

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

In the Matter of

Amendment of Parts 1, 2, 22, 24, 27, 90,)
and 95 of the Commission's Rules to) WT Docket 10-4
Improve Wireless Coverage Through)
the Use of Signal Boosters)

Comments

CellAntenna Corporation ("CellAntenna") is a family-owned US company, based in Coral Springs, Florida. Since 2002, CellAntenna has led the industry in marketing, designing, deploying and servicing communications devices. In the course of its business, CellAntenna markets and sells repeaters designed to amplify wireless signals, commonly known as Signal Boosters. In its efforts to deploy Industrial Signal Boosters¹, CellAntenna has found that some of the carrier consents required by Section 20.21(c)(1)², have been delayed or denied without consistency, and, in some cases, without explanation. In these comments, CellAntenna asks that the Commission consider and impose a process for the consents required by Section 20.21(c)(1), with a "shot clock" – a timeframe in which the wireless carriers must respond, as more fully set forth below.

1. **Background**

The Commission has found that wireless consumers have a reasonable expectation of receiving seamless continuous nationwide commercial mobile telephony services. As noted in

¹ "Industrial Signal Boosters" is defined in *Report and Order*, Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission's Rules to Improve Wireless Coverage Through the Use of Signal Boosters, *Report and Order*, WT Docket No. 10-4, 28 FCC Rcd 1663, 1670 (2013) ("*Report and Order*").

² 47 C.F.R. § 20.21(c)(1).

the *Report and Order* in this proceeding,³ mobile voice and mobile broadband services are increasingly important to consumers and to our nation's economy. CTIA noted the importance of reliable wireless communications services in its 2007 Petition for Declaratory Ruling in this proceeding. CTIA declared that:

The ubiquitous availability of commercial wireless networks providing voice and data communications to the public on a decentralized basis is critical to public safety.⁴

Even so, despite technological advances, wireless reception can be unreliable from place to place. In the *Report and Order*, the Commission noted that coverage gaps exist within and at the edges of service areas. The Commission noted that robust Signal Boosters can bridge the gaps and extend coverage at the fringe of service areas, and difficult to serve indoor environments, such as hospitals.⁵ The Commission also noted the potential for Signal Boosters to improve public safety communications by enabling the public to connect to 911 in areas where wireless coverage is deficient or where adequate communications signal is blocked or shielded. As the Commission noted, Signal Boosters represent a cost-effective means of improving our nation's wireless infrastructure.

Surprisingly, Industrial Signal Boosters are generally deployed by neutral hosts, property developers, hospitals, local governments, or owners of commercial buildings. These non-carrier entities are willing to pay the significant cost attendant to deploying Signal Boosters to ensure reliable wireless communications within the areas served by the planned Signal Booster. Signal

³ 28 FCC Rcd 1664.

⁴ Petition for Declaratory Ruling of CTIA – The Wireless Association®, filed November 2, 2007, at 2.

⁵ 28 FCC Rcd 1664.

Boosters do not compete with carriers, but enhance the carriers' signals ensuring reliable service for the carriers' own customers, but at no cost to the carriers.

2. Procedural Background

On September 23, 2014, the Commission released the Order on Reconsideration and Further Notice of Proposed Rulemaking in this proceeding⁶ In the Further Notice of Proposed Rulemaking ("FNPRM"), the Commission noted that the underlying purpose of the *Report and Order* was to broaden the availability of Signal Boosters while ensuring that Signal Boosters do not adversely affect wireless networks.⁷ In the *Report and Order*, the Commission included a restriction that "Consumer Signal Boosters" may be operated only for "personal use" and only to boost the signal of a wireless carrier signal to which they subscribe. The Commission asked whether it should remove the "personal use" restriction on Provider-Specific Consumer Signal Boosters.

CellAntenna supports removal of the "personal use" restriction, but as the Commission eases processing for Consumer Signal Boosters, CellAntenna urges the Commission to take this opportunity to extend greater ease of processing to Industrial Signal Boosters. Section 20.21(c)(1) replaced a coordination process with a carrier consent requirement on Industrial Signal Boosters.⁸ The consent requirement has resulted in delayed deployment of Industrial Signal Boosters throughout the country. If the Commission insists that carrier consent to the

⁶ Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission's Rules to Improve Wireless Coverage Through the Use of Signal Boosters, *FNPRM Order on Reconsideration*, WT Docket 10-4, 29 FCC Rcd 11563 (2014) ("FNPRM").

⁷ 29 FCC Rcd 11570.

⁸ 47 C.F.R. § 20.21(c)(1).

deployment of Industrial Signal Boosters is required, the Commission should adopt a process by which carrier consents are granted, including a shot clock, giving the carriers a specific timeframe in which they must respond to requests for consent.

3. Commenters Supported Streamlined Processing for Industrial Signal Boosters

In the initial inquiry in the captioned proceeding, CellAntenna and other commenters urged the Commission to adopt a streamlined processing regime for Industrial Signal Boosters, like that adopted for Consumer Signal Boosters. In fact, before the Commission adopted the *Report and Order*, no consent for the installation of Industrial Signal Boosters was required and the business of filling holes in carriers' coverage proceeded apace, with little reported harmful interference.⁹

As the DAS Forum noted in its Petition for Rulemaking in this proceeding, in the equipment certification process under Part 2 of the Commission's rules, the Commission assesses repeaters to minimize the likelihood of interference from their operation.¹⁰ Certificated repeaters may be marketed and sold without carrier consent. The *Report and Order* imposed consent requirement on the operation of Industrial Signal Boosters. The DAS Forum noted the difficulties a carrier consent regime would bring – and it was right.

⁹ CTIA and the DAS Forum allege "several" instances of harmful interference, but each cites only one and the DAS Forum's cited case is an enforcement matter which assessed a fine for failure to respond to FCC inquiry – not harmful interference. In re: Digital Antenna, Inc, Sunrise, Florida, *Notice of Apparent Liability for Forfeiture and Order*, DA 088-1093, 23 FCC Rcd 7600 (2008).

¹⁰ Petition for Rulemaking, The DAS Forum, a membership section of PCIA – The Wireless Infrastructure Association ("DAS Forum"), filed October 23, 2009, at 4.

Since Section 20.21(c)(1) became effective, the consent requirement has slowed the business of installation of Industrial Signal Boosters to a halt. CellAntenna has waited over a year for some consents, and months for others.¹¹

The DAS Forum specifically predicted that problems CellAntenna has experienced. In its Reply Comments in this proceeding, it noted that “licensee consent may be used as a tool for market manipulation or anti-competitive behavior.”¹² Whether through anti-competitive motive or benign neglect, the delay in the current consent regime can only be remedied by a rule providing a process and timeline for carrier consent.

4. CellAntenna’s Challenges

CellAntenna has documented its challenges with carrier consents for Industrial Signal Booster installations. Each carrier’s responsiveness varies widely depending on region and sometimes the character of the installation. For example, different carriers in Florida and in Texas have ignored or rejected requests for consent for hospital installations for as long as twelve months. Each of the major wireless carriers has ignored requests for installations in commercial space, many times without explanation.

CellAntenna is prepared to work with the carriers to install the ordered Industrial Signal Boosters, including finding appropriate technical solutions. The carriers provide no basis for denial – no specific engineering information or other means by which CellAntenna could resolve a carrier’s objection. CellAntenna cannot solve a problem that has not yet been identified.

¹¹ CellAntenna has documented the carriers’ intransigence in a series of *ex parte* filings with the Commission in this proceeding.

¹² Reply Comments of the DAS Forum (A Membership Section of PCIA – The Wireless Infrastructure Association, filed August 24, 2011, at 7.

Until the carriers respond to the pending requests, with specific objections, no solution can be found.

5. A Process – With a Timeline – Must be Imposed

Given CellAntenna's experience with the consent requirement, the Commission may realize the full benefits of the *Report and Order* only by imposing a consent process, including a shot clock.

As an initial matter, CellAntenna proposes that the Commission impose basic principle: consents under Section 20.21(c)(1) may not be unreasonably withheld. Requests for consents should be denied based only on predicted interference as calculated using sound engineering principles. The process should be conducted in this manner:

1. The Commission should require carriers to respond to requests for consent under Section 20.21(c)(1) within fifteen (15) days after the date on which the request is transmitted to the carrier. The response should either grant the requested consent or deny it based on clear and specific engineering criteria, including sufficient detail to allow the requestor to amend the engineering design of the Industrial Signal Booster to work around the conflict identified in the denial.
2. If the installer of the Industrial Signal Booster believes the denial is in error, and wishes to challenge the denial, it may present its fact-based challenge to the carrier within ten (10) days after receipt of the denial.
3. Within ten (10) days after receipt of the challenge, the challenged carrier must respond either with a grant or with a fuller explanation of the denial.
4. If the parties disagree about whether the request should have been denied, a party may bring the dispute to the FCC for resolution through the Enforcement Bureau's Market Disputes Resolution Division's processes.

If the Commission determines that fifteen (15) days is not sufficient time to process every type Industrial Signal Booster installation consent requests, CellAntenna recommends that the Commission classify the installations based on the urgency of the need. For example, first responders, including hospitals, should be highest priority. Commercial installations may be handled with less urgency. Cell Antenna proposes the following as a framework for processing:

Type of Entity	Basis of Urgency	Timeframe for Response
Hospital or Medical Center, Law Enforcement	First Responder	15 days
Government building, other than law enforcement, schools, universities	Government or education purpose	20 days
Community gathering place, designated as a shelter	Civil Defense Shelter	20 days
Commercial Entity	None	30 days

With the more urgent installations classified for shorter response times, service may be in place for any local or national emergencies at the earliest possible times. CellAntenna recommends that the challenge and response times remain short, so that the parties remain focused and solutions are found quickly.

The Commission has imposed shot clock processes in other circumstances in which delayed consents delayed enhanced service to the public. Specifically, in the context of pole attachments and in situations in which major modifications to Public Mobile Radio Systems under Part 22 of the Commission’s rules might result in incursions into neighboring systems.

In the pole attachment process, Section 1.1403(b) requires that a utility respond to any request for access to a pole within forty-five (45) days after receipt of the application. Any denial must be in writing and include all relevant evidence and information supporting the denial, and must explain how the evidence and information relate to a denial of access for reasons of lack of capacity, safety, reliability, or engineering standards.¹³

In a process that may be more familiar to wireless carriers, Section 22.150 of the Commission's rules provides for a pre-filing technical coordination process. In that pre-filing process, applicants are required to provide notice to carriers that might be affected by a proposed modification and to work out any conflict before filing an application for the modification. The potentially affected carriers has thirty (30) days to register objections to the proposed modifications.

While interconnection relationships under Sections 251 and 252 of the Communications Act are largely handled by state utility commissions, Section 252 sets forth specific timelines to ensure reliably efficient access to service.

Clearly, when enhancement of service to the public is at stake, the Commission and Congress have been willing to impose process and timelines for execution of the established process. So that seamless coverage may be afforded to the various carriers' customers, CellAntenna urges the Commission to impose a process with response timeframes on the request and provision of carrier consents to installation of Industrial Signal Boosters. The process should also include a requirement that any denial be based predicted harmful

¹³ 47 C.F.R. § 1.1403(b).

interference as calculated by standard engineering practices and that the prediction be articulated with specificity in the written denial. With full information, the requestor may modify its proposed installation to work around the prediction of interference and obtain consent from the carrier in a timely manner.

6. Actual Interference

Actual interference from a properly designed and professionally installed Industrial Signal Booster is rare. Even so, Section 20.21(d)(1)¹⁴ authorizes Industrial Signal Boosters on a secondary, noninterference basis. If a licensee experiences harmful interference, under Section 20.21(d)(2)¹⁵, the operator of the Signal Booster must cooperate in determining the source of the interference and, if necessary, deactivate the signal booster right away. Carriers are protected by CellAntenna's proposed process by eliminating predicted interference and from actual interference by the secondary status accorded Signal Boosters and Section 20.21(d)(2)'s process requiring investigation and deactivation, if necessary.

7. Unintended Consequences

Since the effective date of Section 20.21(c)(1), companies that abide by the Commission's rules have experienced delays and unexplained denials of the required consents. In the meantime, renegade installation outfits ignore the Commission's rules and installed Signal Boosters without coordinating with the carriers. As denials and delays slow the deployment of needed signal enhancement – enhancement to the carriers' deficient signals – customers will turn to the renegade installation outfits to get the enhancement they need.

¹⁴ 47 C.F.R. § 20.21(d)(1).

¹⁵ 47 C.F.R. § 20.21(d)(2).

Only by working with companies like CellAntenna, in accord with rules which provide a process governed by a shot clock, can the Commission's vision for enhanced service in difficult-to-serve areas be achieved.

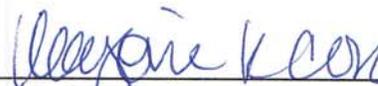
In the *Report and Order*, the Commission noted the potential for Signal Boosters to "enhance wireless consumers, particularly in rural, underserved, and difficult-to-serve areas," without adversely affecting wireless networks.¹⁶ CellAntenna's experience with carrier consents, since the imposition of the requirement, compels the conclusion that a process with a shot clock is necessary. Whether the Commission uses a uniform shot clock or one based on the priority of the installation, a process – governed by a shot clock – is necessary for the effective functioning of the marketplace.

CellAntenna asks that the Commission. impose a process – including a shot clock – at the earliest possible time.

Respectfully submitted,

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¹⁶ 28 FCC Rcd 1664.