

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Accelerating Wireline Broadband Deployment	)	WC Docket No. 17-84
by Removing Barriers to Infrastructure	)	
Improvement	)	
	)	

**REPLY COMMENTS OF CROWN CASTLE INTERNATIONAL CORP.**

Crown Castle International Corp. and its subsidiaries (“Crown Castle”) respectfully submit these comments in response to those filed by numerous stakeholders pursuant to the Federal Communications Commission’s (“FCC” or “Commission”) Further Notice of Proposed Rulemaking<sup>1</sup> regarding utility treatment of overloading. As Crown Castle contends herein, the Commission’s codification of its overloading precedent is necessary for the continued acceleration of broadband deployment. Existing precedent equitably balances the need for expedited broadband deployment and predictable delivery timelines with the safety and reliability needs associated with pole owners’ infrastructure and the important services provided by pole owners, third party attachers, and overloaders. The Commission should also clarify that its existing overloading precedent supports and authorizes the deployment of strand-mounted wireless antenna and equipment so long as the proposed overload complies with generally accepted engineering practices and principles. Further, the Commission should clarify that standard pole attachment application processes and timelines are not applicable to overloading projects, and that treatment of overloading notices as standard attachment applications is

---

<sup>1</sup> *In the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Report and Order, Declaratory Ruling, and Further Notice of Proposed Rulemaking (rel. Nov. 29, 2017) (“FNPRM”).

impermissible under Commission precedent.

Overlapping has served a critical role over the years, providing predictable, abbreviated timelines for the deployment of new and expanded service offerings. Key to the success of broadband deployment through overlapping in FCC jurisdictions has been “notice and attach” precedent and adherence by overlappers to generally accepted engineering principles. With more than 60,000 route miles of fiber in the United States, Crown Castle is a leading provider of fiber optic telecommunications services. Overlapping has served as a vital tool in Crown Castle’s deployment of wireline and wireless broadband solutions.

**I. The Commission’s Codification of Overlapping Precedent is Necessary for Accelerated Broadband Deployment.**

Notice and attach overlapping procedures are key in speeding new and expanded broadband services to market. As explored previously in this docket and others, the Commission is considering the abbreviation of its attachment timelines and other solutions to expedite wireline and wireless broadband deployment. In spite of the Commission’s efforts over the last decade to expedite the deployment of important telecommunications services in a safe and reliable manner, many pole owners are not complying with pole attachment timeframes. Given that it has been nearly seven years since the implementation of the present pole attachment timelines, and that many pole owners still do not characteristically evaluate and approve attachment applications within applicable timelines, dependence on precedent applicable to overlapping becomes strikingly important.

Interestingly, in the context of this docket, in which efforts to accelerate broadband deployment are explored, numerous pole owners have called for treatment of overlapping notices as standard pole attachment applications, and thus subject to extensive application timelines.<sup>2</sup>

---

<sup>2</sup> See, e.g., *In the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers*

Treating overlashing notices in the same manner as standard attachment applications would actually decelerate broadband deployment efforts and runs the risk, much as with the approval of standard attachment applications, of taking significantly longer than the timeframes authorized under the codified survey, estimate, and construction periods. Codification of current overlashing precedent is thus necessary to ensure that deployment efforts do not take a step backward as an increasing number of pole owners seek to impose standard application procedures for overlashing.

All overlashers must comply with generally accepted engineering principles and practices. These “generally accepted engineering principles and practices” encompass the specific spacing, clearance, loading, and other engineering requirements applicable to all attachments. Numerous pole owner comments seek to expand, rather than contract, the time periods for review of overlashing notices.<sup>3</sup> This position works against the stated goals of this proceeding and will not secure further safety gains. Additional time to review overlashing notices before completion of the overlash will not modify the obligations of overlashers in relation to the infrastructure on which they deploy. The obligation for an overlasher to comply with all applicable engineering requirements remains whether the period of time between notice and overlashing is zero days or 45 days. Thus, no appreciable safety benefits will be secured by expansion of the notice period.

Some pole owners may cite the results of the recently issued 2018 Broadband

---

*to Infrastructure Investment*, WC Docket No. 17-84, Comments of the Utility Coalition on Overlashing (Jan. 17, 2018) at 25 (“Utility Coalition on Overlashing Comments”); Initial Comments of the Electric Utilities on Overlashing (Jan. 17, 2018) at 25 (“Electric Utilities’ Comments”); Joint Comments of CenterPoint Energy Houston Electric, LLC and Dominion Energy (Jan. 17, 2018) at 4 (“CenterPoint/Dominion Comments”).

<sup>3</sup> *Id.*; see also *In the Matter of Accelerating Wireline Broadband Deployment by Removing Barriers to Infrastructure Investment*, WC Docket No. 17-84, Comments of the Edison Electric Institute (Jan. 17, 2018) at 8, *et seq.* (“EEI Comments”).

Deployment Report in support of contentions that broadband deployment is proceeding with the necessary speed and that no further policies are needed to promote deployment. In the spirit of the Commission's emphasis on accelerating broadband deployment in this docket, allegorically speaking, taking the foot off of the broadband deployment gas pedal simply because things are currently proceeding well may ultimately result in an inability for the country to meet its communications goals. Moreover, rolling back the ability to utilize the important tool of overloading to meet deployment needs, whether by applying standard pole attachment application timelines to overloading notices or granting other lengthy review timelines for overloading projects, is tantamount to pumping the broadband deployment brakes. Certainly with this nation's ever expanding dependence on broadband for connectivity, including messaging, data, streaming, gaming, Internet of Things connectivity, and soon such developments as autonomous vehicles, any regulatory action that would slow or halt progressing in meeting the country's significant communications needs should be avoided. Accordingly, it is critical for the Commission to codify its overloading precedent.

## **II. Current Precedent Encompasses Overloading Equipment, Not Just Cables**

The Commission should clarify that its precedent on overloading encompasses overloading of strand-mounted wireless solutions, including antennas and equipment, not strictly cables. Although a number of pole owners attempt to persuade the Commission that its overloading precedent only includes overloading of cable,<sup>4</sup> in practice, equipment such as fiber splice cases, fiber snow shoes, cable TV amplifiers, cable TV taps, copper splitters, wi-fi enclosures, and fiber to the home multi-port cases have been overlashed to strand for many years (and in some cases decades). The concerns presently voiced by pole owners regarding the

---

<sup>4</sup> See, e.g. Utility Coalition on Overloading Comments at 5-6; CenterPoint/Dominion Comments at 8-11; EEI Comments at 16.

overlapping of equipment appear to have arisen only recently, as the deployment of strand-mounted wireless solutions has become possible. Strand-mounted wireless solutions were developed in part as a response to pole owner concerns about the attachment of wireless antennas and equipment on poles. Although strand-mounted wireless solutions free up useable space on pole infrastructure, thereby obviating one pole owner concern about wireless attachments to poles, pole owners have advanced new concerns regarding the deployment of strand-mounted wireless solutions, namely concerns regarding loading impacts and stress on pole infrastructure resulting from such deployments.<sup>5</sup> Crown Castle contends that, as with any other overlapping project, adherence to generally accepted engineering practices and principles when deploying strand-mounted wireless solutions is the appropriate vehicle for evaluation of these projects. Differential treatment of overlapping projects seeking to deploy strand mounted solutions on the basis that such solutions are “new” or “different” is inappropriate and represents an impermissible barrier to deployment.

Safety is and has always been of paramount importance to Crown Castle. A number of pole owners’ comments express concerns with the safety and reliability implications of strand-mounted wireless antennas and equipment. The expressed concerns relate to the treatment of the same as overlapping and depending on a photograph of a purported strand-mounted wireless solution for support.<sup>6</sup> Unfortunately, the commenters who utilized this photograph provided no temporal or geographic context surrounding the photograph, nor have they provided any detail regarding the circumstances of their procurement of the photograph. Crown Castle provides the photograph here for the Commission’s consideration, together with proper context and detail

---

<sup>5</sup> *Id.*

<sup>6</sup> See Utility Coalition on Overlapping Comments at 6-7 and EEI Comments at 16 (referencing Exhibit 2, Photo 3) (implying that strand-mounted wireless solutions pictured therein were deployed pursuant to overlapping procedures without previous discussion with pole owners).

regarding the circumstances that gave rise to the photo.



The photograph above was taken at one of several demonstrations of evolving wireless solutions sponsored by Crown Castle on May 30, 2017, June 20, 2017, September 8, 2017, and November 2, 2017. Crown Castle invited numerous pole owners to its contractor's storage yard in Glen Burnie, Maryland to inspect the design and equipment in development, ask questions about the solution, and voice any concerns related to deployment of the same by Crown Castle. The purpose was to inform Crown Castle's design of any final product installation. The equipment in the picture was installed in compliance with National Electrical Safety Code ("NESC") regulations and mounted at eye level in order for attendees to be able to inspect it closely. Functionally, the event served as an opportunity for stakeholders to familiarize themselves with a strand-mounted wireless solution under development and work with Crown Castle through any concerns regarding the same. Representatives from Verizon, Baltimore Gas & Electric, PEPCO, Dominion Virginia Power, FirstEnergy, and DelMarVa Power attended

these demonstrations.

It is disappointing that other commenters have used the collaborative opportunity presented by Crown Castle to, without appropriate context, attempt to advance their own positions in this docket. This undermines the spirit of collaboration Crown Castle seeks to create in its discussions with pole owners, and downplays the safety considerations that motivated Crown Castle to invite stakeholders with varying perspectives to weigh in on the wireless solution demonstrated that day. Indeed, Crown's most significant reasons for hosting the event were the opportunities to discuss safety implications, foster conversation on the same, and allay any misgivings about the nature of the solution under consideration.

To the extent that certain pole owners and others may claim that strand-mounted wireless equipment is excluded from overloading precedent because of its size, it is important to note that other similarly-sized equipment, such as cable amplifiers and splice cases, should also be precluded from being overlashed in the future on the same basis. This is not a desirable outcome, as it would defeat continued overloading of equipment of the same size and dimensions as that which has been overlashed for years. To the extent pole owners wish to limit the ability to overlash equipment over certain dimensions, they must do so on a nondiscriminatory basis and in accordance with sound engineering principles.

Further, to the extent pole owners seek to exclude treatment of strand-mounted wireless solutions as overloading on the basis that they emit radio frequency ("RF"), there is no basis for such an exclusion so as long as the deployment complies with all RF safety limits established by the Commission in conjunction with other national health and safety agencies. Blanket assertions that proposed strand-mounted wireless solutions may not be treated as overloading because RF is involved are unfounded, and attempts to categorically treat them differently on the

basis of RF emissions therefrom represent impermissible barriers to broadband deployment. This concern also rings hollow when RF-emitting wi-fi equipment has routinely been overlashed for years without similar pushback.

### **III. Notice and Attach Precedent Does Not (and Should Not) Contemplate Extended Review Periods**

A number of pole owners contend that, to the extent the Commission codifies its notice and attach overlashing precedent, it must allow pole owners an extended period of time for review of overlashing projects.<sup>7</sup> Many pole owners, in the same vein, also ask for review of overlashing projects under standard pole attachment timelines.<sup>8</sup> Crown Castle submits that meaningful review of any overlashing notice is not contingent on an extended review period for inspection of the same. For instance, prior to submitting overlashing notices to pole owners, Crown Castle thoroughly analyzes the infrastructure the overlash may impact in order to elucidate any safety or engineering concerns. Crown Castle performs pole loading analyses and sag and tension analyses to ensure that the overlashing will not result in unsafe conditions and is compliant with NESC and any specific pole owner's construction standards (to the extent they are more stringent than NESC guidelines). In the event that its modeling demonstrates that the overlashing project would not be safe, Crown Castle proposes make-ready, including pole replacement proposals, etc., in order to ensure the safety and reliability of the infrastructure implicated by the overlashing project. To the extent that a pole owner expresses reasonable concerns about the impact of an overlashing project on certain poles, lines, or other infrastructure implicated by an overlashing notice, Crown Castle consistently offers to share its safety studies

---

<sup>7</sup> See Utility Coalition on Overlashing Comments at 8, 10, 15, 21-24; Electric Utilities' Comments at 5-21, 23; EEI Comments at 3-16; CenterPoint/Dominion Comments at 3-9.

<sup>8</sup> See Utility Coalition on Overlashing Comments at 25; Electric Utilities' Comments at 25; CenterPoint/Dominion Comments at 4.



and modeling with the pole owner in order to expedite the overlashing process. Assuming that an overlasher is willing to share its studies/results with the pole owner and those studies are generally accepted and utilized by pole owners when making safety determinations, the need for additional modeling that would extend notice periods is unfounded.

Further, many pole owners do not currently require pole loading for each pole for initial attachment applications. Thus, overlashers should not be held to a higher standard and should instead follow generally accepted engineering principles and practices, conducting and providing loading analysis for individual poles only when conditions warrant. Blanket pole owner policies/standards requiring loading studies for each and every pole implicated in an overlashing project, without consideration of the project's details, are inappropriate. Although Crown Castle understands the need for an overlasher to demonstrate, for instance, that its project would not cause an overloaded condition on a specific pole, demonstration (by means of the same studies) that the project will not cause an overloaded condition on other poles in the same overlap run may be unnecessary based on the particulars of the project and the application of generally accepted engineering principles. Policies that require overlashers to submit loading studies for every pole present in an overlashing project, without a specific and generally accepted engineering rationale for the policies, are impermissible, and Crown Castle requests that the Commission clarify this point.

In their initial comments, many pole owners ask the Commission to clarify that notice and attach policies contemplate advance notice of overlashing, rather than concurrent notice and deployment.<sup>9</sup> Crown Castle submits that the advance notice periods sought by a number of pole owners are inappropriate in light of a number of factors. Third party attachers and overlashers

---

<sup>9</sup> See, e.g., Utility Coalition on Overlashing Comments at 23; EEI Comments at 3, 5; Electric Utilities' Comments at 23-24; CenterPoint/Dominion Comments at 6.

have an independent duty to ensure that their attachments are compliant with the NESC and generally accepted engineering practices and therefore should be performing their own evaluations as part of their engineering analysis. This information can be shared with the pole owner as part of the notice process. To the extent that such evaluations are, upon request, supplied by the overlasher, Crown Castle contends that notice and attach policies for overlashing are reasonable. This practice is currently adopted by one member of the Utility Coalition on Overlashing, which requires overlashers to give the pole owner notice of an overlashing project no later than the day the work is scheduled to commence. Pole owners consistently retain the right to conduct post-installation inspections of overlashing. Overlashers are typically responsible for the costs of post-installation inspections, as well as any make-ready that must be conducted on poles in the event that the overlash does not accord with applicable specifications. If the overlashing causes any violation of NESC, state, or local safety requirements, overlashers are obligated to bring their attachments into compliance within 30 days of notification. Given the post-installation inspection rights typically retained by pole owners and the contractual need for remediation of non-compliant overlashing deployments by overlashers, the Commission's current notice and attach precedent strikes the appropriate balance between expediting broadband deployment and giving pole owners the right to protect their infrastructure. Further notice in advance of overlashing is unnecessary in light of the protections currently retained by pole owners.

Ensuring safe and reliable engineering conditions on poles is not the exclusive province or interest of pole owners. Indeed, third party attachers and overlashers also have a significant interest in the safety and integrity of the infrastructure, as their customers' service, like the pole owner's customers' service, depends on it. Third party attachers and overlashers have an

independent duty to comply with all appropriate safety codes, such as the NESC, OSHA regulations, and the National Electric Code. Third party attachers and overlashers further assume the liability associated with improper installations. Crown Castle respectfully requests that the Commission (1) codify its notice and attach overlashing precedent, (2) clarify that strand-mounted wireless solutions are permitted under its precedent, and (3) clarify that its notice and attach precedent does not contemplate extended pole owner review periods for overlashing projects.

Crown Castle appreciates the opportunity to submit these reply comments for the Commission's consideration. The issues explored in this proceeding have critical long term implications for the nation's communications future, and Crown Castle is pleased to participate in the continuing conversation surrounding that future.

Respectfully submitted,

/s/ Rebecca L. Hussey

Kenneth J. Simon

Senior Vice President and General Counsel

Monica Gambino

Vice President, Legal

Robert Millar

Associate General Counsel

Rebecca Hussey

Utilities Relations Counsel

CROWN CASTLE

INTERNATIONAL CORP.

1220 Augusta Drive, Suite 600

Houston, TX 77057

(713) 570-3000

February 16, 2018