EVERSOURCE nationalgrid Unitil

National Grid / Eversource / Unitil

D.P.U. 25-10/D.T.C. 25-1 Pole Attachment Inquiry

Topic 1: Technical, Safety, and Engineering Consideration for Pole Attachments

Please provide an overview of the different types of attachments typically found on utility poles and as listed below. Include descriptions of where on poles such attachments are located (space description), spacing needs, when/how prevalent each are between rural and more urban areas, and considerations when surveying poles for new attachments. Visuals and pictures for different items are encouraged.

Types of attachments typically found on utility poles:

Type	Placement	Spacing Needs	Frequency	Survey Considerations
Wireless Antennas	Pole Top	NA	High	One Antenna per Pole Top
Fiber in Electric Space	Power Space	12"	High	Commercial and Electric Reliability Equipment
Streetlights	Below Secondary	Varies	High	Ownership Muni/Company
Municipal Fire Wire	Comms Space	12"	High	Inactive Fire Wire should be removed
Municipal Fiber	Comms Space	12"	High	Violations/UNLICENSED
Meters for Devices	Above 8ft. On Pole	20"-30"	High	Only allowed for Antennas, Camera's or Power Supply Boxes
CATV/Private Fiber	Comms Space	12"	High	Multiple Attachers /Available space
Telephone (VZ)	Last Comms	12"-36"	High	Requires 18' from ground
Cameras	Below Primary	Varies	Unknown	Violations/UNLICENSED
Smart City Devices	Below Primary	12"	Medium	Violations/UNLICENSED
Street Signs	Below Comms	NA	High	UNAUTHORIZED m.g.l 122 (Double Poles Driver)
EV Chargers	Below Comms	Up to 4'	Low	Public Safety/ Reliability (Melrose Project)
Power Supply/Fiber Hubs	Varies	Up to 4'	Med	Available Space
Risers	Bottom of Pole	Approx 3-4'	Med	OWNERSHIP

Types of attachments typically found on utility poles: Visuals

5G Antennas

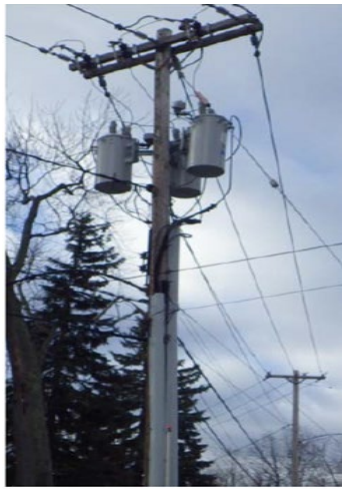
Cameras

Telecom & Cable

EV Chargers

Types of attachments typically found on utility poles: Visuals

Risers



Fire Wire

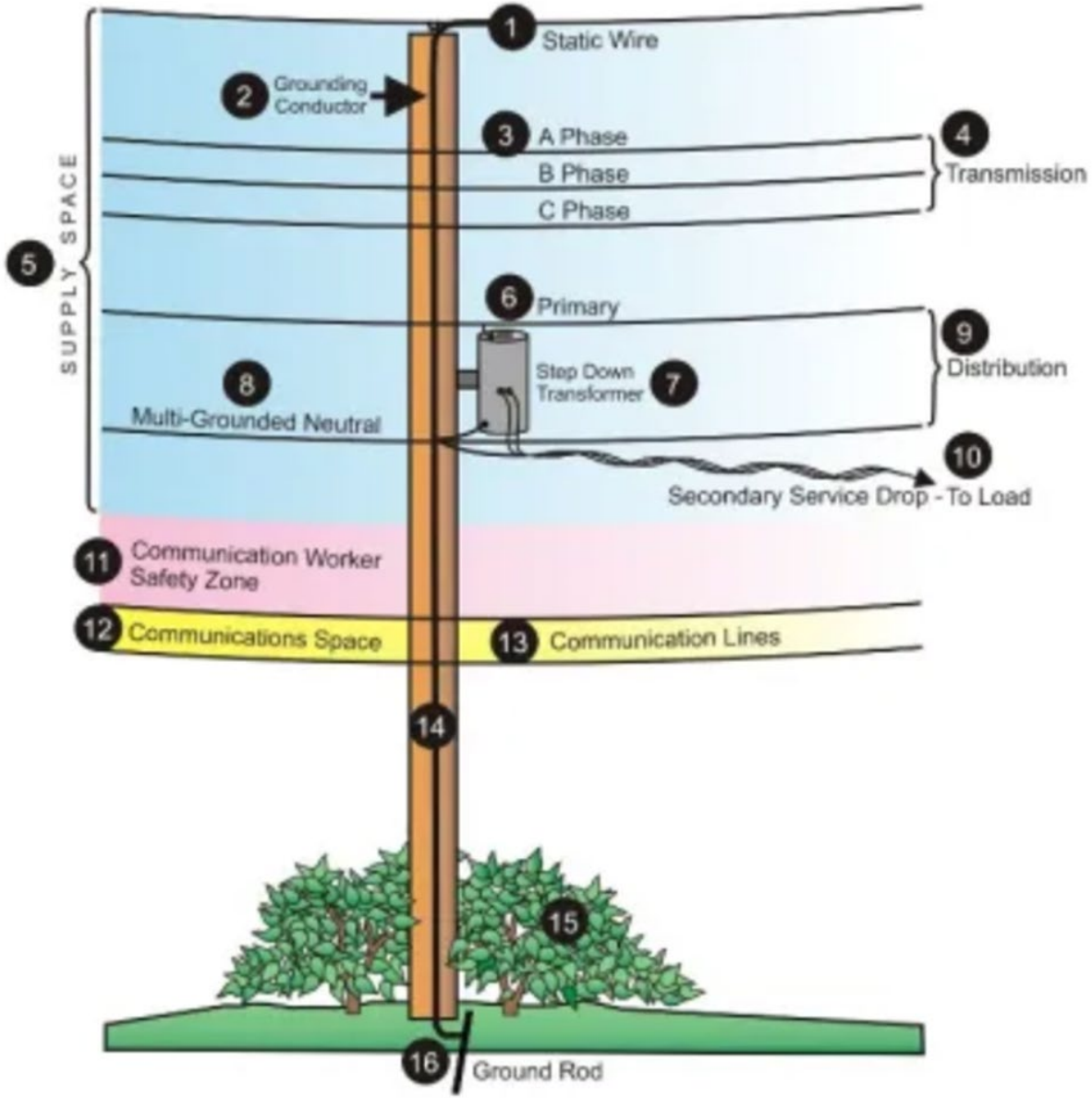
Street Signs

Streetlights

Types of attachments typically found on utility poles: Real World Illustration

Pole Top Antenna
Streetlight
Antenna RF Signal Equipment
Fiber Optic
Telephone Cable
Service Drops
Power Supply
Meter
Street Signs

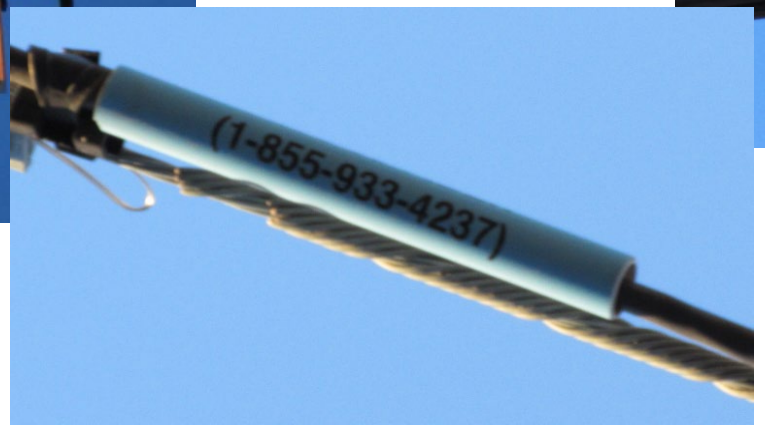
The different ‘segments’ of space, e.g., electric space, communications space, unused space/spacing for climbing



Pole Space Allocation

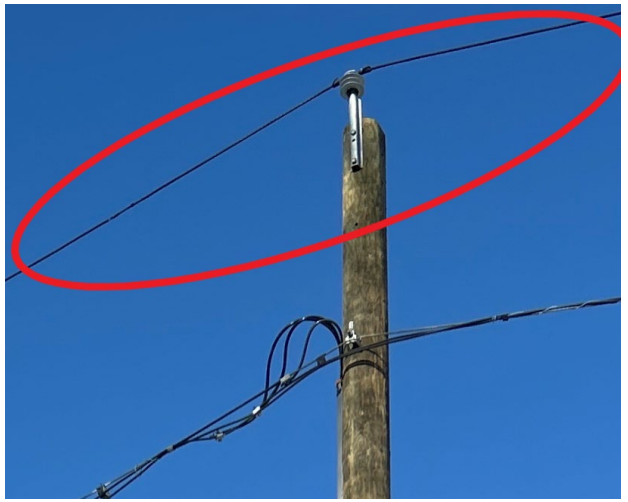
Markings and identification used on poles and for attachments.

- Stencils identify individual pole numbers on the roadside face for each pole owner.
- Tags on communication cables identify the owner and contact information if available.



Electronic attachments, for example:

Primary lines carry high-voltage electricity from substations to neighborhoods, while **secondary lines** step down the voltage and deliver it directly to customers for safe use.



Primary Lines

Secondary Lines

Electronic attachments, for example:

Transformers

Transformers regulate voltage levels in electric utility distribution, stepping up voltage for efficient transmission and **stepping down voltage for safe consumer use**.

Electronic attachments, for example:

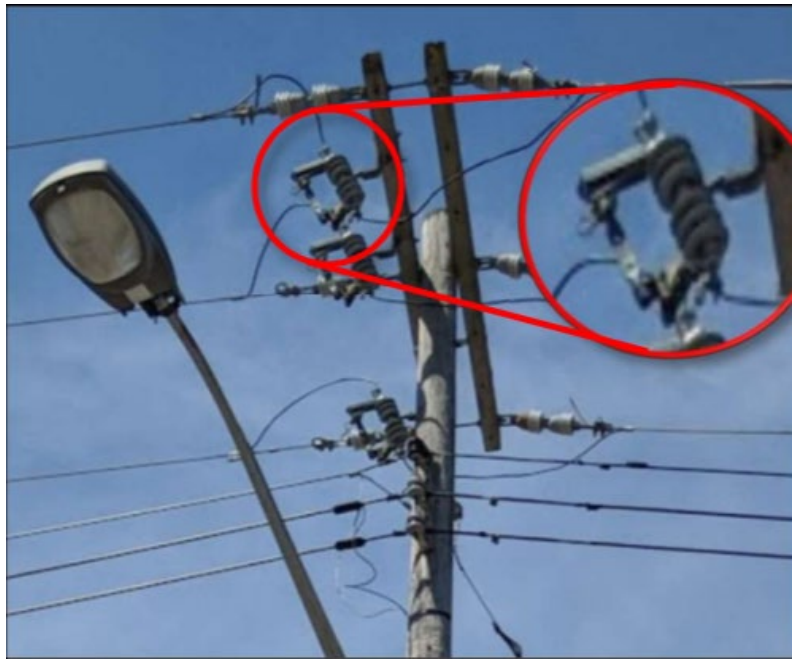
Insulators

Insulators **prevent unintended electricity flow**, supporting and separating conductors. Typically made of porcelain, glass, or polymer, insulators **stop energy from escaping to poles** or the ground.

Electronic attachments, for example:

Cut-outs

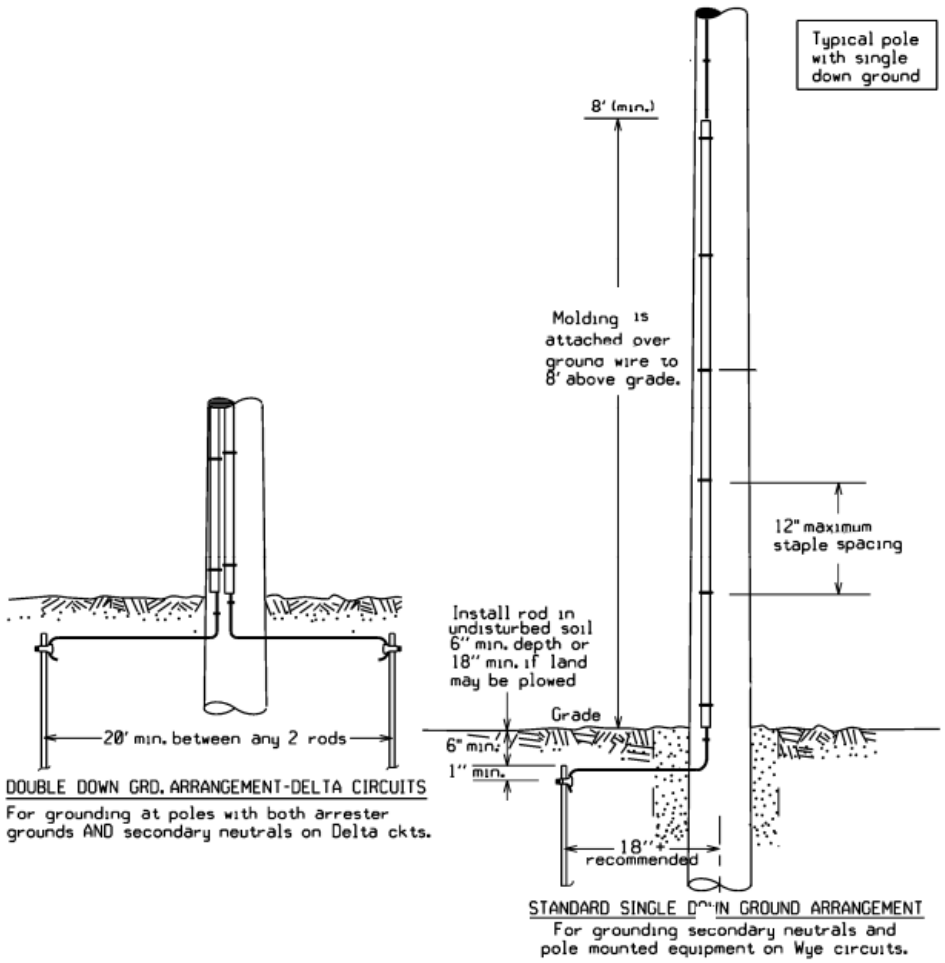
A cutout is a type of protective device used to safeguard the system. It helps **isolate faults and prevent damage** to equipment.

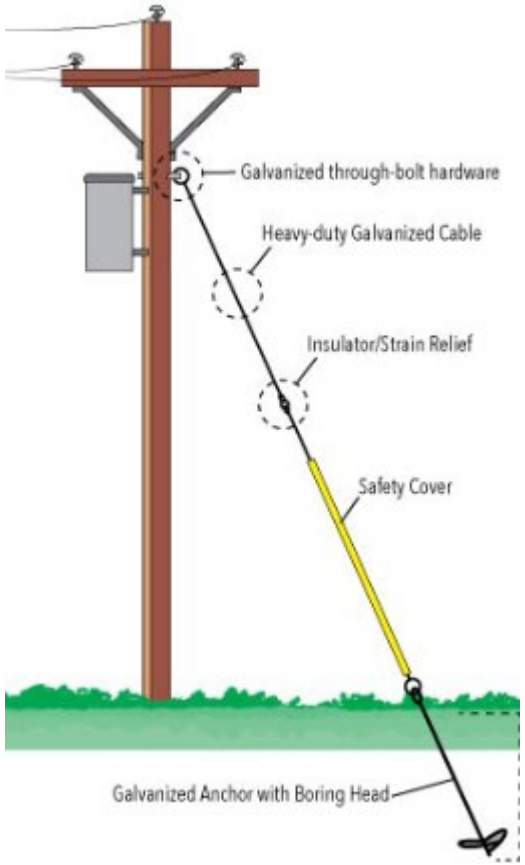


The fuse in the cutout opens when there is a fault to prevent widespread outages.

Electronic attachments, for example: Ground and guy wires

Ground wires provide a safe path for excess electricity to dissipate into the earth, preventing electrical hazards, while **guy wires** offer structural support, stabilizing poles against wind, tension, and other forces to maintain system integrity.





Electronic attachments, for example:

Streetlights which can be owned by the EDC, municipality or private area lighting customer

Roadway

High Pressure Sodium (HPS)

Light Emitting Diode (LED)

Flood

Electronic attachments, for example:

Other Electric attachment types, if applicable

- Locations of **Major Equipment** will impact antennas site and may limit available space on pole for communication attachments

Avoid Poles with Major Electrical Equipment such as Transformers, Regulators, Reclosers, Switches, Capacitors, or Primary Meters

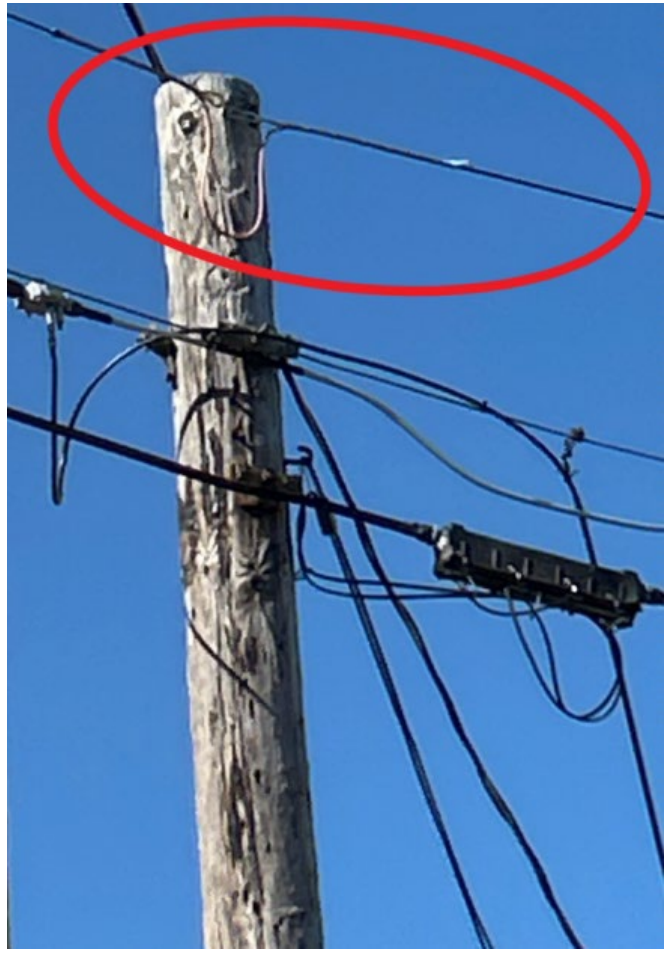
Capacitors

Avoid Poles supporting multiple primary electric circuits

Double Circuit Poles

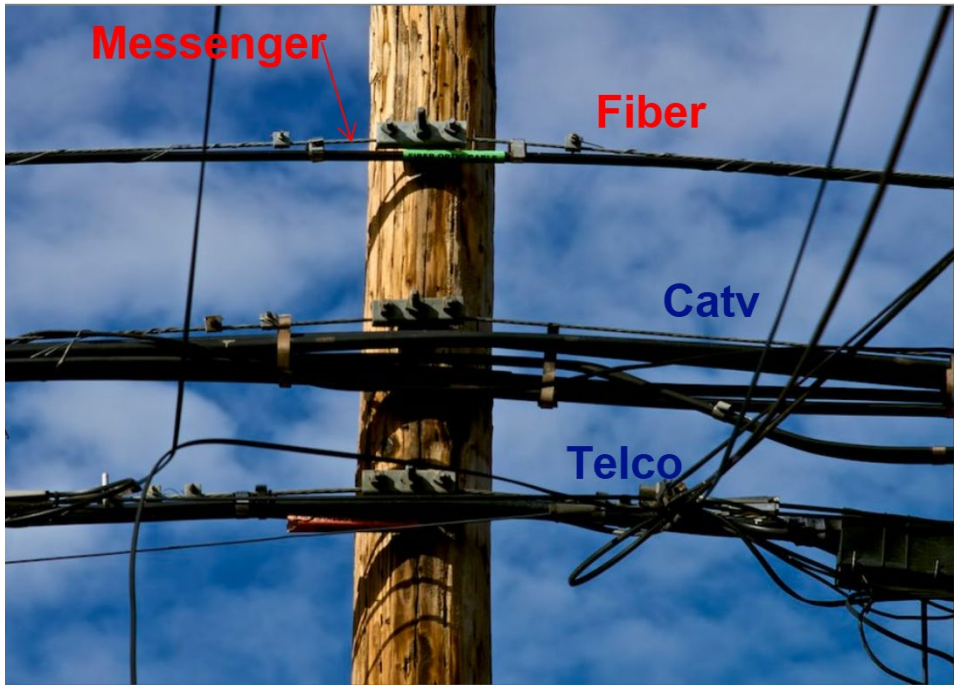
Municipal attachments, e.g., fire alarm, communications, municipal networks (excluding municipal broadband MLPs).

Fire Alarm Wire varies in activity across towns, with some sections in use and others inactive, while **municipal fiber networks** resemble broadband infrastructure and can only be identified if properly tagged.



Cable television, wireline telecommunications, and broadband attachments.

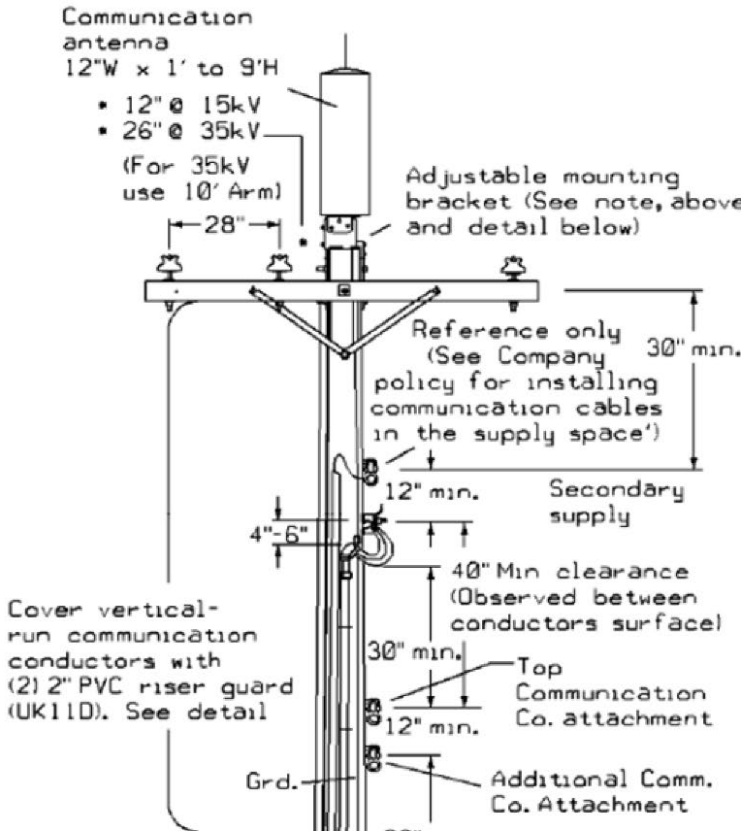
- Fiber attachments are installed in both the **power space** and the **communication space**, **Cable TV and telephone attachments** also occupy the communication space, secured with **brackets and strand-mounted hardware** to maintain separation and minimize interference.



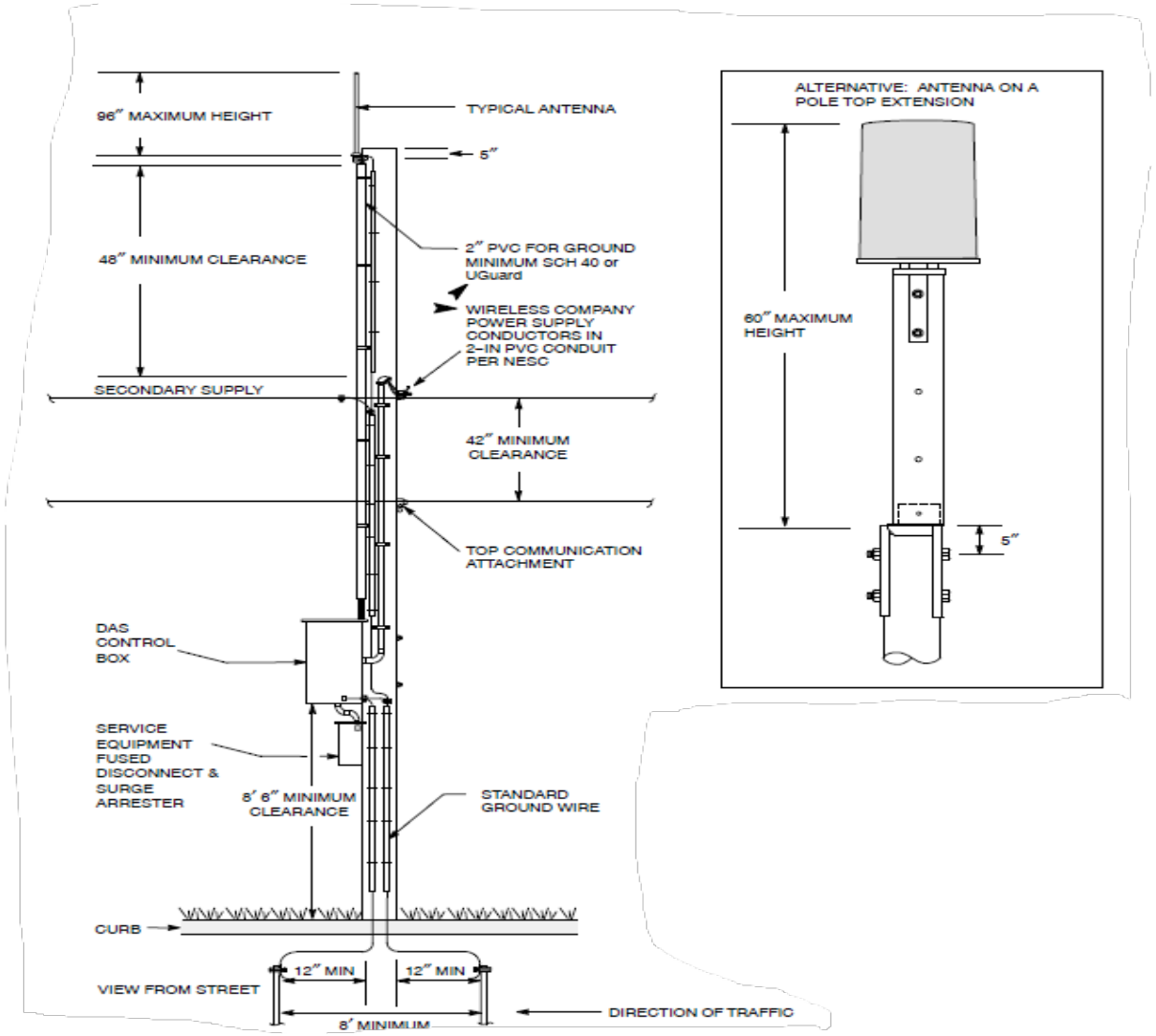
Distributed antennae systems attachments (National Grid)

Clearances in the Power Space

- Antenna must be 12” away from energized components for 15kV (26” for 35kV)
- The Concealfab takes up 18" of the pole top, so Crossarms will be lowered to 24” from pole top when
- If 56” of clearance currently exists between secondary and primary, we keep it, if not, we use a chart that takes into account sag charts based on span length. 30” would be the minimum clearance between any primary and secondary or ADFO Fiber.



Distributed antennae systems attachments (Eversource)



Discuss whether sub-transmission poles are treated differently from typical distribution poles, particularly regarding new attachments, transferred attachments, and maintenance.

Sub Transmission Considerations	Details
Attachment Policy and Definitions	▪ National Grid, Eversource, and Unitil **do not allow** attachments on sub-transmission structures in Massachusetts ▪ Sub-transmission typically operates at **voltages of 25 kV to 35 kV** in New England. Although Unitil operates it's Sub Transmission lines at 69 kv ▪ Primary function is to supply distribution substations rather than directly serving customers.
Safety Concerns	▪ **Minimum Approach Distance (MAD)** for sub-transmission is higher, ensuring that only qualified workers are near these assets. ▪ Due to the critical nature of the infrastructure, pole loading requirements for sub-transmission poles are held to a stricter standard than those for typical distribution poles.
Regulatory	▪ The FCC does not require communication attachments on sub-transmission poles

Discuss how the number and weight of attachments and the age of utility poles impact the integrity and strength of the poles.

Factor	Impact on Integrity and Strength
Number of Attachments	▪ **Increased Load:** More attachments add weight, increasing stress and risk of bending or breaking. ▪ **Distribution of Weight:** Uneven distribution creates stress points, leading to structural weaknesses
Weight of Attachments	▪ **Material Considerations:** Heavier materials increase overall load, affecting stability and longevity. ▪ **Wind and Ice Loads:** Heavier attachments heighten risk of failure during severe weather conditions.
Age of Utility Poles	▪ **Material Degradation:** Environmental factors can weaken structural integrity over time. ▪ **Fatigue:** Years of stress can lead to cracks and damage, compromising strength. ▪ **Maintenance History:** Regular maintenance helps identify issues; neglected poles are at higher risk of failure.

Discuss how vegetation and storm and extreme heat events impact the integrity of the utility poles and attachments.

Vegetation Impact

Tree Growth

- Can obstruct access for maintenance and inspections.
- May cause physical damage to poles through contact.
- Increased risk of damage from falling branches during storms or high winds.

Root Systems

- Roots can destabilize pole foundations, leading to leaning or failure.

Storm and Extreme Heat Events

Storm Events

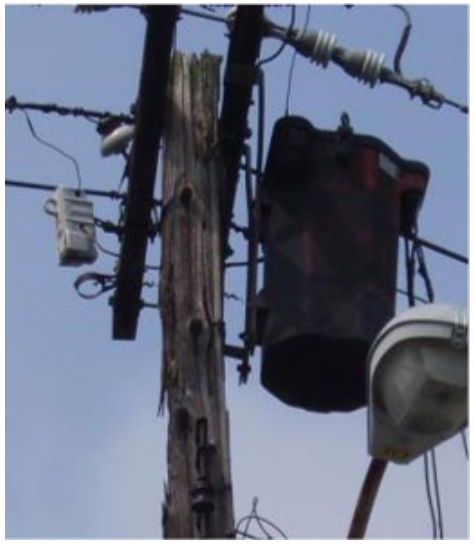
- High winds can exert significant lateral forces, risking pole failure.
- Ice adds weight, increasing stress and potential for collapse.
- Flooding can erode foundations, compromising stability.
- Lightning Strikes can cause direct damage or electrical surges affecting pole integrity.

Extreme Heat Events

- Prolonged heat degrades materials; wooden poles may crack, and metal components can warp.
- Heat causes metal attachments to expand, increasing tension and risking connection failure.
- Higher electricity demand from air conditioning raises loads on power lines & poles, increasing failure risk if infrastructure is under-rated.

Discuss the frequency and process you use to conduct routine inspections on utility poles and associated pole selection criteria.

- **National Grid**: Inspects poles on a **5-year cycle**, covering **20% of assets annually**. Fault levels range from **1 (imminent danger)** to **9 (temporary repairs)**. Inspection frequency depends on pole age, environmental conditions, and regulations. Additional inspections occur after severe weather or reported damage.
- **Eversource**: Inspects poles on a **10-year cycle**, covering **1/7th (14%) of assets annually** out of **~650,000 total poles**. Fault levels range from **1 (imminent danger)** to **9 (temporary repairs)**. Inspection frequency depends on pole age, environmental conditions, and regulations. Additional inspections occur after severe weather or reported damage. We utilize visual and IML methodologies.
- **Unitil:** Inspects and tests poles on a 10 year cycle, covering 10% of assets annually out of approx **20,000 total poles.** Unitil utilizes the PD500 Restograph to perform pole testing.



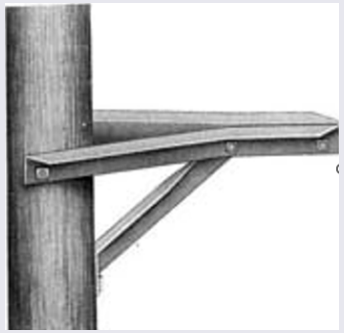
Describe when the utility utilizes trenching and conduit-to-the-pole for its facilities. For example, when and why do you utilize conduit for wires on certain poles?

Trenching and conduit- to-the-pole Considerations	Details
Electric Distribution Companies (EDCs)	**Conduit Usage:** ▪ Primary Risers: Coming out of substations. ▪ Service Risers: Primary and secondary risers servicing customers. ▪ URD Developments: Fed from overhead lines. ▪ Example: Eversource's underground DSS (transmission) lines between substations. **Space Considerations** ▪ National Grid prefers installing poles on private property and siphoning down. ▪ Depends on building size and property footprint.
Verizon	**Trenching Wires:** ▪ From poles to local residences or businesses for safe installation.
Limitations	▪ **National Grid**: Max 50% of pole circumference in contact with conduits. ▪ **Example:** Two 4" pipes limit additional conduits to two more 4" pipes. ▪ **Eversource:** Max 40% of pole circumference in contact with conduits. ▪ **Unitil:** Utilizes Stand-off brackets to attach conduits to pole.

Describe and provide a visual of the following attachment techniques in the communications space or elsewhere on utility poles. Additionally, discuss the instances in which your company would permit or utilize such a practice, if applicable, and any particular safety or engineering concerns.

Boxing/opposite-side construction considerations	Details
Safety Concerns	Boxing makes poles unclimbable for utility workers, complicating maintenance and service restoration during outages.
Increased Costs	Additional bucket trucks and personnel are required to service boxed poles raises costs and prolongs restoration times, ultimately affecting customer expenses.
Limited Boxing Approval	Boxing is only allowed limited circumstances, as it poses clearance and operational challenges that impact safety and reliability.

Describe and provide a visual of the following attachment techniques in the communications space or elsewhere on utility poles. Additionally, discuss the instances in which your company would permit or utilize such a practice, if applicable, and any particular safety or engineering concerns.

Attachment Technique	Details
Extension Arms: Used in limited power space to provide electrical clearance for MAD or to avoid obstacles like large tree limbs. **Standoff Brackets:** Utilized in telecom space to navigate larger obstacles in-span.	
Overlashing: Attach additional cable to an existing communication strand, can only be utilized by the strand owner. Pole loading analysis should be required to be presented to the Pole Owners.	
Chunking: Allows pole removal before communication transfers, used only when the new pole is set nearby and does not interfere with other equipment. For emergent pole replacement conditions and with immediate follow-up to make permanent. This case is a public safety concern.	

Temporary and Abandoned Attachments:

Temporary Attachment Considerations	Details
Describe when pole owners may rely on temporary attachments for their facilities	Neither National Grid nor Eversource rely on temporary attachments for facilities. Note: "Temporary" situations are processed through design and are intended to be permanent.
Opposition to Temporary Attachments	Concerns include safety, structural integrity, maintenance, regulatory compliance, liability, aesthetics, and long-term planning. This leads to a preference for regulated, permanent attachments to ensure reliability and safety.
If the regulatory board deems Temp Attachments are acceptable for some reason over this opposition the following conditions must apply.	• Temporary attachments would need to be submitted by application and in a continuous path • Permanent make ready would be required to be paid in full • Temporary attachments would not pose or cause NESC safety violations. • Temporary attachments would be required to be installed on J-Hooks and not through bolts

Temporary and abandoned attachments:

- **Provide visuals for temporary and abandoned attachments, if available.**

Abandoned attachments resemble active ones—this was left by a private company after relocating buildings and later removed when National Grid found it obstructing a pole transfer.

Applicant attached prior to make ready without authorization—hazardous condition left as not enough clearance on pole

Temporary and abandoned attachments: Opposition by Pole Owners

Safety & Reliability

- **Physical Hazards**: If the fiber attachment is not properly secured, it can become a physical hazard. Loose or dangling cables can interfere with maintenance activities, potentially causing accidents or injuries to workers.
- **Electrical Safety**: Abandoned attachments may still be connected to live electrical systems. This can create a risk of electrical shock or other hazards if workers inadvertently come into contact with these lines during maintenance or repair work.
- **Operational Reliability**: Unmonitored or improperly managed attachments can lead to outages. If these attachments interfere with other equipment, it could compromise the reliability of the distribution system.

Long –Term Planning

- **Asset Management**: Abandoned attachments can obscure the actual condition of the pole and its infrastructure, making it difficult to assess maintenance needs.
- **Data Integrity**: Accurate data is crucial for effective long-term planning. Abandoned attachments can lead to inaccuracies in asset inventories.
- **Reliability**: Unmanaged attachments can lead to operational outages, impacting long-term reliability planning and customer satisfaction.

Double Poles

- **Pole Transfers and Upgrades**: When a pole needs to be replaced or upgraded, any existing attachments, including temporary or abandoned ones, can complicate the transfer process.
- **Delays**: The presence of abandoned attachments can delay the necessary approvals for pole replacements or upgrades. This can result in prolonged timelines for projects.

NESC Compliance

- **Clearance Violations:** Temporary or abandoned fiber attachments may not adhere to these NESC clearance requirements, potentially leading to violations that could result in safety hazards or regulatory penalties.
- **Safety:** If temporary or abandoned attachments are not properly secured, they may sag or become loose, increasing the risk of contact with energized lines.

Temporary and abandoned attachments: Opposition by Pole Owners

Structural Integrity	Liability
• **Structural Integrity**: Abandoned or temporary attachments can affect the structural integrity of the pole. Over time, these attachments may cause wear or damage to the pole, leading to potential failures that could cause outages. • **Increased Load**: Any additional attachments, whether temporary or abandoned, add extra weight and stress to the pole. This can exceed the pole's designed load capacity, leading to potential bending, cracking, or even failure of the pole. • **Deterioration Over Time**: Abandoned attachments may not be regularly inspected or maintained. Over time, the materials can degrade, leading to corrosion or other forms of deterioration that can weaken the pole's structure	• **Injury Hazards**: Loose or improperly secured attachments can pose physical hazards to workers and the public. If someone were to be injured due to an attachment falling or causing an accident, National Grid could face legal liability claims. • **Increased Maintenance Costs**: The presence of abandoned attachments can complicate maintenance activities, leading to potential delays and increased costs. If these complications result in service interruptions or failures, RDC's could be held liable for damages. • **Visual Clutter**: Temporary and abandoned attachments can create visual clutter on utility poles, detracting from the overall appearance of the area. This can be particularly concerning in residential or scenic areas where aesthetics are valued. • **Community Perception**: The presence of abandoned attachments can lead to negative perceptions of EDC's within the community. Residents may view the company as neglectful or unprofessional, which can harm the company's reputation.

Temporary and abandoned attachments:

Discuss when/how the pole owner may abandon/disconnect its own attachments but will leave those facilities on the pole.

- **EDC's do not leave unused facilities** on poles.
- **Municipalities** are typically responsible for abandoned attachments found on EDC poles.

Discuss when/how the pole owner determines when a third-party has abandoned its attachment(s).

- Third parties must **submit a notice of discontinuance** to the EDC, specifying pole locations and requesting license cancellation.
- If abandonment is suspected, the EDC **contacts the third party** to verify attachment status.

Discuss safety and engineering considerations in relation to:

Wireless Attachments	Safety & Engineering Considerations
Pole Top Access by Wireless Facility Attachments Preferred poles are secondary only poles, wood streetlight and guy stub poles. Eversource only allows Pole Top Antennas to be installed on secondary only poles **Unitil** Constructions standards do not allow for Third Party Wireless Facility Attachments on Primary Poles. These types of attachments are only allowed on wood Secondary, Streetlight and Guy stub Poles.	**Pole Exclusions:** ▪ Poles with major electrical equipment installed (e.g., regulators, transformers, reclosers, switches, capacitors, etc.). ▪ Poles supporting multiple primary electric circuits ▪ Electric primary junction poles, including single phase or three phase taps ▪ Poles with electric primary risers ▪ Poles with communication company accessory equipment (e.g., power supplies, fiber splice closures, etc.) ▪ Poles that are inaccessible by bucket truck year-round
Wireless Attachments (Generally)	Any poles that have primary electric cables attached will require the use of electrically qualified (OSHA 1910.269) workers for the installation and ongoing maintenance of any equipment installed above the communication worker safety zone.

Discuss safety and engineering considerations in relation to:

Self–Help	Safety, Engineering and Electric Rate Payer Cost Considerations
Self Help EDCs find self-help remedies present inefficient work practices which ultimately escalate costs to electric ratepayers	**Timelines:** Unacceptable due to the volume currently inflight in Massachusetts. These additional costs would be borne by the MA Electric Ratepayers. EDC's have a robust procurement process in obtaining both Engineering and Electric Space workers and by allowing Self-help would not reduce any timelines and only incur additional costs to our Electric Rate Payers in MA. This will also affect reliability and resiliency of our systems that MA has worked hard to obtain. Self-help will lead to greater inefficiencies. **Safety concerns:** Working on wooden utility poles in the electric space requires much training and years of experience and should only be done by Electric Utility EDCs. System and worker safety is a concern with lack of oversight by Electric trained employees **Labor Agreements:** Pole work is bound by labor agreements and most unions are not in agreement of third-party's conducting self-help

Self Help vs OTMR

	Self–Help	One Touch Make Ready (OTMR)
Definition	Allows requesting attaching companies to perform make-ready work in **both the power and communication space** when timelines are not met.	Process for rearranging communication space cables only using a single construction vendor.
Availability	▪ Would not be available for locations requiring utility pole replacement. ▪ Would not be allowed for locations where NESC violations are or will be present based on the new attachment.	• Would only be applicable after all power space make-ready work is complete. • Used for simple communication make ready only, except where precluded by collective bargaining agreements. • Would not be applicable to locations requiring communication service outages.
Design	Bypasses application, survey, design process and pre-construction review by EDC. There would be no oversight of the process by the pole owners.	Follows third party application, survey and design processes.
Remediation of Issues	Post-Construction Survey Required and remediation of any damage or violations at attaching company's expense.	All issues found must be remediated at the attaching company's expense.

Discuss safety and engineering considerations in relation to:

OTMR	Safety, Engineering and Electric Rate Payer Cost and Reliability Considerations
EDC’s do not support OTMR or Self Help in the power space.	This would protect the Electric Rate Payers and system reliability where only EDCs would perform this work which includes Pole Setting , any work in the Power Space and Small Cell Antenna’s

Discuss engineering considerations in relation to:

Self–Help & EVSE	Safety & Engineering Considerations
Self Help	**Safety concerns:** Self-help bypasses review and approval process by EDCs. **Labor Agreements:** Pole work is bound by labor agreements and some unions are not in favor of third-party's conducting self-help
One Touch Make Ready (OTMR)	**Engineering Concerns:** ▪ Risk of one party acting on behalf of all, potentially moving facilities into violation. ▪ May minimize make-ready requirements. ▪ Could decrease separation between attachments (entitled to 12" unless approved for reduction), impacting pole strength. ▪ Lowering facilities may jeopardize poles and wires, **increasing the risk of clipping**. ▪ OTMR crews in the field cannot accurately assess worst-case scenario clearances.

Discuss safety and engineering considerations in relation to OTMR

EDC's have strong concerns OTMR and Self Help in the communication space and its impact on safety and reliability.

Operational/Reliability	Safety Concerns
Service Outages: The risk of service outages is a significant concern, especially when complex make-ready work is involved. This can negatively affect businesses, emergency services, and residential customers. **Complexity of Make-Ready:** OTMR policies typically only apply to "simple" make-ready work, leaving "complex" tasks like work in the power space, cable splicing, and pole replacements outside the scope of streamlined procedures. This can still lead to delays and complications. **Increased Network Disruptions:** Failures associated with OTMR could lead to widespread network disruptions and delays, particularly for critical services and transportation.	**Worker Safety**: Potential for unsafe working conditions if contractors are not adequately trained or familiar with the existing infrastructure, increasing the risk of accidents during make-ready work. **Public Safety:** Risk of electric shock to unqualified individuals who might come into contact with energized lines due to improper attachment or maintenance procedures. **Structural Integrity**: Improperly performed make-ready work can compromise the integrity of utility poles, making them more susceptible to collapse during storms or high winds, leading to equipment damage and outages.

Discuss safety and engineering considerations in relation to:

EVSE Attachments	Safety, Engineering and Electric Rate Payer Cost and Reliability Considerations
EVSE Attachments EDCs think there are better options than using Electric Utility poles. See Topic#8 for additional comments	**Public Safety Concerns:** EVSE requires power run down into the “unusable” space on the pole and could pose a safety risk to the public. (i.e. if the device gets hit by a motor vehicle, power could then be exposed at a height below 10ft). Safety of the public when these electric cables from the EVSEs are left hanging or crossing bicycle paths in between the charger and vehicle being charged. **Delays in removing double poles.** We already see these delays with Power Supplies and other equipment in this space and adding more equipment in this space continues to increase the timeline in removing double poles especially when poles are hit by vehicles or storm events require emergent replacements.

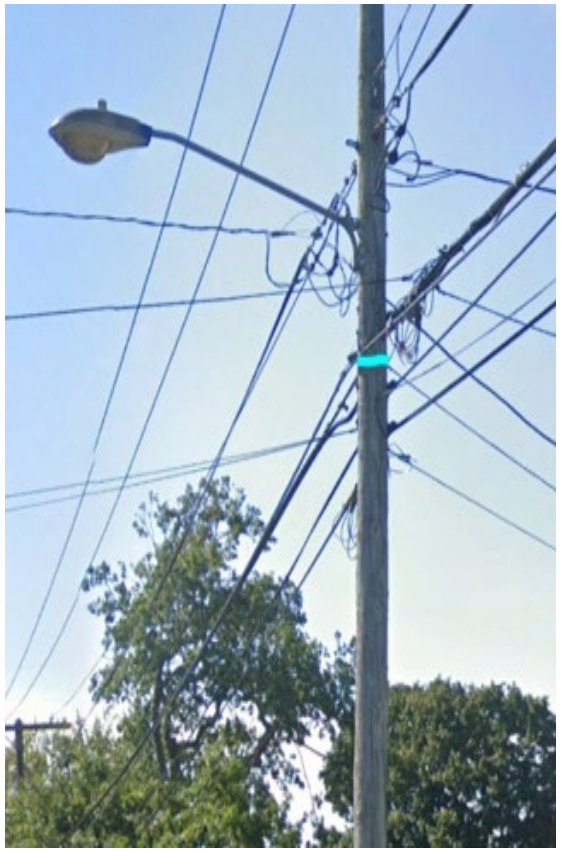
Discuss additional considerations relating to pole top access by wireless facility attachers, boxing, overlashing, and temporary attachments.

	Additional Considerations
Pole Top Access by Wireless Facility Attachers	**Engineering:** Pole Top condition must be structurally sound or would require full pole replacement. **Safety:** Antennas must be properly grounded to prevent electrical hazards.
Boxing: The EDU's do not permit boxing for the purpose of accelerating a construction schedule or avoiding customary make-ready work. Boxing is not prevalent on distribution poles. The FCC and other states have adopted a non-discrimination standard whereby pole owners are only required to allow third-party attachers to have a pole boxed under the same circumstances that the pole owner would allow itself to box the pole.	**Engineering :** Boxing presents NESC clearance violations and does not allow for the required spacing requirements per third party attacher. **Safety:** Boxing poses safety risks, as backside construction is not always accessible and would require additional resources driving operational expense. **Reliability:** Boxing requires EDU's to use more bucket trucks and more personnel in often difficult and unsafe conditions to perform repairs on boxed poles. Boxing not only increases the costs of storm restoration. Boxing poles also creates difficulties and increases costs when poles need to be replaced, requiring costly and non-standard equipment.

Visuals relating to boxing.

12" Separation Boxed

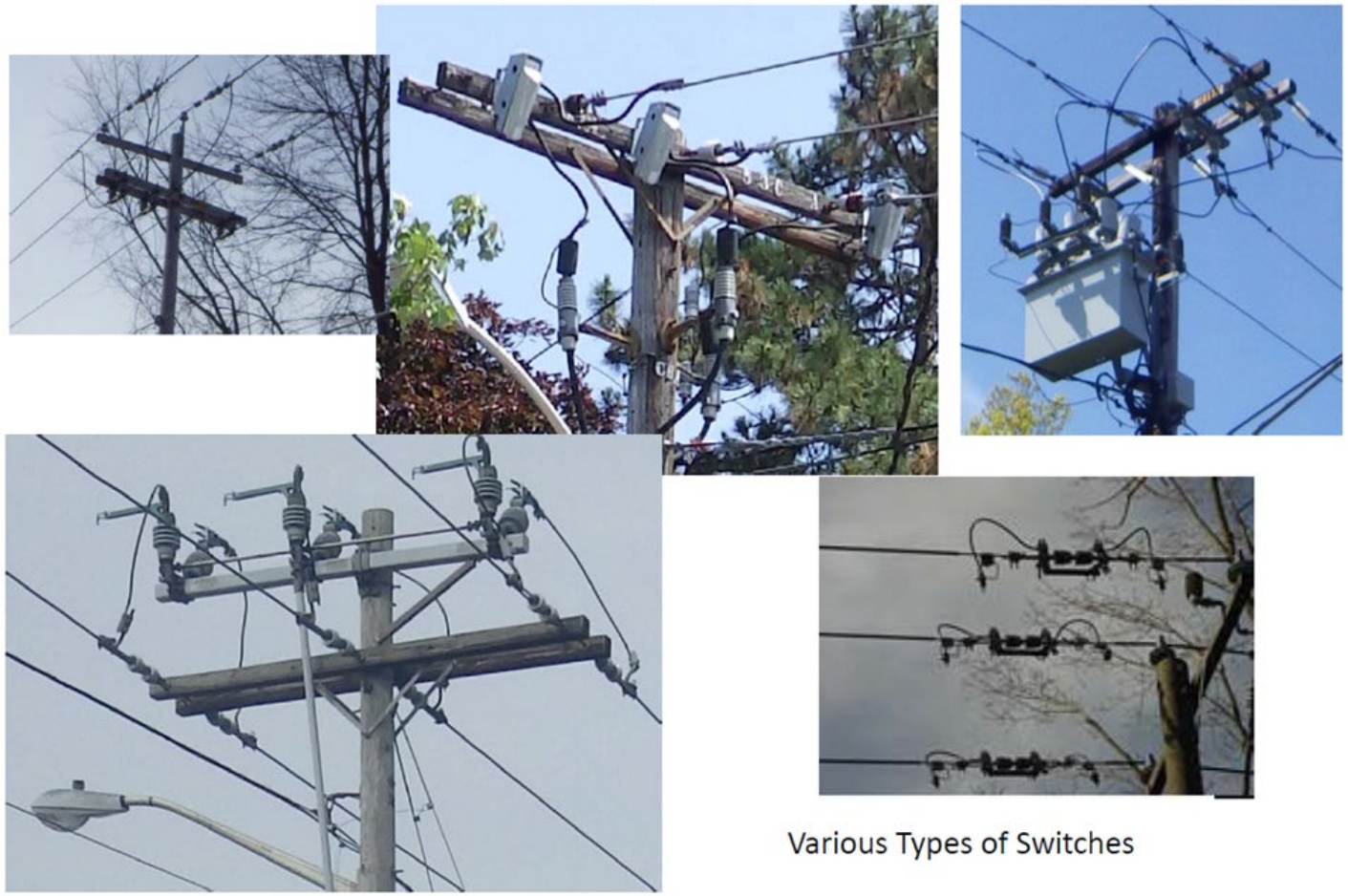
Double Pole Boxed – Two roadside communications and three field-side communications, creating **complexity in the transfer process**.



6" Separation Boxed

Visuals relating to pole top access by wireless facility

Avoid Poles with Major Electrical Equipment such as Transformers, Regulators, Reclosers, Switches, Capacitors, or Primary Meters



Various Types of Switches

Avoid poles with **major electrical equipment** to ensure space at the **pole top** and below **communication cables** for radio/antenna equipment.

Selected poles must be **accessible year-round** by **bucket truck**.

Discuss additional considerations relating to pole top access by wireless facility attachers, boxing, overlashing, and temporary attachments.

	Additional Considerations
Over-lashing Prior to over-lashing, the Licensee shall perform a strand tension analysis and may be required to perform a pole loading analysis.	The Licensee and Over-lasher shall install and maintain their facilities in compliance with relevant codes, standards, and engineering, safety and reliability practices ("Standards"). Such Standards include EBU Electrical Overhead Standards, Telcordia Blue Book – Manual of Construction Procedures, the National Electric Safety Code (NESC) and OSHA requirements.
Temporary Attachments The EDC's do not permit temporary attachments for the purpose of accelerating a construction schedule or avoiding customary make-ready work.	**Safety:** When applications don't go through the make ready process there's no guarantee that the new cable adheres to clearance regulations, passes pole loading analysis, or meets safety standards.

Visuals relating to over-lashing

CATV over-lash at junction

Over-lash detaching from messenger and cable

Describe your company's current practice for addressing unauthorized attachments. If applicable, discuss when your company resorts to self-help measures for removing unauthorized attachments.

Unauthorized Attachments: Equipment installed on utility poles without a license. These unlicensed attachments pose risk to the **reliability of the electric system** and **safety of the communication/line workers and the public.**

When an unauthorized attachment is identified, the EDC will **identify and notify** the unauthorized company of the attachment. The **attachment must either be removed,** or a new application submitted to add the unauthorized attachment to our system records.

The attaching company is required to **follow the attachment process** for the respected type of attachment and pay associated (make ready) fees associated with providing adequate clearance for the attachment. The unauthorized company will also be **back-billed for the unlicensed attachment**.

If the unauthorized company is unable to remove said attachment or begin the third-party application process, **the EDC's will then invoice them for the cost to have internal crews remove the attachment on their behalf.**

Identify any additional technical, safety, and engineering considerations that the Department should consider and explain why.

Pole Height & Capacity

- **55 ft** is the maximum reach for standard utility vehicles.
- **Adherence to NESC clearances** ensures pole capacity is optimized.

Electric Sector Modernization Plan (ESMP)

- Ongoing effort to meet **2050 Decarbonization Goals**.
- Requires **additional space** for new reliability equipment and distribution circuits.

Attachment & Guying Requirements

- Applicants must **guy their plant** according to **pole loading analysis**.
- **No attachments** to existing joint-owned anchors or guys.
- **Third parties** must apply for **stub/guy pole attachments** when necessary.


Thanks
for listening.
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