Street Lights and 5G Issue Brief

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SUMMARY

Our nation's electric distribution system is an economic superhighway powering our lifestyles. Not only does our distribution system—usually characterized by the wooden, steel, or concrete utility poles seen along most streets and highways—deliver electricity to nearly every home and business in the U.S., it also is a key viaduct for telecommunications, wireless, and broadband services.

Electric utility poles are essential for providing safe, affordable, and reliable electricity. Each pole is designed specifically with equipment that lowers the voltage of the electricity being carried on power lines so it can be safely delivered for general use. And because they are nearly everywhere, poles and sometimes utility owned streetlights can also be outfitted with other equipment necessary for delivering broadband, voice, and wireless service as well.

The process for attaching new telecommunications devices to utility poles is called "pole attachments." It is regulated by the Federal Communications Commission (FCC, the Commission) or state public utility commissions across the country. Notably, only poles owned by investor-owned utilities are subject to FCC regulation.

With the advent of 5G wireless technology, many wireless providers are looking to attach new devices to all kinds of infrastructure—such as streetlights. Many electric utilities have signed voluntary, market-based agreements with telecommunications firms to develop new streetlighting infrastructure that also carries wireless devices needed for 5G deployment. These market-based agreements are critical to expediting the deployment of safe electricity and 5G services.

Unfortunately, a proposal pending before the FCC threatens the viability of these agreements going forward. The wireless industry has proposed that the FCC exercise direct authority over utility owned streetlights as a means to deploy 5G devices. This proposal, if adopted, would not only delay 5G, it would also have a negative impact on public safety.

UTC POSITION

As the need to deploy 5G wireless services becomes a national priority, electric utilities are key partners with the telecommunications sector, the federal government, and state and local agencies involved with various review processes. Across the nation, utilities have entered into market-driven agreements over the last several years with wireless carriers to attach new devices to existing or new infrastructure—indeed, the utility industry is ready for the 5G race.

These arrangements between utilities, wireless providers, and other necessary parties have proven to be successful in deploying 5G devices on street poles and other infrastructure. According to Southern Company, Xcel Energy, Duke Energy, and others, these kinds of arrangements have accelerated the rollout of 5G and advanced wireless services while also maintaining electric reliability and improving streetlighting infrastructure.

Efforts to replace this thriving market with a regulatory regime would not only slow down wireless deployment, it would also likely negatively impact streetlights themselves, many of which are not structurally capable of supporting wireless communications devices. Therefore, UTC and its members urge the FCC to reject this proposal and instead encourage all parties to engage in good faith, market-based agreements.

BACKGROUND

Unlike the process of attaching telecommunications devices to investor-owned electric utility poles (known as "pole attachments"), which is heavily regulated by the FCC, the market for attaching wireless devices to utility and municipally owned streetlights relies on voluntary approaches. This means that instead of the FCC setting artificially low rates and limited safety reviews as they do for IOU-owned poles, parties

seeking to add wireless devices to streetlights engage in voluntary agreements with numerous parties.

Streetlights are inherently different than utility poles. First, the ownership of such lights is split between the utility and local government. Even if the light is owned by a utility, streetlights are typically installed and maintained at the request of a street-light customer, such as a city or municipality. In other words, replacing and/or placing new infrastructure onto a streetlight involves numerous parties with varying needs.

This is why utilities have engaged in proactive, market-driven agreements to replace certain streetlights with new infrastructure capable of safely providing lighting services and deploying 5G wireless services. Utilities like Duke Energy, Southern Company, Xcel Energy, and others have found these programs to be effective in accelerating wireless deployments.

Even though these programs are providing demonstrable results, the wireless industry has asked the FCC to apply the same kinds of strict, top-down regulations for utility distribution poles to streetlights. In a proposal pending before the FCC, the wireless industry asks the Commission to determine that streetlights are the same as "utility poles" and therefore should be subject to the same rules. The wireless industry claims that these arcane pole-attachment regulations are needed to expedite the deployment of 5G services and to "win the Race to 5G." Since the late 1970s, the telecommunications industry succeeded in convincing the FCC to impose these top-down regulations on utility poles by claiming that higher attachment fees were impeding their ability to provide their services in less populated, rural areas.

SITUATIONAL AWARENESS

However, after four decades of pole-attachments regulations, rural America still lags in broadband deployment. Studies have demonstrated the lack of causality between lower pole-attachment rates and higher broadband deployment; in fact, the Virginia State Corporation Commission in 2011 found no direct correlation between pole-attachment rates and broadband deployment.

Despite these findings, and despite a thriving, functional streetlight-colocation market, the wireless industry is seeking to expand the same kinds of failed policies to street lights in order to lower their costs of business. As Duke, Southern, Xcel and others have demonstrated, top-down, strict regulatory approaches would grind this market to a halt, creating a bureaucratic system that favors the wireless sector over customers and public safety.

Market-based approaches result in new street light infrastructure capable of storing small-cell devices in creative, structurally sound ways that improve the streetscape while also deploying the advanced wireless services that 5G promises. New streetlights can be safely designed and installed with wireless capability so discretely that the wireless devices are barely noticeable. This kind of approach provides wins for all parties—wireless companies that wish to deploy their services, cities, and the public, who get new infrastructure at a much lower cost.

A top-down, heavy handed regulatory approach, on the other hand, would likely result in litigation, delays, and unsafe and unseemly wireless installations. This approach would surely cause the U.S. to lose the race to 5G.

ABOUT UTC

The Utilities Technology Council (UTC) is a global trade association dedicated to serving critical infrastructure providers. Through advocacy, education and collaboration, UTC creates a favorable business, regulatory and technological environment for companies that own, manage or provide critical telecommunications systems in support of their core business.

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