

May 25, 2016

**Ex Parte**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: *Connect America Fund*, WC Docket No. 10-90; *Universal Service Reform Mobility Fund*, WT Docket No. 10-208

Dear Ms. Dortch:

On May 23, 2016, Chris Nierman and Gene Strid of General Communication, Inc. (“GCI”) and I spoke with Chris Helzer, Chief Engineer of the Wireless Telecommunications Bureau, Paroma Sanyal, Chief Economist of the Wireless Telecommunications Bureau, and Tom Tran of the Competition and Infrastructure Policy Division, Wireless Telecommunications Bureau. We discussed the mobile performance commitments GCI has proposed as part of the Alaska Plan.<sup>1</sup> We confirmed that the speed commitments that GCI proposed are through to the edge of the polygon surrounding the intended service area, but that GCI expects that customers will often experience higher speeds. GCI also discussed its understanding that reporting progress toward meeting the Alaska Plan performance commitments will be accomplished through Form 477 filings and Form 481 annual reports, both of which must be certified.

We also spoke about some of the challenges of constructing wireless infrastructure in remote Alaska. In many areas, the best site for a tower from an engineering perspective may be on protected lands and not available or unavailable without protracted permitting. Furthermore, such a site may be uneconomic to extend road access and primary power from the village or community the cell site is intending to serve. As a result, towers are typically collocated within the village or community at GCI earth stations or on TERRA towers. Such siting makes the backhaul readily available, and the cell site can leverage other infrastructure, such as equipment shelters and power systems. While such placement may not leverage natural terrain, if it is even available, to extend radio propagation beyond the village, placing the cell site within the village reduces the propagation pathloss to users, improving their indoor coverage. The lack of intervillage roads makes it expensive to bring bulky supplies or equipment (such as a crane) to a new site. Sometimes large equipment and parts can be delivered by barge, but such access is seasonal. Furthermore, using heavy equipment so delivered is generally avoided wherever possible, since it is very expensive.

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<sup>1</sup> See Letter from John T. Nakahata, Counsel to General Communication, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90, WT Docket No. 10-208 (filed May 5, 2016).

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In addition, towers must be designed to meet the challenges of Alaskan terrain and climate. For example, towers built on permafrost must be constructed so as not to cause the ground below the tower to melt, which would make the tower unstable. Thus, construction techniques that may be common elsewhere, such as supporting a tower with guy wires, are not generally possible because the guy wire anchors may be quite difficult to install in the frozen ground and, if successfully installed, might transfer heat into the permafrost and thus weaken the anchor's pullout strength. Thus, towers in these areas are built on gravel pads with spread load frames and above-surface ballast weight to counter the potential for the tower to overturn. The towers' height and bearing capacity are limited so as not create an overturning load that the foundation cannot support. As a result, it is not always possible to place additional equipment on a tower beyond what the tower was originally designed to support.

Notwithstanding these challenges, GCI stands ready to deploy LTE service as described in its proposed performance commitments.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. Veach", is written over a light blue rectangular background.

Julie A. Veach

*Counsel to General Communication, Inc.*

cc: Chris Helzer  
Paroma Sanyal  
Tom Tran