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Agenda

- FCC Authority To Regulate Utility Pole Attachments
- Effective Date of One-touch Make-ready Process
- Work Together To Complete Projects Time & Cost Efficiently
- Joint Use Pole Attachments and Make-Ready
- Existing Pole Attachment Process
- One-touch Make-Ready Pole Attachment Process
- Changes to Existing Pole Attachment Process
- Changes to Treatment of Overlashing
- New Attachers are Not Responsible for Pre-existing Violations
- Compare Process and Timelines Existing vs. OTMR Pole Attachment Process
- Benefits and Drawbacks of One-Touch Make-Ready

References

- ▶ FCC 18-111
 - Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment
 - WC Docket No. 17-84
 - WC Docket No. 17-79
 - Third Report and Order and Declaring Ruling: August 2, 2018
- Internet
 - FCC Law Blog FCC Seeks "Large Step" Toward Advancing Broadband Infrastructure Goals With Draft One-Touch Make-Ready Order
 - Alden Are you ready for one touch make ready?
 - Next Century Cities
 - Wired
 - Wikipedia
- Personal experience

Dan Nelson, P.E. Background and Expertise

- Professional Engineer Reviews and Oversight
- Aerial and Buried Communications Design and Permitting Since 2011
- Alliant Energy Joint Use Pole Attachment Permitting Since 2014 (WPL and IPL) - Wireline and Wireless
- Alliant Energy Joint Use Pole Removal Program Since 2016 (WPL)
- Alliant Energy Buried and Aerial Electric Design PE Review Since 2017 (IPL)
- Small Cell Antennas Design, Permitting, Review and Environmental Studies
- Railroad Utility Crossing Permits
- Cured-in-place Pipe (CIPP)

One-Touch Make-Ready Concept

- Louisville, Nashville and San Antonio have One-Touch Make-Ready statutes.
- One-Touch Make-Ready is a concept and has not been fully tested on everyday pole attachment projects.
- Ideas and concepts as presented by the FCC.

Definitions and Acronyms

- Utility Pole owner
- Existing Attacher Provider already attached to pole
- New Attacher Provider seeking to add attachment to pole
- OTMR One-Touch Make-Ready
- FCC Federal Communications Commission
- BDAC Broadband Deployment Advisory Committee
- OMB U.S. Office of Management and Budget



FCC Authority To Regulate Utility Pole Attachments

- Under the guidelines of the Federal Communications Commission, states are presented with two options for the regulation of their utility poles.
 - States can pass legislation recognizing the right of the FCC to regulate their utility poles.
 - States can form their own regulatory agencies and maintain their right to self-regulate their utility poles.
- The FCC currently regulates all activity related to utility pole attachments in 30 states.
- Wisconsin is governed by FCC regulations.

FCC Authority To Regulate Utility Pole Attachments

The FCC currently regulates all activity related to utility pole attachments in the following 30 states:

Alabama

Florida

Indiana

Maryland

Missouri

Nevada

North Dakota

Rhode Island

Tennessee

West Virginia

Arizona

Georgia

lowa

Minnesota

Montana

New Mexico

Oklahoma

South Carolina

Texas

Wisconsin

Colorado

Hawaii

Kansas

Mississippi

Nebraska

North Carolina

Pennsylvania

South Dakota

Virginia

Wyoming

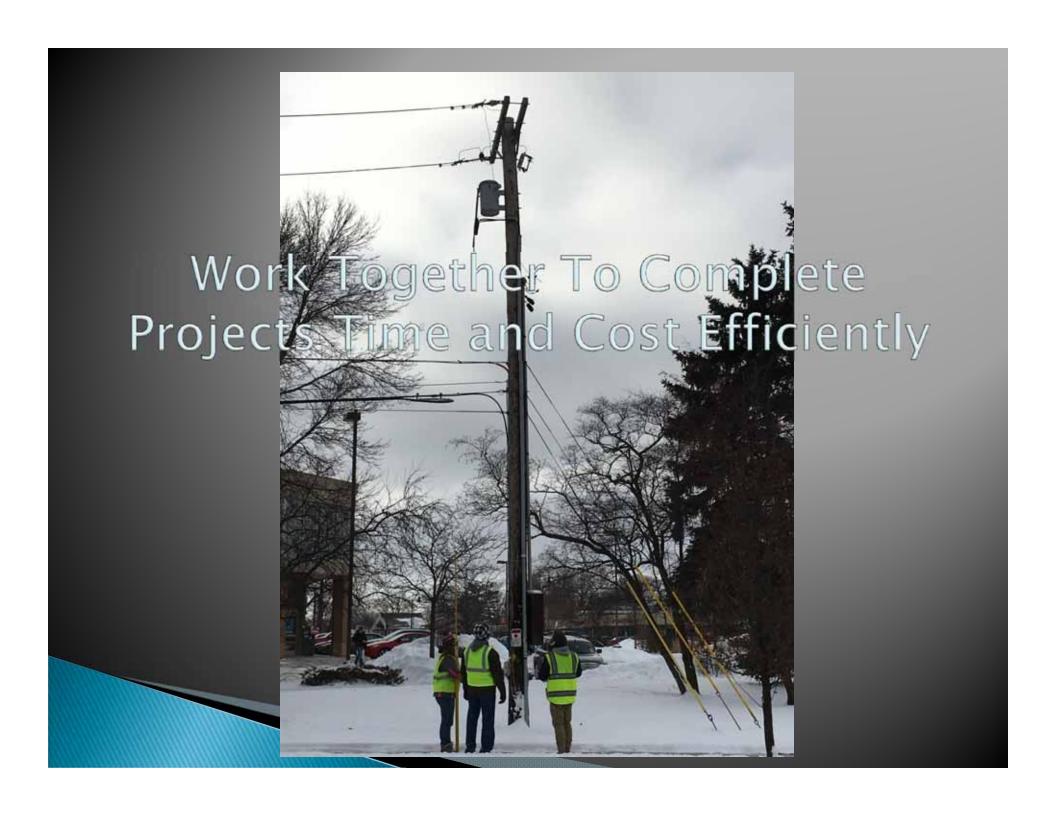
FCC Authority To Regulate Utility Pole Attachments

- FCC regulates attachments to poles owned by investor-owned utilities in the 30 states that are currently governed by federal law.
- FCC rules does not govern municipal and cooperative owned poles.



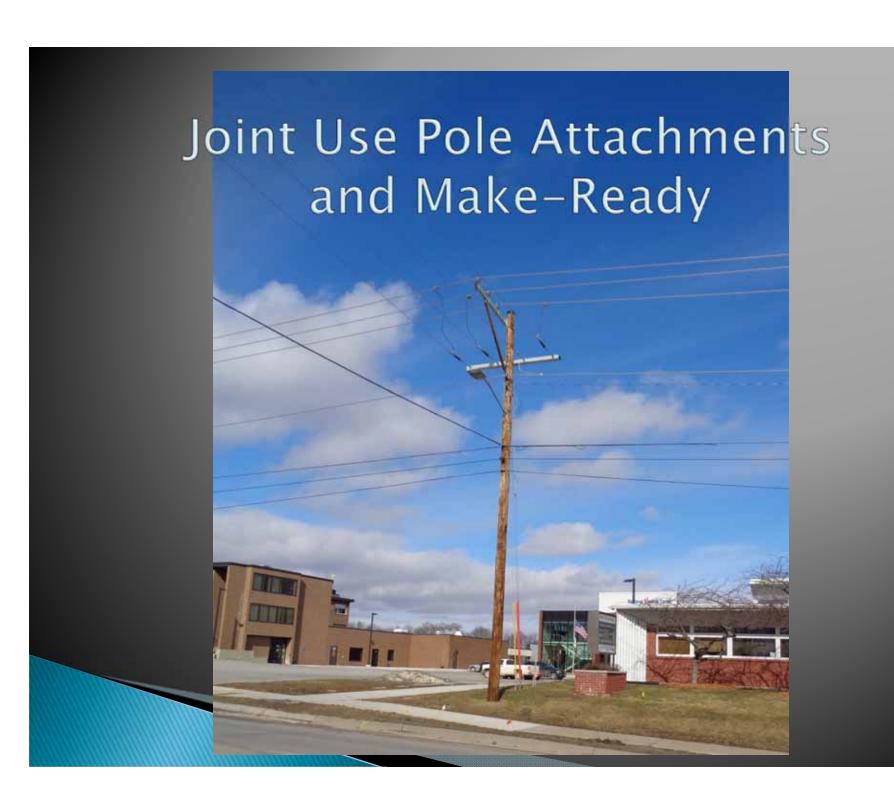
Effective Date of One-touch Make-ready Process

- The August 3, 2018 Pole Attachment Order was expected to be effective March 11, 2019 but has been delayed.
- Federal Register reported the U.S. Office of Management and Budget (OMB) is requesting comment by March 22 on requirements portions of the Order.
- Since these remaining portions of the Order cannot become effective until 30 days after OMB approval, it will be at least two months before these extensive new rule change will become effective.



Work Together To Complete Projects Time and Cost Efficiently

- Explain the process and timelines for the one-touch makeready process and show how all joint facility parties are involved.
- Understanding roles and timelines, if we work together we can complete projects safely, and more time and cost efficiently using the one-touch make-ready process.
- Cooperation among all parties is essential to making the pole attachment process proceed smoothly and safely.
- No matter the attachment process, all parties need to work cooperatively to meet deadlines, perform work safely, and address any problems expeditiously.



Utility Poles

- Utility poles have become one of the great battlegrounds in the effort to expand network infrastructure deployment.
 - The war over high-speed access is fought on 40-foot-high wooden sticks.
- Pole access determines whether a new provider is able to easily and cost effectively bring broadband infrastructure to a community.
- This in turn plays a significant role in the level of competition, and the services available to local businesses and residents.
- However, gaining access to these poles is often a long, difficult, and expensive process, making the barrier to entry incredibly high.

Utility Poles

- A significant portion of utility poles are owned by electric utilities and telecommunications companies.
- When a provider enters a new market, they must contact the owner of each utility pole to which they would like to attach.
- Each company with pre-existing wires or attachments on the pole must then be asked to perform "make-ready" work.
- No new attachments can be made until all incumbents have deem the pole ready.
- This process that can take upwards of nine months!

Make-Ready

- Make-ready is the modification or replacement of a utility pole, or of the lines or equipment on the utility pole, to accommodate additional facilities on the pole.
- Make-ready work is necessary to prevent the risk of outages and safety issues.
- New attachment can not be added to pole until acceptable space and capacity per codes and pole owner standards are obtained.



- Pole owner assesses requested attachment
 - Room for new attachment?
 - Safety and Capacity Issues?
- Any identified issues must be addressed prior to attachments or changes
- Existing attachers must be notified of the request
- Existing attachers with make-ready must individually send a contractor to complete work
- Multiple companies must each send a truck on a different day to the same pole to move facilities until appropriate space is made for the requested attachment

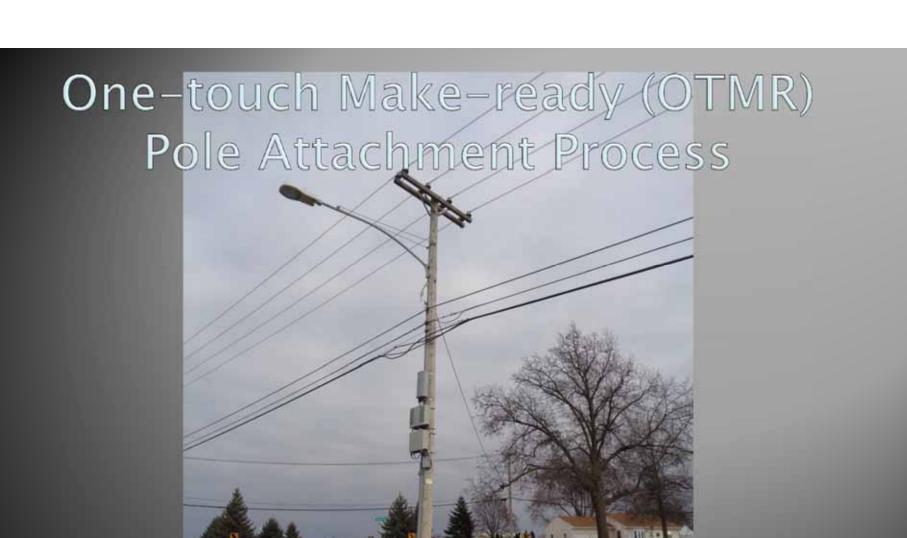
- Issues With Permitting
 - Lengthy and comprehensive permitting process
 - Permitting costs increasing
 - All costs must be paid by the requesting attacher

- Issues With Make-Ready Construction
 - Make-ready work must occur sequentially
 - Each contractor must schedule and coordinate their work to not conflict with other contractors
 - Existing attachers cause delays or are non-responsive
 - Make-ready work can take months, or even years
 - Disruptions in high traffic areas and to the community

- Process and Timelines
 - Review of Application Completeness No Set Timeline
 - Application Review and Survey
 - 45 days, 15 extra days for large orders
 - Estimate 14 days
 - Estimate Acceptance 14 days
- Large orders is lesser of 3,000 poles or 5% of utilities poles in that state

- Process and Timelines
 - Make-Ready
 - 60 days for attachments in communications space
 - 105 days for large orders
 - 90 days for attachments above communications space
 - 135 days for large orders
 - 15 additional days if utility needs to complete makeready it-self
 - Right to hire contractor or Self-Help Remedy
 - Inspection

- Pole attachment delays and high costs have deterred providers from deploying broadband
- Make-ready stage of the current process is thought to be the largest source of high costs and delays
- Broadband Deployment Advisory Committee (BDAC)
 recommended that the Commission take actions to promote access to broadband infrastructure
 - One-touch make-ready
 - Improvements to the process for complex and noncommunications space attachments



Background

One-touch Make-ready Pole Attachment Process

- Recommended by Broadband Deployment Advisory Committee (BDAC)
- Promote and expedite broadband deployment by attaching new facilities to utility poles broadband providers can continue to enter new markets and deploy facilities that support high-speed broadband.

One-touch Make-ready Pole Attachment Process

- In race for 5G, small cell antennas will be needed to improve wireless coverage. Small cells require wireline backhaul.
 - Estimated 100,000 to 150,000 small cell antennas were to be constructed by the end of 2018
 - Projected to reach 455,000 by 2020 and 800,000 by 2026
- OTMR alone could result in approximately 8.3 million incremental premises passed with fiber and about \$12.6 billion in incremental fiber capital expenditures

One-touch Make-ready Pole Attachment Process

- OTMR pole attachment process places new attachers in control of the surveys, notices, and make-ready work necessary to attach their equipment to utility poles.
- One contractor has permission to move existing attachments on a pole, allowing a single crew to move all attachments on a pole on a single visit.
- OTMR speeds and reduces the cost of broadband deployment by allowing the party with the strongest incentive—the new attacher, to control the project.

Utility Pole Spaces

- A utility pole is divided into three spaces.
- The bottom of the pole is unusable for most attachments, although distributed antenna systems (DAS) and some other types of attachments can (sometimes) be placed there.
- The electric space is at the top of the pole, where high voltages are present.
- Between those two spaces is the communications space, where low-voltage equipment can be placed including fiber, copper and coaxial cables.

Simple vs. Complex Make-Ready

- OTMR process permits new attachers to complete simple make-ready for wireline attachments in the communications space on a pole.
- OTMR process is applicable for poles requiring only simple make-ready work.
- OTMR is not available for complex make-ready work or for any projects involving electric-supply facilities.

Simple Make-Ready

- Make-ready is considered simple when existing attachments in the communications space of a pole could be transferred without any reasonable expectation of a service outage or facility damage and does not require splicing of any existing communication attachment or relocation of an existing wireless attachment.
- Communication space is considered the lower usable space on a utility pole, which typically is reserved for low-voltage communications such as fiber, copper and coaxial cable and their associated equipment.

Complex Make-Ready

- Complex make-ready
 - Likely to result in a service outage
 - Likely to damage existing facilities
 - Requires splicing of an existing attachers wire
 - Any and all wireless equipment
 - Requires pole replacement

Simple vs. Complex Make-Ready Who Decides?

- New attachers determine whether the make-ready work is simple or complex at the time they conduct an initial survey and design of the proposed attachment.
- New attachers contractor is required to determine whether make-ready work identified in the survey is simple or complex
- The utility also has the right to reasonably object to the determination

Coordination and Safeguards For One-Touch Make-Ready

- Coordination among the parties is encouraged to ensure that new attachers perform work safely and reliably, thereby significantly mitigating the potential drawbacks of OTMR.
- (1) Require new attachers to use a utility-approved contractor or qualified contractor
 - Addresses existing attachers apprehension about unfamiliar contractors working on their facilities
 - Guards against delays that result when utilities fail to maintain approved contractor lists

Coordination and Safeguards For One-Touch Make-Ready

- (2) Require new attachers to provide advance notice and allow representatives of existing attachers and the utility a reasonable opportunity to be present when surveys and OTMR work are performed
- (3) Requires new attachers to allow existing attachers and the utility the ability to inspect and request any corrective measures after the new attacher performs the OTMR work
- Addresses existing attachers and utilities concerns that the new attachers contractor may damage equipment or cause an outage without their knowledge and with no opportunity for prompt recourse.

Coordination and Safeguards For One-Touch Make-Ready

- (4) Allow existing attachers and utilities to file a petition with the Commission requesting the suspension of a new attachers OTMR privileges due to a pattern or practice of substandard, careless, or bad faith conduct when performing attachment work.
- Prevents substantial service interruptions or danger to the public or workers.

One-touch Make-ready Pole Attachment Process

- Pole attachment process that places new attachers in control of the surveys, notices, and make-ready work necessary to attach their equipment to utility poles.
- OTMR only applies to simple make-ready work.
- One contractor performs all simple make-ready work.
- Promote and expedite broadband deployment.



- Recommended but not mandatory for the utility to make a list available qualified contractors authorized to perform survey and simple make-ready work on their facilities
- New attachers may choose their own qualified contractors but must certify to the utility that the contractor meets the requirements

Contractors must meet key safety and reliability criteria recommended by the BDAC

- (1) Follow published safety and operational guidelines of the utility, if available, but if unavailable, follow the National Electrical Safety Code (NESC) guidelines
- (2) Read and follow licensed-engineered pole designs for make-ready work, if required by the utility

- (3) Follow all local, state, and federal laws and regulations including, but not limited to, the rules regarding Qualified and Competent Persons under the requirements of the Occupational Safety and Health Administration (OSHA) rules
- (4) Meet or exceed any uniformly applied and reasonable safety and reliability thresholds set and made available by the utility, e.g., the contractor cannot have a record of significant safety violations or worksite accidents
- (5) Be adequately insured or be able to establish an adequate performance bond for the make-ready work it will perform, including work it will perform on facilities owned by existing attachers

- Utility is allowed to veto any contractor
- Veto must be based on reasonable safety or reliability concerns related to the contractor's ability to meet one or more of the minimum qualifications or on the utility's previously posted safety standards
- Utility also must make its veto within either the threebusiness day notice period for surveys or the 15-day notice period for make-ready
- Existing attachers do not have the right to veto

There is no requirement that OTMR must be performed by union contractors where an existing attacher has entered into a collective bargaining agreement that requires the existing attacher to use union worker for pole attachment work.

 Contractors must meet key safety and reliability criteria recommended by the BDAC



OTMR Process Timeline Note

FCC estimates that new attachers using the OTMR timeline will save more than three months from application to completion compared to the existing rules

OTMR Process Summary

- Conduct Survey
- Notify Utility of Intent to Use OTMR
- Utility Review Application for Completeness
- Application Review
- Make-Ready
- Post Make-Ready

OTMR Process Conduct Survey

- Responsibility of new attacher to conduct a survey of the poles to determine the make-ready
- Results of survey included in permit application
- Required to permit representatives of the utility and existing attachers to be present for survey
- Provide 3 day notice of the date, time, and location of the survey and the name of the contractor performing the survey
- Parties are encouraged to work together to find a mutuallyagreeable time
- Attachers should publicly post point of contact

OTMR Process Notify Utility of Intent to Use OTMR

- Elect OTMR on pole attachment application
- Identify simple make-ready work to be performed on application
- Utility has 15 days to review application and accept or reject simple make-ready (30 days for larger order)
- 15 day period should provide ample time for utility to review project and accompany the new attachers contractor on a survey
- The utility also has the right to reasonably object to the OTMR determination
- Existing attachers do not have the right to reject OTMR determination

OTMR Process Notify Utility of Intent to Use OTMR

- Utility's objection is final and determinative
- Specific and in writing
- Include all relevant evidence and information supporting its decision, and provides a good faith explanation of how such evidence and information relate to a determination that the make-ready is not simple.

OTMR Process Notify Utility of Intent to Use OTMR

- If make-ready involves a mix of simple and complex work, or involves work above the communications space, the new attacher can divide the work onto separate applications.
- New attacher can complete the simple make-ready work under the OTMR process while it waits for complex work/work above the communications space to run its course through the longer existing process.

OTMR Process Review of Application for Completeness

- Current definition of a complete application is vague: "Information necessary under the utility's procedures"
- New, more transparent definition: An application is complete if it provides the utility with the information necessary under its procedures, as specified in a master service agreement or in publicly-available requirements at the time of submission of the application, to begin to survey the affected poles.

OTMR Process Review of Application for Completeness

- Utility has 10 business days to determine whether the application is complete and notify the attacher of decision.
- Utility must specify where and how the application is deficient.
- If there is no response by the utility within 10 business days, or if the utility rejects the application as incomplete but fails to specify any deficiencies in the application, then the application is deemed complete.
- Resubmitted application need only supplement the previous application by addressing the issues identified by the utility.

OTMR Process Review of Application for Completeness

- Utility has five business days after resubmission to review and identify which deficiencies were not addressed and how the resubmitted application did not sufficiently address the utility's reasons.
- The new attacher may follow this resubmission procedure as many times as it chooses, so long as in each case it makes a bona fide attempt to correct the issues identified by the utility.

OTMR Process Application Review

- 15 day review (30 days for larger requests)
- FCC justification for shortened timeline
 - New attacher is completing most of the pre-work, not utility
 - Utility has the right to specify the information it requires the new attacher to put in the application
 - Utility has the ability to reject the application (multiple times if necessary) before accepting it for review

- The new attacher may proceed with OTMR by giving 15 days prior written notice to the utility and all affected existing attachers.
- To avoid unnecessary delays, the new attacher may provide the required 15-day notice any time after the utility deems its pole attachment application <u>complete</u>.
- Thus, the 15-day notice period may run concurrently with the utility's evaluation of whether to grant the application.
- If, the new attacher cannot start make-ready work on the date specified in its 15-day notice (e.g., because its application has been denied or it is otherwise not ready to commence make-ready), the new attacher must provide 15 days' advance notice of its revised make-ready date.

- New attacher must provide representatives of the utility and existing attachers the following information in the 15-day advance notice:
- (1) Date and time of the make-ready work
- (2) Description of the make-ready work involved
- (3) Reasonable opportunity to be present when the makeready work is being performed
- (4) Name of the contractor chosen by the new attacher to perform the make-ready work

- The 15 days is only a notice period before the new attacher begins make-ready work; it is not an opportunity for existing attachers or the utility to complete make-ready work and bill the new attacher for that work.
- Existing attachers and the utility are welcome to complete make-ready work but will not be reimbursed.

- New attacher are required to notify an affected entity immediately if the new attachers contractor damages another company's equipment or causes an outage that is reasonably likely to interrupt service.
- Upon receiving notice of damaged equipment or a service outage, the utility or existing attacher can either
 - Complete any necessary remedial work and bill the new attacher for the reasonable costs related to fixing the damage
 - New attacher must fix the damage or outage at its expense immediately following notice from the utility or existing attacher.

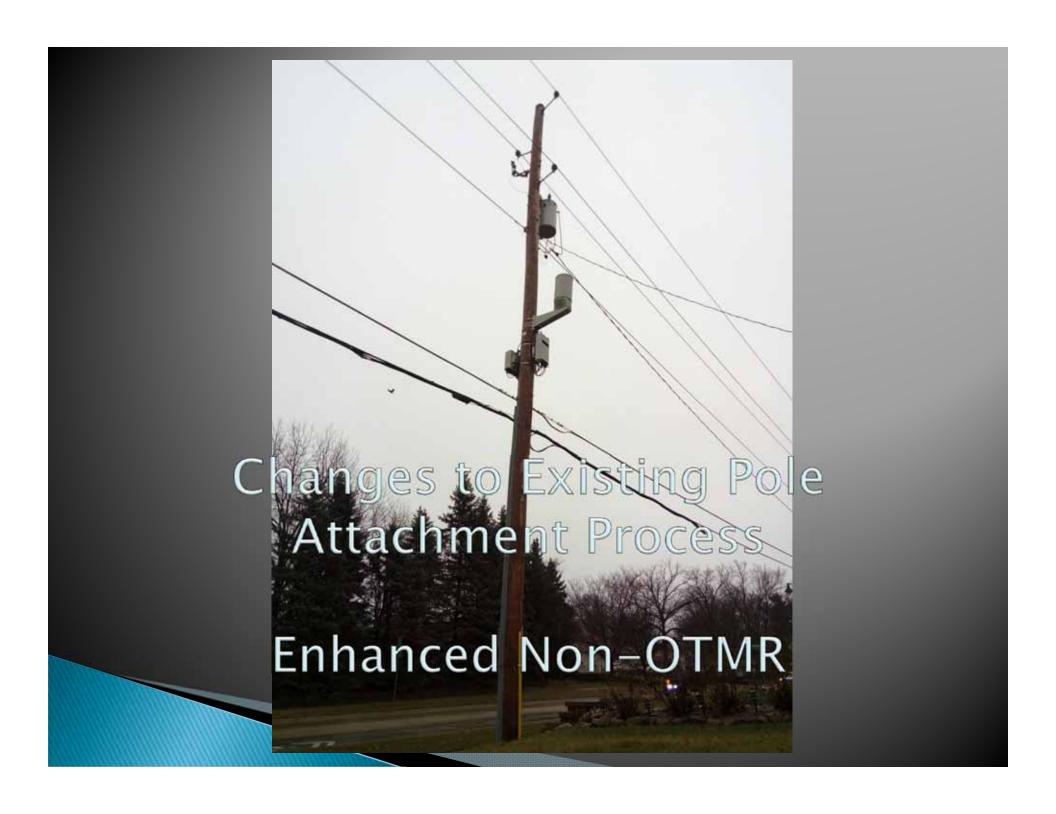
- The new attacher must complete the repair work before it can resume its make-ready work.
- Where the utility or the existing attacher elects to fix the damage or outage, the new attacher can only continue with make-ready work if it does not interfere with the repair work being conducted by the utility or existing attacher.

OTMR Process Post Make-Ready

- New attacher must provide notice within 15 days after the completing OTMR work.
- 90-day period for the inspection of make-ready work performed by the OTMR contractor.
- Post-make-ready inspection and remedy requirement gives the utility and existing attachers their own opportunity to ensure that work has been done correctly and defective make-ready work is repaired quickly.
- 14 days after any post make-ready inspection, the utility and the existing attachers notify the new attacher of any damage or any code violations caused.
- Provide adequate documentation of the damage or the violations.

OTMR Process Summary

- Conduct Survey
- Notify Utility of Intent to Use OTMR
- Utility Review Application for Completeness
- Application Review
- Make-Ready
- Post Make-Ready



Changes to Existing Pole Attachment Process

Enhanced Non-OTMR

- More efficient pole attachment timeline
 - Review of Application For Completeness
 - Review of Application and Survey
 - Make-Ready Stage
- Enhancing the Self-Help Remedy
 - Self-Help Remedy
 - Pole Replacements
- Contractor Selection for Self-Help
- Detailed Make-Ready Costs

- Revise definition of a complete pole attachment application
- Establish a timeline for determination whether an application is complete
 - Existing process does not define timeline

- Current definition of a complete application is vague: "require information necessary under the utility's procedures"
- New, more transparent definition: an application is complete if it provides the utility with the information necessary under its procedures, as specified in a master service agreement or in publicly-available requirements at the time of submission of the application, to begin to survey the affected poles.

- Utility has 10 business days to determine whether the application is complete and notify the attacher of that decision.
- Utility must specify where and how the application is deficient.
- If there is no response by the utility within 10 business days, or if the utility rejects the application as incomplete but fails to specify any deficiencies in the application, then the application is deemed complete.

- Resubmitted application need only supplement the previous application by addressing the issues identified by the utility.
- Utility has five business days after resubmission to review and identify which deficiencies were not addressed and how the resubmitted application did not sufficiently address the utility's reasons.
- The new attacher may follow this resubmission procedure as many times as it chooses, so long as in each case it makes a bona fide attempt to correct the issues identified by the utility.

Review of Application and Survey

- Keep existing process 45 day review
- Require utility to permit potentially affected attachers to be present for any pole surveys
 - Provide date, time, location and name of contractor performing the survey
 - Provide 3 day notice of survey

Review of Application and Survey

- Utility may elect to use previously performed survey as part of OTMR process prevent duplication of surveys
- Utility must notify affected attachers of intent to use the new attachers survey
- If existing OTMR survey is used the survey period is shortened from 45 days to 15 days

Make-ready Stage (Make-Ready Deadlines)

- 30 day deadline for all communications make-ready work (75 days for large requests)
 - Changed from 60 to 30 days (105 to 75 large)
- 90 day deadline for work above the communications space (135 large requests)
 - Timeline did not change

Make-ready Stage (Make-Ready Deadlines)

- Existing attachers can get an extension up to 60 days (105 days for large orders) from the date of the utility make-ready notice.
 - Complex make-ready requiring service interruptions or safety reasons
 - Must immediately notify, in writing, a detailed explanation and a new completion date
 - Must act in good faith and cannot be routine
 - New attacher can file complaint with Commission

Make-ready Stage (Make-Ready Deadlines)

- Eliminate 15 day extension to utility to complete work in communication space
- Retain 15 day extension for utility to complete work above communication space

Make-ready Stage (Notice and New Attacher Role)

- When a utility provides the required make-ready notice to existing attachers, it must provide the new attacher with a copy of the notice, plus the contact information of existing attachers to which the notices were sent.
- Then the new attacher (rather than the utility) must take responsibility for encouraging and coordinating with existing attachers to ensure completion of make-ready work on a timely basis.

Make-ready Stage (Notice and New Attacher Role)

- This additional notice requirement to empower the new attacher to promote the timely completion of make-ready.
- The new attacher is in the better position to manage the work of existing attachers, to impose reasonable deadlines, and to negotiate compensation for the work performed.

Self-Help Remedy

- The make-ready clock runs simultaneously and not sequentially for all existing attachers, and the utility must immediately notify at the same time all entities with existing attachments that are affected by the proposed make-ready work
- Coordinating work among existing attachers may be difficult, particularly for poles with many attachments, and existing attachers that are not the first to move may in some circumstances receive limited or even no time for work during the make-ready stage.

Self-Help Remedy

- Despite these challenges, we expect utilities, new attachers, and existing attachers to work cooperatively to ensure that pole attachment deadlines are met.
- If others do not meet their deadlines, new attachers then may invoke the self-help remedy.

Self-Help Remedy

Self-help remedy for new attacher is available for surveys and make-ready work for all attachments anywhere on the pole in the event that the utility or the existing attachers fail to meet the required deadlines.

<u>Self-Help Remedy - Surveys</u>

- If a utility fails to complete a survey then a new attacher may conduct the survey in place of the utility and hire a contractor to complete a survey.
- New attacher shall permit the utility and existing attachers to be present for any field inspection conducted as part of the new attachers survey.

<u>Self-Help Remedy - Surveys</u>

- Need to provide 3 business days notice of any field inspection as part of any survey it conducts
- Notice shall include the date and time of the survey, a description of the work involved, and the name of the contractor being used by the new attacher.

<u>Self-Help Remedy - Make-Ready</u>

- If make-ready is not complete by the required date the new attacher may conduct the make-ready in place of the utility and existing attachers, and hire a contractor to complete the make-ready.
- New attacher shall permit the affected utility and existing attachers to be present for any make-ready.

Self-Help Remedy - Make-Ready

- Need to provide 5 days notice of the impending make-ready.
- The notice shall include the date and time of the make-ready, a description of the work involved, and the name of the contractor being used.

<u>Self-Help Remedy - Make-Ready Damages</u> (Same as OTMR)

- New attacher are required to notify an affected entity immediately if the new attachers contractor damages another company's equipment or causes an outage that is reasonably likely to interrupt service.
- Upon receiving notice of damaged equipment or a service outage, the utility or existing attacher can either
 - Complete any necessary remedial work and bill the new attacher for the reasonable costs related to fixing the damage
 - Require the new attacher to fix the damage or outage at its expense immediately following notice from the utility or existing attacher.

<u>Self-Help Remedy - Make-Ready Post-Inspection</u> (Same as OTMR)

- New attacher must provide notice within 15 days after the completing OTMR work.
- 90-day period for the inspection of make-ready work performed by the OTMR contractor.
- Post-make-ready inspection and remedy requirement gives the utility and existing attachers their own opportunity to ensure that work has been done correctly and defective make-ready work is repaired quickly.

<u>Self-Help Remedy - Make-Ready Post-Inspection</u> (Same as OTMR)

- 14 days after any post make-ready inspection, the utility and the existing attachers notify the new attacher of any damage or any code violations caused to their equipment by the new attachers make-ready work.
- Violations could include safety, electrical, engineering, construction
- Must provide adequate documentation of damages and violations.

<u>Self-Help Remedy - Pole Replacements</u>

- Self-help not available for pole replacements
- Pole replacements can be complicated to execute and are more likely to cause service outages or facilities damage

- Different approaches to contractor selection for simple and non-simple make-ready.
- Since similar, the same approach to contractor selection for simple self-help in the communications space as for OTMR.

Contractors for Simple Self-Help Work

- Recommended but not mandatory for the utility to make a list available qualified contractors authorized to perform survey and simple make-ready work on their facilities
- New attachers may choose their own qualified contractors but must certify to the utility that the contractor meets the requirements

Contractors for Simple Self-Help Work

Contractors must meet key safety and reliability criteria recommended by the BDAC

- (1) Follow published safety and operational guidelines of the utility, if available, but if unavailable, follow the National Electrical Safety Code (NESC) guidelines
- (2) Read and follow licensed-engineered pole designs for make-ready work, if required by the utility

Contractors for Simple Self-Help Work

- (3) Follow all local, state, and federal laws and regulations including, but not limited to, the rules regarding Qualified and Competent Persons under the requirements of the Occupational Safety and Health Administration (OSHA) rules
- (4) Meet or exceed any uniformly applied and reasonable safety and reliability thresholds set and made available by the utility, e.g., the contractor cannot have a record of significant safety violations or worksite accidents
- (5) Be adequately insured or be able to establish an adequate performance bond for the make-ready work it will perform, including work it will perform on facilities owned by existing attachers

Contractors for Simple Self-Help Work

- Utility is allowed to veto any contractor
- Veto must be based on reasonable safety or reliability concerns related to the contractor's ability to meet one or more of the minimum qualifications or on the utility's previously posted safety standards
- Utility also must make its veto within either the threebusiness day notice period for surveys or the 15-day notice period for make-ready
- Existing attachers do not have the right to veto

Contractors for Complex Self-Help Make-Ready and Work above Communications Space

- Utility must make available and keep up-to-date a sufficient list of contractors it authorizes to perform surveys and makeready considered complex and above communications space
- The new attacher must use a contractor from list
- Attachers may request the addition of a contractor to the list that meets the minimum qualifications and the utility may not unreasonably withhold its consent.

Changes to Existing Pole Attachment Process -Detailed Make-Ready Costs-

- Additional requirements to improve the transparency and usefulness of make-ready estimates and post-make-ready invoices.
- Require estimates and invoices to be detailed and include documentation that is sufficient to determine the basis for all charges.
- Improved transparency of make-ready costs with better enable providers to plan more aggressive broadband buildouts.

Changes to Existing Pole Attachment Process -Detailed Make-Ready Costs-

Make-Ready Estimate

- Utility required to provide a detailed, itemized estimate of all charges, on a pole-by-pole basis when requested.
- Utility may present charges on a per-job basis rather than pole-by-pole estimate for fixed cost charges.
 - Materials, labor and other costs such as traffic control, truck rolls, etc.
 - Pass through costs to the new attacher from the utility's use of a third-party contractor.
- 14 days to provide estimate response

Changes to Existing Pole Attachment Process -Detailed Make-Ready Costs-

Final Invoice

If final cost of the work differs from the estimate, the Utility shall provide new attacher an updated detailed, itemized final invoice of actual charges if requested.

Changes to Existing Pole Attachment Process

Enhanced Non-OTMR

- More efficient pole attachment timeline
 - Review of Application For Completeness
 - Review of Application and Survey
 - Make-Ready Stage
- Enhancing the Self-Help Remedy
 - Self-Help Remedy
 - Pole Replacements
- Contractor Selection for Self-Help
- Detailed Make-Ready Costs



Overlashing

To physically tie additional wires or cables to those that are already attached to a utility pole, accommodating any additional strands of fiber or coaxial cable on existing pole attachments.

- The ability to overlash can be the difference between being able to serve a customer's broadband needs within weeks versus six or more months when delivery of service is dependent on a pole attachment.
- Pre-notification without requiring pre-approval.
- 15 day advance notice required.
- Utility may not charge a fee to the party seeking to overlash for the utility's review of the proposed overlash, as such fees will increase the costs of deployment.

- Pole owners, may, but are not required to, establish reasonable pre-notification requirements, including that attachers provide 15 days' (or fewer) advance notice of overlashing work.
- Pole owners may assess whether a planned overlash would create any capacity, safety, reliability or engineering issue, and, if so, provide detailed documentation within the 15 day advance notice period.
- But pole owners may not use advance notice requirements as a guise to require attachers to undertake engineering studies.

Prior Approval

- A utility shall not require prior approval for:
 - An existing attacher that overlashes its existing wires on a pole.
 - For third party overlashing of an existing attachment that is conducted with the permission of an existing attacher.

Preexisting Violations

- A utility may not prevent an attacher from overlashing because another existing attacher has not fixed a preexisting violation.
- A utility may not require an existing attacher that overlashes its existing wires on a pole to fix preexisting violations caused by another existing attacher.

Advance Notice

- Utility may require no more than 15 days' notice of overlash.
- If a utility requires advance notice for overlashing, then the utility must provide existing attachers with advance written notice.
- If after receiving advance notice, the utility determines that an overlash would create a capacity, safety, reliability, or engineering issue, it must provide specific documentation of the issue to the party seeking to overlash within the 15 day advance notice period.

Advance Notice

- Party seeking to overlash must address any identified issues before continuing with the overlash either by modifying its proposal or by explaining why, in the party's view, a modification is unnecessary.
- A utility may not charge a fee to the party seeking to overlash for the utility's review of the proposed overlash.

Overlasher's Responsibility

- Party that engages in overlashing is responsible for its own equipment and shall ensure that it complies with reasonable safety, reliability, and engineering practices.
- If damage to a pole or other existing attachment results from overlashing or overlashing work causes safety or engineering standard violations, then the overlashing party is responsible at its expense for any necessary repairs.

Post-Overlashing Review

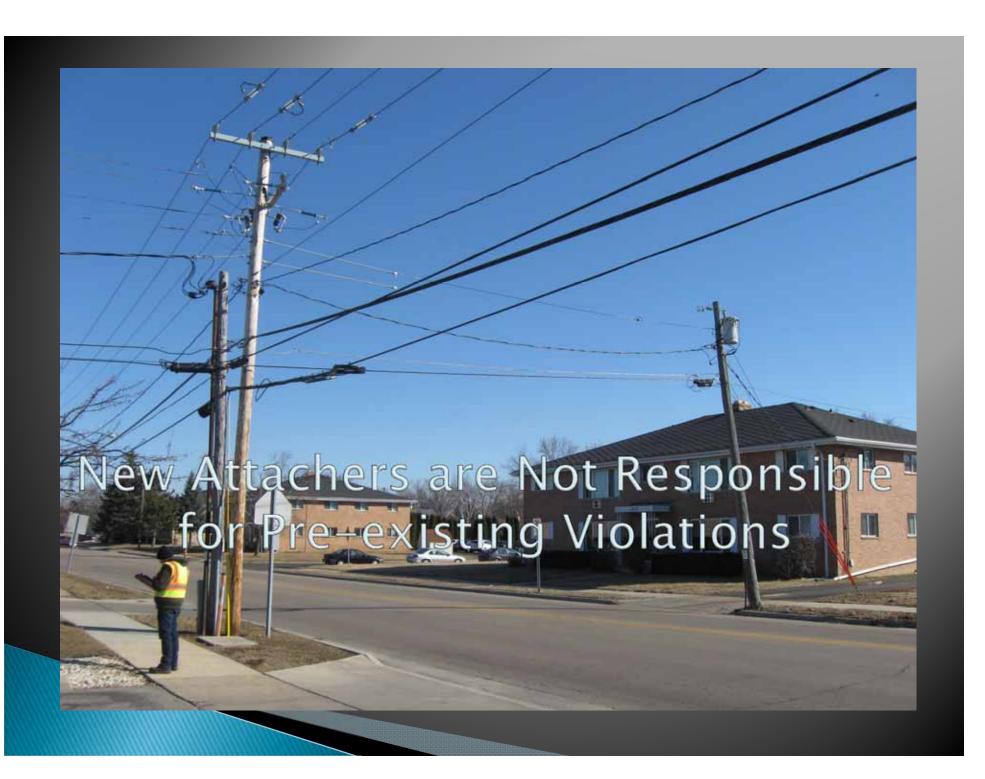
- Overlashing party shall notify the affected utility within 15 days of completion of the overlash on a particular pole.
- Utility has at 90 days from receipt in which to inspect the overlash.
- Utility has 14 days after completion of its inspection to notify the overlashing party of any damage or code violations to its equipment caused by the overlash.

Post-Overlashing Review

- If the utility discovers damage or code violations caused by the overlash on equipment belonging to the utility, then the utility shall inform the overlashing party and provide adequate documentation of the damage or code violations.
- The utility may either complete any necessary remedial work and bill the overlashing party for the reasonable costs related to fixing the damage or code violations or require the overlashing party to fix the damage or code violations at its expense within 14 days following notice from the utility.

Changes to Treatment of Overlashing

- Serve a customer's broadband needs within weeks versus six or more months when dependent on a new attachment.
- Pre-notification without requiring pre-approval.
- 15 day advance notice required.
- Utility may not charge a fee to the party seeking to overlash for the utility's review of the proposed overlash, as such fees will increase the costs of deployment.



New Attachers are Not Responsible for Pre-existing Violations

- New attachers are not responsible for the costs associated with bringing poles or third-party equipment into compliance with current safety and pole owner construction standards, to the extent such poles or third-party equipment were out of compliance prior to the new attachment.
- New attachers are responsible only for actual costs incurred to accommodate their attachments.
- This likely will mitigate the risk of new attachers shouldering costs of infrastructure upgrades or remediation of existing safety violations they did not cause.
- Issue that has given rise to numerous commercial disputes and delays in service deployment over the years.

New Attachers are Not Responsible for Pre-existing Violations

- Utilities may not deny new attachers access to the pole solely based on safety concerns arising from a pre-existing violation.
- Simply denying new attachers access prevents broadband deployment and does nothing to correct the safety issue.
- Utility cannot delay completion of make-ready while the utility attempts to identify or collect from the party who should pay for correction of the preexisting violation.

Compare Process and Timelines Existing Pole Attachment Process One-Touch Make-Ready (OTMR) Pole Attachment Process

Phase	Prior Rules	OTMR-Based Regime	Enhanced Non-OTMR Regime
Review of Application for Completeness	Vague definition of complete application can lead to delays. No timeline for utility to determine whether application is complete. 47 CFR § 1.1411(c)	Revised definition application makes must be included utility has 10 bus to determine whe application is commust specify any has limited time tresubmitted application is \$\frac{5}{2} \text{1.1411(c)(1), (1)}\$	in application. A iness days ther an application application applete; the utility deficiencies and o review cations. <i>Appx. A</i>

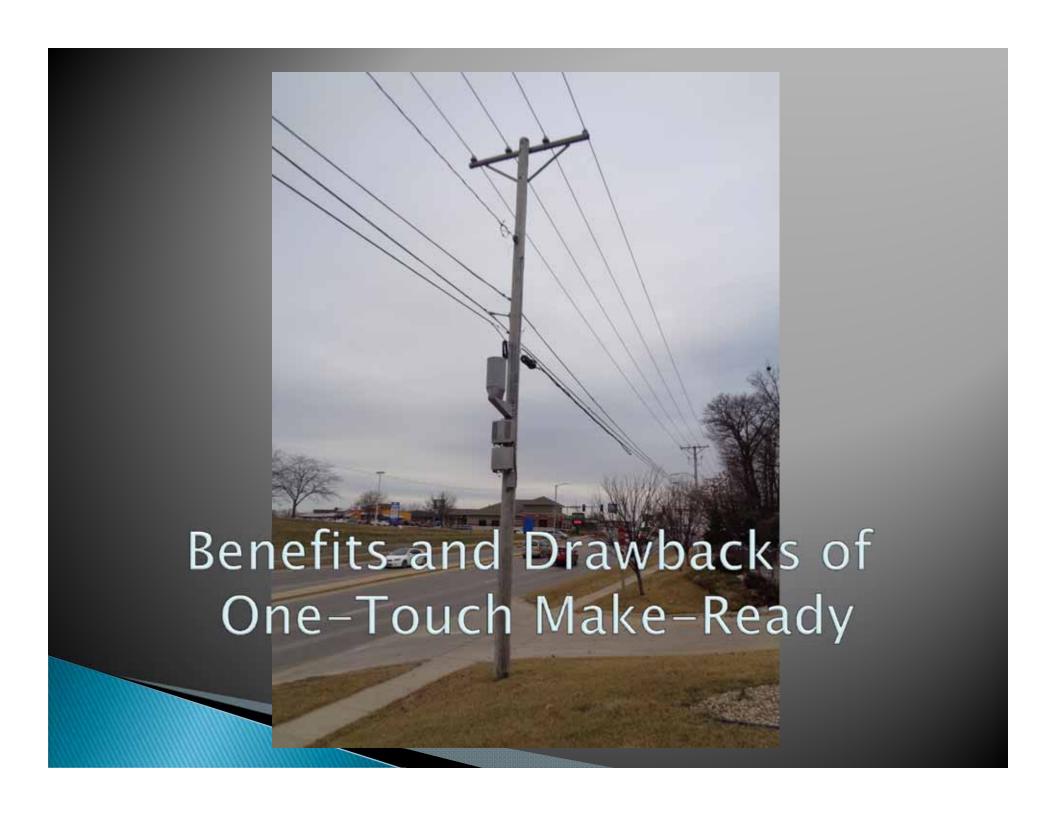
Phase	Prior Rules	OTMR-Based Regime	Enhanced Non-OTMR Regime
Review of Whether to Grant Complete Application; Survey	The utility has 45 days to decide whether to grant a complete application and to complete any surveys. The utility has an additional 15 days for large orders. 47 CFR § 1.1411(c)	The utility has 15 days to decide whether to grant a complete application. The new attacher conducts the survey and determines its timing. Appx. A § 1.1411(j)(2), (j)(3)	Largely same as prior rules, except that the utility must take certain steps to facilitate survey participation by new and existing attachers. Appx. A § 1.1411(c)(3)

Phase	Prior Rules	OTMR-Based Regime	Enhanced Non-OTMR Regime
Estimate	The utility must provide an estimate of the make-ready charges within 14 days of receiving the survey results. 47 CFR § 1.1411(d)	N/A – no estimate stage	Same as prior rules, except the estimate must detail basis for charges. Appx. A § 1.1411(d)

Phase	Prior Rules	OTMR-Based Regime	Enhanced Non-OTMR Regime
Attacher Acceptance	The attacher has 14 days or until withdrawal of the estimate by the utility, whichever is later, to approve the estimate and provide payment. 47 CFR § 1.1411(d)(i)-(ii)	N/A – no estimate stage	Same as prior rules. Appx. A § 1.1411(d)(2)

Phase	Prior Rules	OTMR-Based Regime	Enhanced Non-OTMR Regime
Make- Ready	The existing attachers must prepare the pole within 60 days of receiving notice from the utility in the communications space (105 days for larger orders) or 90 days in the above the communications space (135 days for larger orders). A utility may take 15 additional days after the make-ready period to complete make-ready itself.	The new attacher performs all work in as little as one trip. The new attacher must provide 15 days' notice to existing attachers before commencing work, and this notice period may run concurrently with the utility's review of whether to grant the application. The new attacher must notify existing attachers within 15 days after completion of work on a pole so that existing attachers can inspect the work.	The existing attachers prepare the pole within 30 days in the communications space (75 days for larger orders) or 90 days above the communications space (135 days for larger orders). A utility may take 15 additional days after the make-ready period to complete make-ready itself for work outside the communications space.

Phase	Prior Rules	OTMR-Based Regime	Enhanced Non-OTMR Regime
Self-Help Remedy	New attachers in the communications space may perform work themselves when the deadlines are not met. 47 CFR § 1.1411(i)	N/A	New attachers in any part of the pole may perform work themselves when the deadlines are not met. We take steps to strengthen the self-help remedy. Appx. A § 1.1411(i)(2)



One-touch Make-ready Drawbacks

- Many cities have one incumbent provider. Increased competition will force incumbent provider to upgrade their network and offer more competitive pricing.
- Each provider has its own internal process for make-ready work. Established business practices are often not conducive to proposed timelines.

One-touch Make-ready Drawbacks

- Many providers have their own trusted contractors that they train to handle their wires.
- The new provider or its designated contractor may not be aware of all of the safety and reliability nuances involved with moving certain wires, cables and fibers, possibly leading to injury of workers and expensive damage to equipment that would leave residents without electric, telecommunications, Internet, and other services.

One-touch Make-ready Drawbacks

- Because new attachers are no longer responsible for preexisting violations, it will be more difficult and costly to bring poles up to code and many cases becomes the pole owners financial responsibility.
- Pole owners have less control and oversight of work and attachments on poles, but are still liable for safety issues on their assets.

One-touch Make-ready Drawbacks

- OTMR has the potential to change roles within businesses and the joint use community at-large.
- Education, training and updated software and the expense that comes with it, will be required to account for changes to the established process and timelines.
- Joint use departments have tight schedules as it is, especially as small cell, DAS, and fiber are being deployed rapidly. The number of joint use requests is only expected to increase.

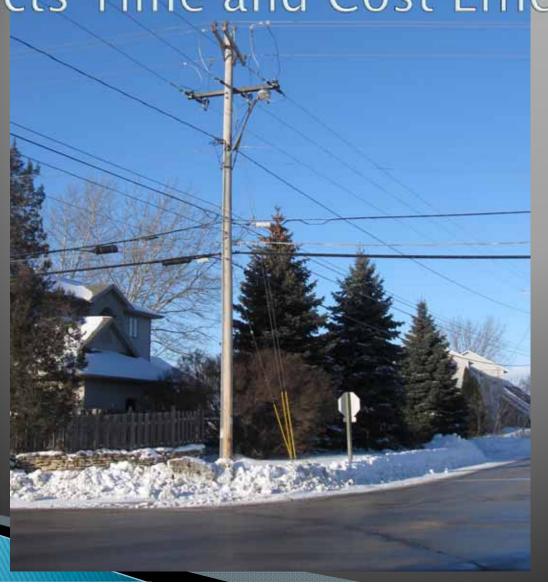
- Accelerate broadband deployment and 5G technology providing faster speeds for consumers on stationary and mobile devices.
- Pole access is essential to the race for 5G because mobile and fixed wireless providers are increasingly deploying small cell antennas on poles and these wireless services depend on wireline backhaul.
- Estimated 100,000 to 150,000 small cells were to be constructed by the end of 2018, and these numbers are projected to reach 455,000 by 2020 and 800,000 by 2026.
- OTMR alone could result in approximately 8.3 million incremental premises passed with fiber and about \$12.6 billion in incremental fiber capital expenditures.

- OTMR decreases the time and capital cost of construction, which lowers barriers to entry and may encourage new investment in a community, which can lead to increased competition and higher speeds.
- As competition increases, the cost of service should decrease and the services from incumbents should improve, benefiting companies and residents in the area.

- OTMR allows construction to be completed faster and more safely than having multiple contractors at each pole.
- Benefits municipalities and their residents by decreasing inconveniences of make-ready work. Includes noise, traffic disruptions, closures, disruptions of streets and sidewalks and service outages.

- Alleviates burden of utilities overseeing the make-ready process.
- Job security and job creation.
- Improved timelines, reduced costs, and rules provided by the FCC, the policy offers a defined process for the joint use community to adhere by.





Work Together To Complete Projects Time and Cost Efficiently

- Explain the process and timelines for the one-touch makeready process and show how all joint facility parties are involved.
- Understanding roles and timelines, if we work together we can complete projects safely, and more time and cost efficiently using the one-touch make-ready process.
- Cooperation among all parties is essential to making the pole attachment process proceed smoothly and safely.
- No matter the attachment process, all parties need to work cooperatively to meet deadlines, perform work safely, and address any problems expeditiously.

References

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 - WC Docket No. 17-84
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 - Third Report and Order and Declaring Ruling: August 2, 2018
- Internet
 - FCC Law Blog FCC Seeks "Large Step" Toward Advancing Broadband Infrastructure Goals With Draft One-Touch Make-Ready Order
 - Alden Are you ready for one touch make ready?
 - Next Century Cities
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 - Wikipedia
- Personal experience

Summary

- FCC Authority To Regulate Utility Pole Attachments
- Effective Date of One-touch Make-ready Process
- Work Together To Complete Projects Time & Cost Efficiently
- Joint Use Pole Attachments and Make-Ready
- Existing Pole Attachment Process
- One-touch Make-Ready Pole Attachment Process
- Changes to Existing Pole Attachment Process
- Changes to Treatment of Overlashing
- New Attachers are Not Responsible for Pre-existing Violations
- Compare Process and Timelines Existing vs. OTMR Pole Attachment Process
- Benefits and Drawbacks of One-Touch Make-Ready

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