

FEDERAL COMMUNICATIONS COMMISSION WASHINGTON

February 14, 2020

The Honorable Yvette D. Clarke U.S. House of Representatives 2058 Rayburn House Office Building Washington, DC 20515

Dear Congresswoman Clarke:

Thank you for your letter regarding recent communications network outages in Puerto Rico following last month's earthquakes.

In the aftermath of the first earthquake, the FCC immediately began monitoring our Network Outage Reporting System (NORS), as well as open source media, for indications of significant impacts to Puerto Rico's communications infrastructure. We were also in close and frequent coordination with the Department of Homeland Security (DHS). On January 7, following the second earthquake, the FCC, in coordination with DHS, activated the Disaster Information Reporting System (DIRS) for all of Puerto Rico, and first reports were due on January 8.

As you noted in your letter, with an island-wide power outage resulting from the second earthquake, there were approximately 31.7% of cellular sites out of service on January 8, nearly all due to power outages. While this is a significant outage, this also means that 68.3% of cellular sites were operational in the absence of primary power, a much higher percentage than we saw in the aftermath of Hurricane Maria in 2017. We also saw the percentage of cellular sites out of service decline significantly each day, going from 31.7% to 1.8% within 5 days. As you noted, the earthquake also caused outages for 258,637 cable and wireline subscriber in the affected area; however, within 5 days, the number of subscribers without service was down to 30,288.

The rapid recovery was due in no small part to the extraordinary restoration efforts of the island's telecommunications carriers, who took the lessons they learned from Hurricane Maria and used them to develop more resilient networks as well as a recovery strategy that relied upon sector collaboration as opposed to being carrier-based.

The FCC remains committed to assisting Puerto Rico's efforts to strengthen and harden its communications networks. For the past two years, under an agreement with the Federal Emergency Management Agency, an FCC staff member has been deployed to Puerto Rico at least one week each month to assist our federal partners and the Commonwealth in designing and building an innovative, resilient, redundant private-public communications and information technology infrastructure framework to ensure the delivery of essential services to the residents of Puerto Rico. FCC staff is also in touch with the federal and Commonwealth entities that are responding to the earthquakes and is available to provide any assistance they may need. Finally, last September, the Commission adopted a Report and Order establishing Stage 2 of the Uniendo a Puerto Rico Fund and making available more than \$500 million in Universal Service Fund

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support over ten years for fixed broadband networks and more than \$250 million over three years to support 4G and 5G mobile networks. Support for fixed networks will be awarded to service providers through a competitive process that gives greatest funding priority to proposals that use resilient technologies like underground fiber and provide redundant backup network paths so that these networks will survive the test of time. We expect to announce funding recipients later this year.

I appreciate your interest in this matter and trust that this information is helpful. Please let me know if I can be of any further assistance.

Sincerely,

Ajt V. Pai



FEDERAL COMMUNICATIONS COMMISSION WASHINGTON

February 14, 2020

The Honorable Raul Ruiz U.S. House of Representatives 2342 Rayburn House Office Building Washington, DC 20515

Dear Congressman Ruiz:

Thank you for your letter regarding recent communications network outages in Puerto Rico following last month's earthquakes.

In the aftermath of the first earthquake, the FCC immediately began monitoring our Network Outage Reporting System (NORS), as well as open source media, for indications of significant impacts to Puerto Rico's communications infrastructure. We were also in close and frequent coordination with the Department of Homeland Security (DHS). On January 7, following the second earthquake, the FCC, in coordination with DHS, activated the Disaster Information Reporting System (DIRS) for all of Puerto Rico, and first reports were due on January 8.

As you noted in your letter, with an island-wide power outage resulting from the second earthquake, there were approximately 31.7% of cellular sites out of service on January 8, nearly all due to power outages. While this is a significant outage, this also means that 68.3% of cellular sites were operational in the absence of primary power, a much higher percentage than we saw in the aftermath of Hurricane Maria in 2017. We also saw the percentage of cellular sites out of service decline significantly each day, going from 31.7% to 1.8% within 5 days. As you noted, the earthquake also caused outages for 258,637 cable and wireline subscriber in the affected area; however, within 5 days, the number of subscribers without service was down to 30,288.

The rapid recovery was due in no small part to the extraordinary restoration efforts of the island's telecommunications carriers, who took the lessons they learned from Hurricane Maria and used them to develop more resilient networks as well as a recovery strategy that relied upon sector collaboration as opposed to being carrier-based.

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Page 2—The Honorable Raul Ruiz

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Sincerely,

Ajit V. Pai



FEDERAL COMMUNICATIONS COMMISSION WASHINGTON

February 14, 2020

The Honorable Darren Soto U.S. House of Representatives 1429 Longworth House Office Building Washington, DC 20515

Dear Congressman Soto:

Thank you for your letter regarding recent communications network outages in Puerto Rico following last month's earthquakes.

In the aftermath of the first earthquake, the FCC immediately began monitoring our Network Outage Reporting System (NORS), as well as open source media, for indications of significant impacts to Puerto Rico's communications infrastructure. We were also in close and frequent coordination with the Department of Homeland Security (DHS). On January 7, following the second earthquake, the FCC, in coordination with DHS, activated the Disaster Information Reporting System (DIRS) for all of Puerto Rico, and first reports were due on January 8.

As you noted in your letter, with an island-wide power outage resulting from the second earthquake, there were approximately 31.7% of cellular sites out of service on January 8, nearly all due to power outages. While this is a significant outage, this also means that 68.3% of cellular sites were operational in the absence of primary power, a much higher percentage than we saw in the aftermath of Hurricane Maria in 2017. We also saw the percentage of cellular sites out of service decline significantly each day, going from 31.7% to 1.8% within 5 days. As you noted, the earthquake also caused outages for 258,637 cable and wireline subscriber in the affected area; however, within 5 days, the number of subscribers without service was down to 30,288.

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Page 2—The Honorable Darren Soto

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