

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)
)
Emergency Petition for Supplemental Universal)
Service Support to Restore Wireless Networks in)
Hurricane-Devastated Insular Areas)
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EMERGENCY PETITION

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Vitelcom Cellular, Inc., doing business as Viya Wireless (formerly Innovative Wireless or Vitelcom), a mobile wireless provider in the United States Virgin Islands (“USVI”) (“Viya Wireless”), and Choice Communications, LLC (“Choice”), a mobile wireless provider that will be merged into Viya Wireless¹ (collectively, “Petitioner”), hereby petition the Federal Communications Commission (“FCC” or “Commission”) to provide emergency supplemental universal service support to aid in the restoration of wireless telecommunications services to the residents of the USVI, an insular U.S. territory that was devastated by Hurricanes Irma and Maria.²

¹ Viya Wireless and Choice are commonly controlled by parent company ATN International, Inc. (“ATN”). The Commission has consented to the transfer of control of certain Choice wireless licenses to Viya Wireless as part of ATN’s planned merger of Choice into Viya Wireless. *See* ULS File Nos. 0007764065, 0007764074. However, this transaction has not yet been consummated.

² In other concurrent filings, affiliates of Petitioner are seeking other emergency relief to ensure that telecommunications services are restored to the residents of the USVI. Although this Petition focuses on the USVI, it could be applied with equal force to Puerto Rico, which also sustained significant hurricane damage.

I. INTRODUCTION AND SUMMARY

Petitioner requests that the Commission make available a supplemental, one-time infusion of up to \$50 million for carriers to restore wireless networks using hurricane-hardened facilities.³ The Petitioners propose for these funds to be awarded through a process similar to a request for proposals (“RFP”), and to be subject to verification of the appropriate use of the support. Further, the Petitioners propose for the funds to be subject to reasonable requirements, consistent with those adopted for facilities built with Mobility Fund Phase II support, to ensure that facilities constructed with the support will be available to benefit all carriers serving the USVI.

Given the urgency of the need for this funding to be included in USVI wireless carriers’ disaster recovery plans, Viya requests that this Petition be considered on an expedited basis.

II. BACKGROUND

A. Hurricanes Irma and Maria

On September 6, 2017, Hurricane Irma hit the USVI with sustained 185-mile-an-hour winds, toppling trees and power lines, damaging and destroying structures, and causing island-wide electrical outages that will likely last for months.⁴ Various news reports identified Hurricane Irma as one of the strongest storms ever recorded in the Atlantic Ocean. It resulted in

³ On October 4, 2017, PRWireless, Inc. dba Open Mobile filed a petition seeking support to rebuild its wireless network in Puerto Rico, which was also damaged by Hurricanes Irma and Maria. The form of relief requested in that petition – restoration of pre-phase-down identical support – would not provide relief in the USVI because no wireless carriers in the USVI received appreciable identical support.

⁴ *See, e.g.*, Camilla Schick et al., “The Storm Reaches Puerto Rico: ‘There Is Nothing Like This,’” New York Times (Sept. 6, 2017), <https://www.nytimes.com/2017/09/06/world/americas/hurricane-irma-update.html>.

at least 84 deaths, including 45 across the Caribbean and 39 in the United States.⁵ According to the Commission's September 18th Communications Status Report on Hurricane Irma, Hurricane Irma massively damaged the mobile communications infrastructure on St. Thomas and St. John, leaving the majority of cell sites out-of-service and also damaged infrastructure on St. Croix, leaving about a quarter of cell sites out of service.⁶ USVI residents on these islands continue to lack access to adequate water, electricity, and other basic services.⁷

President Trump declared the USVI to be a major disaster area on September 7, 2017.⁸ Further, as additional reports detailed the extent of destruction, the President subsequently expanded the disaster relief resources available under this declaration on September 10, 2017.⁹

Following Hurricane Irma, on September 20, 2017, Hurricane Maria decimated Puerto Rico and the U.S. Virgin Islands. St. Croix was in the powerful eyewall of the storm, and the storm did extensive further damage to St. Thomas and St. John, which were in the process of

⁵ See e.g., James Oliphant, "About 1.5 million, mostly in Florida, without power in Irma's wake," Reuters (Sept. 15, 2017), <https://www.reuters.com/article/us-storm-irma/about-1-5-million-mostly-in-florida-without-power-in-irmas-wake-idUSKCN1BQ1C6>; Madison Park, Emanuella Grinberg, & Ray Sanchez, "Hurricane Irma leaves 'nuclear landscape' in Caribbean," Cable News Network (Sept. 13, 2017), <http://www.cnn.com/2017/09/13/americas/irma-impact-caribbean/index.html>.

⁶ FCC, Public Safety and Homeland Security Bureau, "Hurricane Irma Communications Status Report for Sept. 18" at 6 (Sept. 18, 2017), <https://www.fcc.gov/document/hurricane-irma-communications-status-report-sept-18>.

⁷ See, e.g., Brianna Sacks & Cora Lewis, "'It's Like A Bomb Went Off': What Life Is Like On The US Virgin Islands After Hurricane Irma," BuzzFeed (Sept. 11, 2017), https://www.buzzfeed.com/briannasacks/irma-devastes-us-virgin-islands?utm_term=.moexy7wMO#.qa6gQ9WRq.

⁸ Press Release, President Donald J. Trump Approves U.S. Virgin Islands Disaster Declaration, White House Press Office (Sept. 7, 2017), <https://www.whitehouse.gov/the-press-office/2017/09/07/president-donald-j-trump-approves-us-virgin-islands-disaster-declaration>.

⁹ Press Release, President Donald J. Trump Amends U.S. Virgin Islands Disaster Declaration, White House Press Office (Sept. 10, 2017), <https://www.whitehouse.gov/the-press-office/2017/09/10/president-donald-j-trump-amends-us-virgin-islands-disaster-declaration>.

beginning their recovery from the damage inflicted by Hurricane Irma.¹⁰ Hurricane Maria's 155-mile-per-hour winds destroyed much of the electrical and communications infrastructure on St. Croix, as well as undoing the restoration efforts undertaken by Viya on St. Thomas and St. John following Hurricane Irma. Indeed, the FCC's first Communications Status Report following Hurricane Maria revealed that the combined destructive forces of Hurricanes Irma and Maria left more than three quarters of the cell sites in the USVI out of service.¹¹ Further, as a result of hurricane damages, the two USVI PSAPs still remain unable to retrieve Phase I and Phase II location information for wireless callers and Automatic Number Identification (ANI)/ALI for VoIP Callers.¹² The Commission further noted that it had received reports that "large percentages of consumers are without either cable services or wireline service (one company reported that 100% of its consumers are out of service due to lack of commercial power). There are at least 18 switches that are out of service due to either SS7 or toll isolation."¹³

In anticipation of Hurricane Maria, President Trump approved a USVI declaration of emergency on September 18.¹⁴ In addition, after Hurricane Maria hit the USVI, he declared USVI to be a major disaster area on September 21, 2017, thereby qualifying the USVI to receive

¹⁰ Travis Fedschun & Nicole Darrah, "Hurricane Maria surges toward Puerto Rico, US Virgin Islands," Fox News (Sept. 20, 2017), <http://www.foxnews.com/world/2017/09/20/hurricane-maria-takes-aim-at-puerto-rico-us-virgin-islands-as-category-5-storm-strengthens.html>.

¹¹ FCC, Public Safety and Homeland Security Bureau, "Hurricane Maria Communications Status Report for Sept. 21" at 6 (Sept. 21, 2017), http://transition.fcc.gov/Daily_Releases/Daily_Business/2017/db0926/DOC-346919A1.pdf.

¹² *Id.* at 2.

¹³ *Id.* at 7.

¹⁴ Press Release, President Donald J. Trump Approves U.S. Virgin Islands Emergency Declaration, White House Press Office (Sept. 18, 2017), <https://www.whitehouse.gov/the-press-office/2017/09/18/president-donald-j-trump-approves-us-virgin-islands-emergency>.

federal relief resources.¹⁵ In the wake of these disasters, Chairman Pai has affirmed that “the FCC stands ready to do whatever we can to help with th[e] task” of restoring the hurricane-damaged communications networks.¹⁶

B. Hurricane Damage to Petitioners’ Facilities and Restoration Efforts

Prior to the damage cause by Hurricanes Irma and Maria, Choice operated a 3G CDMA mobile network and Viya Wireless operated a 3G UMTS mobile network. Further, Viya Wireless was in the process of deploying a new 4G UMTS/LTE network. Substantial portions of these wireless networks were rendered inoperable by the storms. Petitioners have made restoring service to these wireless networks a priority because they can be brought back online more quickly than the local wireline network, and there is a current pressing need for some form of communications to be restored in the USVI in the near term. Viya Wireless is communicating with Commission and Federal Emergency Management Agency (“FEMA”) staff on a daily basis regarding its efforts and successes in bringing these wireless networks back online—initially to assist first responders and ultimately for the benefit of USVI residents and businesses.

Viya’s efforts have been hampered, however, by the continuing lack of commercial electric power in the USVI – a situation that is likely to continue for an extended period of time. Even before the storms, Petitioners began moving generators into place to provide backup power to cell sites and switching centers. Given the insular character of the USVI, however, it has proven difficult to procure sufficient fuel to run generators to power even the portions of the wireless networks that remain operational. Further, Viya’s generators are beginning to fail

¹⁵ Press Release, President Donald J. Trump Approves U.S. Virgin Islands Disaster Declaration, White House Press Office (Sept. 21, 2017), <https://www.whitehouse.gov/the-press-office/2017/09/21/president-donald-j-trump-approves-us-virgin-islands-disaster-declaration>.

¹⁶ See FCC Press Release, “Chairman Pai Statement on Hurricane Maria” (Sept. 21, 2017), https://apps.fcc.gov/edocs_public/attachmatch/DOC-346833A1.pdf.

because they were not designed to run continuously for weeks at a time, which has been necessitated by the lack of power for the past month. The lack of transport to the USVI has also hampered Petitioners' efforts to get additional generators, as well as repair crews, positioned on the islands. Further, theft of both generators and fuel also has been a consistent problem.

III. REQUEST FOR RELIEF

A. Storm-Hardened Networks Are Not Economically Feasible in the USVI Absent Additional Support.

As Petitioners and other wireless carriers in the USVI work to rebuild their wireless networks, the public interest would be served by constructing, in the first instance, facilities that are hardened to withstand future hurricanes and tropical storms. Although it is unclear whether any network infrastructure could have survived direct hits by two back-to-back Category 5 hurricanes, as occurred in this instance, wireless network facilities certainly can be built in the USVI that are more resilient and that are hardened against hurricane or tropical storm damage to a greater degree than prior wireless network deployments in the USVI.

Hardened networks are more expensive, however, particularly in the Virgin Islands. Network components that will withstand extreme weather are inherently more expensive than standard equipment – concrete and steel poles are more expensive than wooden ones; burying fiber is more expensive than aerial fiber; and reinforcing towers adds significant costs. The geological conditions in the USVI also make buried facilities unusually expensive. The low-lying areas on the islands have an unusually high water table. As a result, buried plant in low lying areas must be installed as though it were effectively in submarine conditions. Higher elevations, on the other hand, are solid rock, which is inordinately expensive to trench and subject to seismic activity that can sever conduit and cut cables. In addition, the aftermath of Hurricanes Irma and Maria has made clear that additional provisions for back-up power are

necessary in the USVI. Even in the absence of storms, commercial power in the USVI frequently is not available 24/7. When commercial power is unavailable, carriers' generators and the fuel to run them become attractive targets for theft, which can only be avoided through the considerable expense of burying generators and fuel tanks near crucial towers and switching facilities.

Current conditions in the USVI make it economically infeasible for Petitioners (and likely any other wireless carriers subject to market forces in the USVI) to construct network facilities of the quality necessary to withstand future tropical storms or hurricanes. The devastation of the USVI has cut off carriers' revenue streams, and revenues are likely to remain minimal for a considerable time to come. The two storms have driven Viya's end-user revenues down to near zero. Further, the lack of power, closure of local post offices, and closure of banks has eliminated carriers' ability to render and deliver bills, as well as customers' ability to offer payment. Moreover, most businesses remain shuttered because of storm damage, lack of power, or both. As a result, most USVI businesses and residents currently are without income and therefore could not pay telecommunications bills even if they received the bills and the banks were open.

Before the hurricanes, the median household income in the USVI was approximately 30 percent lower than in the mainland U.S., and the poverty rate, at 46 percent, was more than three times the U.S. average. The USVI government – the USVI's largest employer – was financially distressed before the storms hit, facing per-capita government debt at nearly 130 percent of the levels in Puerto Rico, which is going through a form of bankruptcy. Further, the USVI government lacks adequate access to the bond markets because it stopped reporting to credit agencies prior to the hurricanes. Moreover, around one-third of the USVI's economy depended

on tourism in recent years, but tourism is unlikely to rebound quickly given the devastation of the islands' natural beauty and tourist infrastructure. Given all these factors, USVI carriers cannot anticipate funding the construction of storm-hardened facilities with revenues from the sales of services to USVI customers.¹⁷

B. Rebuilding USVI Wireless Networks to Withstand Future Storms Will Serve the Public Interest

The public interest would be served by a one-time infusion of capital into the USVI wireless market to enable the construction of hardened network facilities appropriate to the tropical, insular environment of the USVI. Such facilities will provide more reliable service to the U.S. citizens resident in the USVI in light of the likelihood of future hurricanes and tropical storms. The construction of storm-hardened networks today ultimately will be less expensive and more economically efficient than the construction of less-expensive, less-durable networks today that have to be rebuilt again following the next major storm. Building storm-hardened networks today also will eliminate or reduce the extent to which USVI residents are subject to future dislocation and distress as a result of future interruptions of service. Thus, the requested relief furthers the statutory goals of the Commission's universal service policies – to ensure consumers “in all regions of the nation, including low income consumers and those in rural, insular, and high-cost areas, ... have access to telecommunications and information services ... that are reasonably comparable to those services provided in urban areas.”¹⁸ Providing specific

¹⁷ On October 4, 2017, PRWireless, Inc. dba Open Mobile filed a petition seeking support to rebuild its wireless network in Puerto Rico, which was also damaged by Hurricanes Irma and Maria. The form of relief requested in that petition – restoration of pre-phase-down identical support – would not provide relief in the USVI because no wireless carriers in the USVI received appreciable identical support

¹⁸ 47 U.S.C. § 254(b)(3).

support to mitigate service interruptions from repeated, severe storms in low-income tropical insular areas helps ensure a more consistent level of continuity of service as compared to non-insular, urban areas.

C. A One-Time Infusion of Support Will Help Fund Storm-Hardened Wireless Networks

Petitioners propose that the Commission make available a one-time infusion of universal service support in the amount of \$50 million (or such other amount as the Commission may deem appropriate) for mobile wireless carriers in the USVI to storm-harden their networks as they rebuild following Hurricanes Irma and Maria. This support could be made available based on specific proposals submitted in an RFP-like manner by facilities-based eligible telecommunications carriers (“ETCs”)¹⁹ for funding to storm-harden specific wireless network facilities that they propose to construct to provide wireless services in the USVI. The Commission could prescribe the types of expenses that would be eligible for this form of support. For example, Petitioners propose that such support should be available for the following types of activities:²⁰

- Reinforcing towers that hold wireless antennas to withstand higher winds.²¹
- Reinforcing buildings containing switching facilities and other network enclosures to withstand heavy rains and higher winds.

¹⁹ To remain consistent with section 254, Petitioners propose that the Commission make this funding available to ETCs. *See* 47 U.S.C. §§ 254(e), 214(e).

²⁰ In considering proposals for this support, the Commission should have the flexibility to grant proposals that include other specific items that are consistent with the approach and purpose described herein to harden USVI wireless networks against the effects of repeated extreme weather events.

²¹ This should include towers used to house antennas for wireless cells as well as microwave antennas used for wireless backhaul.

- Burying or otherwise securing backup electrical generators and fuel tanks for such generators at wireless sites and/or switching facilities.
- Providing redundant electrical generators at hub sites.
- Installing fuel storage facilities, either at a central location or at diversified locations, to power generators in the event of loss of commercial power.
- Purchasing fuel distribution vehicles to distribute fuel from storage facilities to generators.
- Provisioning generators with larger fuel capacity and longer duty hours.
- Purchasing cell sites on wheels (“COWs”) for wireless carriers to have available to deploy in the event of disasters.²²

The Commission would accept and act on proposals for the support on a rolling basis for a specified period of time, such as six months from the release date of a Commission order providing for this support. Proposals would describe the network hardening to be funded, including an estimate of the costs and the number of customers that will be served by the funded facilities. The Commission would review such proposals and grant those that propose to fund covered facilities. In the event of proposals to serve overlapping areas, or if requested funding exceeds the total budget for the program, the Commission should select proposals based on objective criteria such as total number of customers to benefit from the proposal, as well as whether the proposal would provide service to anchor institutions such as first responder facilities, hospitals, and schools. Following construction, funded applicants would be required to document the appropriate use of the support they received. The Commission should set a deadline for its action on proposals, such as 30 days from filing, so that carriers can include such funds in their recovery planning.

²² This is particularly important in the insular setting of the USVI as, unlike on the mainland, COWs cannot readily be brought from other locations following disasters.

D. The Commission Has the Authority to Grant This Relief

The Commission has the authority to provide this support under section 254, and this support will help fulfill the Commission's obligations under that provision. Consistent with section 254(e), this support will be used for the provision, upgrade, and maintenance, of wireless telecommunications services that meet the definition of universal service prescribed by the Commission.²³ Further, the support will ensure that quality services are available to the residents of the USVI at just, reasonable, and affordable rates.²⁴ It will help ensure that consumers in all regions of the United States, including the USVI, have access to telecommunications and information services that are reasonably comparable to those available in U.S. urban areas.²⁵ Moreover, by providing funding to reinforce wireless networks to withstand the specific tropical conditions of the USVI, the support will particularly ensure the availability of such services in insular areas, as mandated by the statute.²⁶ Although the Commission has determined in other contexts that specific insular-area support is not needed because broader universal service programs are sufficient to ensure reasonably comparable rates and services in insular areas,²⁷ that is not true in this case. Absent an additional infusion of support, wireless telecommunications services in the USVI will be less reliable than those in urban areas of the United States due to the unique characteristics of the USVI.

²³ 47 U.S.C. § 254(c)(1); 47 C.F.R. § 54.101.

²⁴ 47 U.S.C. § 254(b)(1).

²⁵ 47 U.S.C. § 254(b)(3).

²⁶ *See id.*

²⁷ *High-Cost Universal Service Support, et al.*, Order and Notice of Proposed Rulemaking, 25 FCC Rcd 4136, 4148-58 ¶¶ 22-36 (2010).

E. Reasonable Requirements Can Ensure That Funded Networks Benefit the Broad USVI Community

To ensure that the support provided pursuant to this program funds facilities that do not inure solely to the benefit of the carriers that construct them, the Commission could require such carriers to allow reasonable collocation on their facilities constructed with the support in a manner consistent with the requirements for Mobility Fund Phase II.²⁸ As discussed above, applications for support will specifically describe the facilities to be funded, making it easy to identify the facilities subject to the collocation requirement. Given the one-time nature of support, the Commission could prescribe a reasonable period of time in which such collocation is required on facilities funded by this support, such as five years.

IV. CONCLUSION

As set forth herein, the Commission should provide for a one-time infusion of universal service support to ensure the deployment of hardened wireless facilities appropriate for the unique circumstances in the USVI. Given the urgent need for USVI wireless carriers in the USVI to rebuild facilities to restore mobile service following Hurricanes Irma and Maria, the Petitioners request that the Commission consider this Petition on an expedited basis so that USVI carriers will have visibility regarding whether this funding source will be available as they continue the restoration process.

²⁸ 47 C.F.R. § 54.1015(f).

Respectfully submitted,

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