between the FCC and APPA Methods are presented in Table 1, together with the APPA's rationale for modifications they made to the FCC Method.

**Table 1**  
**Pole Attachment Rate Models**  
**Comparison Between FCC and APPA Methods**

<b>Issue</b>	<b>FCC Method</b>	<b>APPA Method</b>	<b>APPA Rationale</b>
Applicability	Separate rates for cable TV and other telecommunications attachments. Cable required to pay for only share of assigned space; not allocated any common space costs.	One rate for all communications attachments.	Lower FCC cable TV rate was formulated in 1978 to assist developing cable television industry. Cable formula does not allow utilities to recover all costs associated with providing pole space. Utilities and their customers absorb any un-recovered costs. The cable TV industry is now fully established and there is no justification for subsidizing it with a lower rate.
Carrying charge	The carrying charge rate based on percentage of the net cost of a pole.	The carrying charge rate based on percentage of the gross cost of a pole.	Has minimal financial impact on the calculations. Clarifies the formula.
Allocation of Common Space Costs	One-third of common costs allocated to utility. Remaining two-thirds allocated among parties attached to the pole, with the utility counted as one of the attachers.	Per capita allocation - common space costs allocated equally among all parties attaching to the pole, with utility counted as one of the attachers.	The FCC one-third allocation is arbitrary and bears no relationship to actual costs incurred.
Safety Space	Utility bears full cost of 40" safety space.	Safety space shifted to common space and costs allocated on that basis	Safety space provides benefit to attachers and should be considered part of unusable space.

# Section 4—Pole Attachment Rate Computations for the PUD

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## 4.1 PUD Pole Attachments

Currently, there are nine known entities renting space on the PUD's poles. They are as follows:

1. Broadstripe/Wave
2. Cellnet
3. CenturyLink
4. Clallam PUD
5. Jefferson County Public Works
6. Jefferson Healthcare
7. US Fish & Wildlife
8. WSDOT
9. Noanet

There are also a few individual customer connections not listed. The total number of attachments is 11,680. The majority of the connections are from Wave and CenturyLink. All attaching entities are roughly \$12 per attachment.

### *Assumptions*

The following assumptions are specific to Jefferson County PUD.

- Average pole height: 38.6 feet based on records provided by PSE.
- Number of poles: 11,182 based on records provided by PSE.
- Number of attachers per pole: 3.0 based on standard assumption for rural areas.
- Transmission poles: transmission assets included as the PUD allows third-party attachments to transmission poles.
- Rate of return: 3.72 percent based on the PUD's average long-term debt interest rate. This rate of return does not contain an equity component.
- Depreciation rate: 3.37 percent. Poles are depreciated over 25 years and overhead devices are depreciated over 36 years.

- Operations and Maintenance expenses: based on actual expenses relative to rate base. The resulting percent is 3.73% when calculated using gross plant and 6.27% when calculated using net plant.
- Administrative and General expenses: based on actual expenses relative to rate base. The resulting percent is 2.30% when calculated using gross plant and 3.83% when calculated using net plant.
- Tax expenses: based on actual expenses relative to rate base. The resulting percent is 3.48% when calculated using gross plant and 5.80% when calculated using net plant.

## 4.2 Pole Attachment Rates: FCC Method<sup>25</sup>

Under the FCC Method, two separate rates are computed for pole attachers: one for cable TV companies and another for all other telecommunication providers. The assumptions used in the computation of the PUD's pole attachment rates are presented in Exhibit A, rate calculations are shown in Exhibits B and D, and supporting worksheets are shown in Exhibits E through H.

### *Results*

The FCC Telecom Method yields a pole attachment rate of \$18.57 per attachment for all telecommunications providers. The Cable method rate is calculated as \$7.75 per attachment but is not applicable to the PUD.

## 4.3 Pole Attachment Rates: APPA Method

Using the APPA Method, one uniform rate is computed for all attachers on the PUD's distribution poles. The assumptions used in the computation of the PUD's pole attachment rates are presented in Exhibit A, rate calculations are shown in Exhibits B and C, and supporting worksheets are shown in Exhibits E through H.

### *Results*

The APPA Method yields a pole attachment rate of \$31.50 per attachment.

## 4.4 Resulting Rates per RCW 54.04.045

Adding one half of the FCC Telecom Method to one half of the APPA Method yields a pole attachment rate of \$25.03 per attachment, as shown in Exhibit B.

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<sup>25</sup> At the time of RCW 54.04.045 (2008).

## Section 5—Summary and Recommendations

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Jefferson PUD engaged the services of EES Consulting to update its pole attachment rates. In 2008, Washington legislature amended RCW 54.04.045 to include a specific pole attachment rate formula. This formula uses  $\frac{1}{2}$  the FCC Telecom rate plus  $\frac{1}{2}$  the APPA rate and is the basis for the rates presented in this report.

Given the results of this study, it is recommended the PUD consider increasing pole attachment rates from \$12 per attachment per year to a maximum of \$25.03 per attachment per year. This represents an increase of 109% percent over the current level. Changing the rate would yield an additional \$152,000 in revenue for the PUD.

Because the PUD is a new utility and does not have several years of financial history, it may be appropriate to gather additional information over the next few years to complete a more thorough pole attachment analysis. The information used for this study is based on information provided by PSE and does not reflect any recent or expected changes in information related to poles or the attachments within the utility. The PUD should work on developing updated number of poles per size broken out between distribution and transmission, gross plant associated with the identified poles, and number of attachments by entity. Basic financial information based on a longer history of operations by the PUD will also be valuable in updating the analysis.

In addition, Mason County PUD No.3 found an average of 2.59 attachers per average pole based on a field survey performed by the utility. While the PUD is probably similar to Mason County PUD No.3, the PUD would need to do its own field survey to support a change from the standard number of 3.0 attachers per pole. Use of a lower number of attachers would have a significant impact on rates. As an example, using the 2.59 number developed by Mason County PUD No.3 would increase the resulting rate to \$28.52.