Pole Attachments 101

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Pole Attachments – The Essentials
What is a Pole Attachment?

- High Voltage Power Lines
- Secondary Power Lines
- Communications attachments (telephone and cable)
- Guys and Guy Markers
- Anchors (behind fence)
- Telco Video Electronics
Cable Pole Attachment

- Cable fits into surplus space
Small Cell v. Macro Cell
Pole Clearances

POLE CLEARANCES

Power

TV Cable

Telephone

40"

12"

18 ft
Conduits are underground pipes made of plastic concrete or, in some cases, wood.

Conduits may be divided with a number of plastic or fiberglass ducts ranging in size from one to six inches in diameter and further divided using “inner duct”.

Conduit rent is calculated per foot of ½ innerduct.

Rights-of-Way is a term applied to pathways or corridors of access that utilities have secured for installing their facilities and delivering their services.
Legal Framework

- History of Pole Attachment Regulation
  - Electric and Incumbent Local Exchange Carrier ("ILEC") dominance over pole facilities arose as a result of public policies to establish widespread availability of electric services
  - Utility pole networks have been paid for over the years by utility ratepayers, as intended, for whom the networks were built and are maintained
  - Most attachers, including cable operators and wireless companies, did not have the same opportunity to construct their own networks under rate of return regulation
Legal Framework

Monopoly abuses led to regulation


- Covers Investor-Owned Utilities (Electric and ILECs)
- Protects “Cable Television Systems” Only
- Ensures just and reasonable rates, terms and conditions
- Establishes “Cable Rate Formula”
- Allows states to opt out and self-regulate

Telecommunications Act of 1996 - Amends § 224

- To mandate access to poles, conduits and rights-of-way
- Extends protections to providers of telecommunications service, including wireless
- Establishes “Telecom Rate Formula”
Certified States

Alaska  Arkansas  California  Connecticut  Delaware
District of Columbia  Idaho  Illinois  Kentucky  Louisiana
Maine  Massachusetts  Michigan  New Jersey  New Hampshire
New York  Ohio  Oregon  Utah  Vermont
Washington
States That Regulate Municipalities

- Alaska
- California
- Colorado (FCC)
- Delaware
- Indiana (FCC)
- Louisiana
- Massachusetts
- Missouri
- New York
- North Carolina (FCC)
- Oregon
- Texas (FCC)
- Vermont
- Washington
<table>
<thead>
<tr>
<th>States That Regulate Coops</th>
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<tbody>
<tr>
<td>Alaska</td>
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<td>California</td>
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<td>North Carolina (FCC)</td>
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<td>Vermont</td>
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<td>Virginia (FCC)</td>
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<td>Washington</td>
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States That Regulate Both

- Alaska
- California
- Delaware
- Indiana (FCC)
- Louisiana
- North Carolina (FCC)
- Oregon
- Vermont
- Washington
Nearly all states have adopted a variation of the cable formula

Few (VT example) have two formulas – one for telecom and one for cable
FCC Pole Attachment Fundamentals
Nondiscriminatory Access

- **Scope of Federal Pole Attachment Act**
  - Covered Entities: Cable systems, CLECs, Wireless and BIAS entitled to non-discriminatory access to distribution poles, conduit and rights-of-way owned and controlled by utility
  - Cable, CLECs, wireless and BIAS and ILECs entitled to just, reasonable rates, terms and conditions
Access Standards

- Access may be denied ONLY on a nondiscriminatory basis where there is insufficient capacity and for reasons of safety, reliability and generally applicable engineering reasons.

- Access denials must be in writing and detail how the denial relates to reasons of insufficient capacity, or safety, reliability and generally applicable engineering reasons.
“Insufficient capacity” should not exist where request can be accommodated using traditional methods of make-ready

NESC is primary standard governing access decisions
  - Utilities may adopt their own reasonable standards but these cannot frustrate access, be applied retroactively or be discriminatory

An electric utility may reserve space consistent with a “bona fide development plan that reasonably and specifically projects a need for that space in the provision of its core utility service”
  - Must allow use of space prior to need

An ILEC may not reserve space for future use
Access-Pole Replacements

- Should Replace Poles On a Nondiscriminatory Basis
  - Some pole owners claim pole replacements not required
- Higher Construction Standards
  - Arguably allow, but should be reasonable and nondiscriminatory
The Application Process

Access Requests Made by Submitting an Application for a Permit

- Application may include information to allow the pole owner to perform a pre-construction survey (under “its” procedures)
- Fight unreasonable requests (such as PE Stamp, analysis of all attachments on pole, other unnecessary engineering)

Application fees: Reject up-front, flat fees

- Actual Cost for Preconstruction surveys and make-ready engineering permitted
- Pole loading fees can be high
The Application Process-Timeframes

- **Maximum Access Timelines (Poles only)**
  - Preconstruction Survey (and access denials): 45 days (+15 days for large jobs).
  - Make-Ready Estimate: 14 days to provide/accept.
  - Make-Ready Performance 60 days after payment (+30 days for wireless above communications space, +45 days for large jobs).
    - Pole owner must notify existing attachers (upon payment of make-ready estimate) of planned make-ready.
  - **Large job**: Lesser of 5% of pole owner’s poles in a state or 3,000 poles (counted every 30 days)
Remedies for Failure to Meet Timelines

- **Hire Contractor to Perform Survey and Make-Ready** (in “communications space”)
  - Pole owner must provide list of approved contractors.
  - Must notify pole owner of decision to use contractor

- **Temporary Attachments**
  - If Utility allows for anyone, must allow for you

- **File complaint**
  - Wireless Attachments above communications space/Make-Ready in electric space
Make-Ready Cost Rules

- Make-Ready Costs are paid for by the benefitting party—must reflect reasonable, actual cost
  - May charge up-front estimates
  - Must provide detailed breakdown upon request
- The pole owner may not require attacher to pay to correct existing violations caused by others (including owner) in order to gain access
- May not require existing attacher to pay make-ready costs if pole owner or third party requires make-ready for own benefit
Overlashing Rules

- Overlashing does not constitute another “attachment” for rental purposes
- Attaching entities may overlash without pole owner “approval”
  - Overlashing must comply with applicable standards
- Third parties may overlash onto attacher’s permitted facilities without permission from the owner
- If the overlashed wire/fiber delivers “telecommunications services,” now including BIAS, the attachment is a telecommunications attachment for rental rate purposes
## Safety Inspection Rules

<table>
<thead>
<tr>
<th>Post construction Inspections</th>
<th>Periodic Inspections</th>
<th>Non-periodic</th>
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</table>
| • Must be performed in a reasonable timeframe following installation or may not charge | • Should not be inspections of attacher plant alone-includes all entities, including owner  
• “Cost” Recovered in the Annual Rent | • Suspicion of attacher non-compliance  
• May Charge (if non-compliance found) |
Addressing Non-Compliance

- Attacher may be charged to correct violations caused by that attacher only
  - Cost-sharing may be reasonable if fault not capable of determination and all parties agree
- Pole owner often blames attacher due to “but for” rule—not legal
- Penalties not permitted (on recon)
To count “billable” attachments in order to update billing records and discover unauthorized (i.e., non-permitted) attachments

Frequency: Typically limited to no more than once every five (5) years

Audit costs should be very low
  - Recent audits charged at between $3-$6 per pole.
  - Should include all attachers
Unauthorized Attachment Penalty

- An Unauthorized Attachment is an attachment installed without a permit for which a permit was required
  - Until April 2011, the FCC limited penalties to 5 years back rent
  - New standard: 5 years back rent if self-reported or found in joint audit or plus $100 if given opportunity to participate and don’t
  - Pole owner should provide specific notice (pole number and location) for verification purposes (i.e., cannot provide mere pole count) and prior to assessment of penalty
Conduit

- FCC formula limits rates that can be charged
- Norm is less than $1 per foot
- ½ duct occupancy presumption
- No “unusable” space
- Maintenance spare
- Just and reasonable terms and conditions
“[A] rate is just and reasonable if it assures a utility the recovery of not less than the additional costs of providing pole attachments, nor more than an amount determined by multiplying the percentage of the total usable space . . . 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. . . .” 224 (d)(1)
Attributes of the FCC Cable Formula

- FCC formula = fully allocated cost standard
- Relies on publicly available historical costs that utilities keep as a matter of course in their accounting records (including munis and coops)
  - FERC Form 1-Electric Utilities
  - ARMIS Report-ILECs
  - RUS Form 7 and annual state tax filings in Virginia
- Relies on presumptions
- Simple plan, minimum of staff and paperwork-avoid full-blown rate case
- Parties can determine without regulatory intervention
### Cable Rate Presumptions

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Description</th>
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<tbody>
<tr>
<td>37.5 foot</td>
<td>• pole</td>
</tr>
<tr>
<td>24 feet</td>
<td>• usable space (18 feet of clearance, 6 feet of burial depth)</td>
</tr>
<tr>
<td>13.5 feet</td>
<td>• usable space</td>
</tr>
<tr>
<td>1 foot</td>
<td>• space occupied by cable attachment</td>
</tr>
<tr>
<td>11.25%</td>
<td>• Rate of Return</td>
</tr>
<tr>
<td>15%</td>
<td>• appurtenance reduction-electric utility</td>
</tr>
<tr>
<td>5%</td>
<td>• appurtenance reduction-ILECs</td>
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Cable Rate-3 Major Components

- Net Investment Per Bare Pole
- Carrying Charge Factor
- Space Allocation Factor (a.k.a. Use Factor)
FCC-Cable Formula
Section 224(d) Cable Formula for Determining Maximum Rate For Use of Electric Utility Poles Using FERC Accounts

<table>
<thead>
<tr>
<th>Maximum Rate per Pole</th>
<th>Space Occupied</th>
<th>Net Pole Investment</th>
<th>Carrying Charge Rate</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>= 1 foot (presumed, but rebuttable)</td>
<td>= 13.5 feet (presumed, but rebuttable)</td>
<td>x 0.85 x</td>
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Where:

And:

<table>
<thead>
<tr>
<th>Net Pole Investment</th>
<th>Gross Pole Investment (Account 198) - Depreciation (Account 189) (Poles) - Income Taxes (Account 190, 281 - 283) (Poles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated</td>
<td>Accumulated Deferred</td>
</tr>
<tr>
<td>Deferred</td>
<td>Taxes (Electric Plant) (Accounts 190, 281 - 283)</td>
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<table>
<thead>
<tr>
<th>Administrative Element</th>
<th>Total General and Administrative</th>
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<tbody>
<tr>
<td>Gross Plant Investment</td>
<td>Accumulated Depreciation (Electric) - (Account 189 - Electric)</td>
</tr>
<tr>
<td>Accounts 593</td>
<td></td>
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<table>
<thead>
<tr>
<th>Maintenance Element</th>
<th>Account 593</th>
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</thead>
<tbody>
<tr>
<td>Pole Investment in Accounts 364, 365, &amp; 369</td>
<td>Depreciation (Poles) Related to Accounts 364, 365, &amp; 369</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Depreciation Element</th>
<th>Gross Pole Investment (Account 361) x Depreciation Rate for Gross Pole Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxes Element</td>
<td>Accounts 401.1 - 409.1 - 410.1 - 411.4 - 411.1</td>
</tr>
<tr>
<td>Return Element</td>
<td>Applicable Rate of Return (default = 11.25%)</td>
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Davis Wright Tremaine LLP
FCC-Cable Formula
Section 224(d) Cable Formula for Determining Maximum Rate For Use of LEC Utility Poles Using FCC ARMIS Accounts

Maximum Rate per Pole = \frac{Space Occupied}{Usable Space} \times \frac{Net Pole Investment}{Total Number of Poles} \times 0.95 \times Carrying Charge Rate

Where:
Space Occupied = 1 foot (presumed, but rebuttable)
Usable Space = 13.5 feet (presumed, but rebuttable)

And:
Net Pole Investment = Gross Pole Investment - Accumulated Depreciation - Accumulated Deferred Income Taxes
(Account 2411) - (Account 3100)(Poles) - (Account 4100 + 4340)(Poles)

Carrying Charge Rate = Administrative + Maintenance + Depreciation + Taxes + Return

Administrative Element = \frac{Total General and Administrative (Accounts 6710 & 6720)}{Gross Plant Investment (Account 2001) - Accumulated Depreciation (Account 3100) - Accumulated Deferred Taxes (Plant) (Accounts 4100 + 4340)}

Maintenance Element = \frac{Account 6411 - Rental Expense (Poles)}{Net Pole Investment}

Depreciation Element = \frac{Gross Pole Investment (Account 2411) \times Depreciation Rate for Gross Pole Investment}{Net Pole Investment}

Taxes Element = \frac{Operating Taxes (Account 7200)}{Gross Plant Investment (Account 2001) - Accumulated Depreciation (Account 3100) - Accumulated Deferred Taxes (Plant) (Accounts 4100 + 4340)}

Return Element = Applicable Rate of Return (default = 11.25%)
Pre June 2011 Telecom Rate

Maximum Rate =

Space Factor \times \text{Net Cost of Bare Pole} \times [\text{Carrying Charge Rate}]

Where Space Factor =

[\text{Space Occupied}] + [\frac{2}{3} \times \frac{\text{Usable space}}{\text{No. of Attaching Entities}}] 

\text{Pole Height}
June 7 2011 Telecom Rate

- New Telecom Rate Formula
  
  \[ \text{Rate} = \text{Space Factor} \times \text{Cost} \]

- Where Cost
  
  - in Urbanized Service Areas = 0.66 \times (\text{Net Cost of a Bare Pole} \times \text{Carrying Charge Rate})
  
  - in Rural Service Areas = 0.44 \times (\text{Net Cost of a Bare Pole} \times \text{Carrying Charge Rate})
June 7 2011 Telecom Rate

Lower Bound Rate Formula

\[
\text{Rate} = \text{Space Factor} \times \text{Net Cost of Bare Pole} \times [\text{Maintenance and Administrative Carrying Charge Rate}]
\]

Where Space Factor =

\[
[\text{Space Occupied}] + \left[\frac{2}{3} \times \frac{\text{Usable space}}{\text{No. of Attaching Entities}}\right]
\]

Pole Height
Recent Developments

- Significant Activity
  - At the FCC
  - In Congress
  - At State PUCs
- There is an emphasis on wireless attachments – 5G Deployment
Proposed One Touch Make Ready Regime

The FCC draft Third Report and Order and Declaratory Ruling in the Wireline and Wireless Accelerated Broadband Deployment dockets – on Agenda for August 2nd Meeting

Would establish a new “One Touch Make-Ready” (OTMR) process to streamline the deployment of 5G
One Touch Make Ready

Chairman Pai’s Blog Statement:

“Spectrum’s not the only key to 5G. We’ll also have to make network deployment—and in particular the smaller, denser infrastructure of 5G networks—easier. . . . Instead of having multiple parties sequentially prepare poles for a new attacher, as is current practice, the process can be much quicker if a single construction crew does all the make-ready work at once. By making it quicker and cheaper to attach to poles, we can accelerate network buildout and make it easier for new entrants to provide more broadband competition.”
FCC Ban on Local Moratoria

- **Declaratory Ruling**
  - Draft Third Report and Order also Declares Local Moratoria on Facilities Deployment (express and de facto) Barred by Section 253(a):
    - Concludes that state and local moratoria on telecommunications services and facilities deployment are barred by section 253(a) of the Communications Act because they “prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.”
    - Directs the Wireline Competition Bureau and Wireless Telecommunications Bureau to act promptly on petitions challenging specific alleged moratoria.
Congressional Activity

- STREAMLINE Small Cell Deployment Act
  - Bill introduced by Senators Thune and Schatz would prohibit states and localities from delaying approval for “placement, construction, and modification of Small Personal Wireless Service Facilities”
    - Would apply to attachments of small personal wireless devices
Activity in the States

- Several States are also actively pursuing new pole attachment policies
  - Recent examples include California and Massachusetts
New California Pole Access Rules

In 1998, the California Public Utilities Commission (CPUC) granted CLECs access to attach.

In 2016, CPUC granted wireless carriers access to attach.

On April 27, 2018, in Decision 18-04-007, CPUC provided CLECs expanded nondiscriminatory access to public utility infrastructure for the purpose of installing antennas and other wireless telecommunications equipment.

The amended ROW Rules go into effect August 24, 2018.
On June 25, 2018, the Massachusetts Department of Telecommunications and Cable (DTC) issued a Notice of Inquiry (NOI) to investigate telecommunications carrier accounting practices and record keeping to ensure the DTC can properly carry out its attachment authority.

DTC investigation prompted by FCC relaxation of accounting and reporting requirements, leaving data vacuum for DTC.