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**SENT VIA ELECTRONIC MAIL**

November 18, 2019

Marybel Batjer  
President, California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, California 94105

**Re: Frontier Response to Nov. 13 Letter to Community Industry Leaders [PUBLIC VERSION]**

Dear President, Batjer,

On behalf of Citizens Telecommunications Company of California Inc. d/b/a Frontier Communications of California (U-1024-C), Frontier Communications of the Southwest Inc. (U-1026-C), and Frontier California Inc. (U-1002-C) (collectively, Frontier), I am responding to your recent letter to Communications Industry Leaders regarding phase two of the California Public Utilities Commission's (CPUC) Emergency Disaster Relief Program Proceeding (Rulemaking R.18-03-011 and Decision D.19-08-025). Frontier shares the CPUC's commitment to public safety and concern for addressing the impacts that the unprecedented Public Safety Power Shutoffs (PSPS) have had statewide, on the telecommunications industry, and Frontier's landline voice services.

As Frontier's Senior Vice President of Regulatory Affairs, I will represent the Company at the Nov. 20 Pre-Hearing Conference (PHC) with support from Frontier's California-based Director of Network Operations for the West Region, Mark Capurso. Mr. Capurso has extensive expertise in network management and emergency preparedness. As requested, we will be prepared to report on Frontier's actions throughout the recent PSPS and wildfire events including our detailed reporting to Cal OES and collaboration with California agencies, governments, utilities, and communities.

As with California consumers generally, Frontier's copper-based distribution network is impacted by the PSPS given our wireline network's dependence on commercial power. Accordingly, Frontier has taken numerous steps to prepare for and respond to the extended power shutdowns. Since the PSPS were first initiated, Frontier has mobilized our regional operations teams, with crews responding immediately to assess and maintain our network systems and mitigate, where possible, service disruption to our customers and emergency communications. I am pleased to report Frontier has thus far successfully addressed the minimal impacts to our services and network that have occurred as the result of commercial power interruptions.

Per the specific request for information set forth in your November 13, 2019 letter, below please find Frontier's responses, which are also being submitted to CPUC Communications Division staff:

**1. Responsiveness during the latest wildfires and public safety power shutoffs to keep communications services on, specifically identify:**

**The amount and type of power available on site at your central offices, headends and wireless switches, indicating how long these facilities can operate at average load without main power and what your plan is to refuel, if a generator is present. Separately, indicate the number of remotes, field cabinets, nodes or other devices between the subscriber's homes and your central office and headends, and how long each of these devices can operate at average load without main power. Further, provide your refueling plans for these field cabinets, nodes, and remotes.**

**Response:** In wireline telecommunications the term for brick and mortar facilities that house network equipment is Central Office, not headend.

Frontier has 641 offices (Central Offices, Remote Switching Units, Controlled Environmental Vaults, and Remote Hut locations) throughout California. Most of these locations have fixed generators. Frontier also has 88 portable generators that can be deployed as required.

The Frontier network is built to a common telecommunications standard for backup power. Facilities with fixed generators have an auto start emergency generator intended to supply 72 hours or more hours of continuous power during a commercial power outage as well as on site battery to provide 3-4-hours of supplemental power further support operations. Locations without a fixed generator are typically engineered to with batteries intended to supply 8 hours of backup power.

Frontier's Central Offices (Headends) are designed to run for 72 hours or more with the fuel on hand. Fuel tanks are topped off regularly and before seasonal requirements dictate. For those Central Offices (Headends) or Remote Switch Unit offices that are not equipment with fixed generators and based on size, available space and environmental considerations at the time offices were built, Frontier has designated portable generators that are delivered and connected by a full-time Frontier employee when needed. Central Offices (Headends), Remote Switch Units and microwave locations are also subject to extensive preventive maintenance routines that are regularly performed to verify operational performance of their back-power systems, including fuel level assessments and battery and generator testing. Frontier also submits an annual filing affirming that this testing has been performed in compliance with Federal Communications Commission (FCC) regulations applicable to 911/PSAP network operations.

First Level Refueling for diesel fuel in Northern California and Southern California is performed by full-time Frontier personnel with vehicles outfitted to carry 100 gallons of diesel. Frontier uses several experienced vendors, for emergency deliveries and those involving 500 gallons or more. In Southern California, Frontier employs additional back up measures and stores additional diesel supplies at a vendor location in the event Frontier experiences any impediment to its regular diesel fuel supply. Frontier also has propane fueled generators in both Northern California and Southern California, which are refueled by a local/regional vendor as needed.

Field remotes, which represent approximately 15 percent of services, are equipped with batteries that are designed to operate 4-8 hours in the event of commercial power interruptions. When extended commercial power interruption events occur, Frontier dynamically assesses the need for back up power to impacted field remotes and, on a priority basis and as situational conditions permit, Frontier provides additional supplemental backup power to support services. Frontier prioritizes services to hospitals, police departments, and remote cabinets with 100 or more customers.

- a. **For wireless providers, provide a list of the cell sites which you have located in the Tier 2 and Tier 3 fire threat areas and how long each facility can operate at average load with onsite power. If the site has a generator, how long can this site operate at average load without refueling and what are your refueling plans?**

**Response:** Frontier is not a wireless provider.

- b. **Describe the locations in your network where actions need to be taken to harden the communications infrastructure for risk, including but not limited to, wildfires and PSPS events. Provide a list of specific locations that allow emergency responders to understand where catastrophic events (wind, water, fire, earthquake and subsidence) may have local and regional reliability impacts. This must include areas and communities where fiber backhaul routes do not have adequate hardening or physical redundancy.**

**Response:** As described above, Frontier's network has been designed consistent with telecommunications resiliency standards to provide continuity of services. Facilities that serve large numbers of customers are equipped with robust backup power capabilities. In general, remote and isolated locations that serve small numbers of customers are equipped with battery backup designed to operate 4-8 hours in the event of commercial power interruptions. These remotes will not operate for prolonged periods without commercial utility power. Frontier is currently working as part of a collaborative effort to introduce increased diversity in two main California corridors. Specifically, Frontier is actively working to implement improvements in fiber facilities along HWY 299 between Redding and the Coast and portions of HWY 395 in connection with state California Advance Services (CASF) grant recipients. In addition, Frontier has a CASF grant project pending approval by the CPUC that would enhance network facilities along a portion of HWY 395 in Northern California between Alturas and Susanville.

- c. **Provide the reports of outages which you sent to the FCC for each day of the recent Disaster Information Reporting System (DIRS) activation in California.**

**Response:** Please see the attached zip file of confidential DIRS reports filed with the FCC. These reports reflect Frontier's best available information at the time. The DIRS reports have been designated as confidential pursuant to Pub. Util. Code § 583; G.O. 66-D § 3.2(b); Gov. Code §§ 6255(a) and 6254(k); Civ. Code § 3426.1(d); Evid. Code § 1060; 6 C.F.R. § 29.2(b); 6 U.S.C. § 673(a)(1)(E); and FCC Public Notice, DA 07-3871. The confidential designations of the DIRS reports are supported by the Declaration of Allison M. Ellis, Frontier's Senior Vice President,

Regulatory Affairs.

**2. Engagement and timely responsiveness to requests from Cal OES and CAL FIRE. Communication providers are directed to take immediate corrective actions that, at a minimum, include:**

- a. **Confirm the name of an Emergency Operations Center (EOC) liaison that can be present 24/7 in the state operations center during emergency response events. The EOC liaisons shall be trained in emergency response, in accordance with Standardized Emergency Management System (SEMS) and have working knowledge of utility operations and business processes.**

**Response:** Frontier has an Emergency Operations Center Team (EOC) in California that is available 24/7 and that coordinates with Cal OES and other utilities during emergency events. Frontier is also in the process of working with Cal OES and the California Utilities Emergency Association (CUEA) to enhance training of Frontier personnel on coordination with Cal OES during events and expects to complete this in early December.

- b. **Develop and implement processes that will ensure that County EOC liaisons will have the latest information during PSPS and wildfire events and are enabled and empowered to resolve local issues as they arise.**

**Response:** Frontier's EOC and 911 teams remain in contact with Cal OES, CUEA, and CUEA members, through calls, meetings and emails, as appropriate, during events.

- c. **Establish a more effective communication structure with state, county and tribal government emergency management personnel. This communications structure shall be separate and unique from general updates to local governments and other stakeholders to allow for emergency personnel to receive the support and information required to properly respond.**

**Response:** In compliance with D.16-12-066 OP 16 in the Rural Call Completion Investigation (I 14-05-012), Frontier staffs a special 24 hours a day, 7 days a week 800 number that it has provided to county officials and tribal emergency contacts for their use during emergencies. Frontier will review its list of official emergency contacts, including local points of contact, and will update its communication to emergency contacts to further ensure an open line of communication exists for catastrophic events. In addition, Frontier participates in local government meetings regarding emergency response, as needed and when requested.

**3. Compliance with D.19-08-025.**

- a. **Decision 19-08-025 directs communications carriers to provide a minimum level of consumer protections and safety actions in the case of a declared disaster. Based on responses we have received so far, the CPUC needs to hear more specifics about what you are doing and provide specifics such as what equipment and when.**

**Response:** As ordered in D.19-08-025, Frontier complies with the requirements for communications providers. Frontier has timely filed advice letters for state declared disasters, filed its advice letters for the communication plan and is daily reporting the status of fires to

the CPUC Communications Division staff. Frontier is also timely responding to data requests. Frontier provides the required credits and waivers to customers whose service is impacted. In addition, Frontier undertakes the following during emergency or significant events:

- Frontier’s ERC convenes Subject Matter Expert (SME) leaders, continuously monitors situations, and coordinates Frontier’s response to the event.
- Company leaders work closely with communities, first responders, and regulatory agencies to provide essential information to stakeholders. Frontier uses multiple channels, including press releases, customer emails and text messages, and dedicated situational web pages.
- As a member of CUEA Frontier collaborates with other utilities in response efforts and coordinating post-disaster infrastructure restoration.
- With safety as the highest priority, Frontier crews actively work to secure and prepare facilities and infrastructure including central offices, remote network sites and backup power facilities to maximize our ability to provide service during and after emergency events.
- Frontier stages materials that may be needed for repair (cable, equipment, parts, etc.) in nearby locations to speed its restoration response to disaster-related network damage. In addition, Frontier works to expedite the availability Fiber-optic cable and large gauge telecom cables, which are specialized materials that take time to procure.
- Once safety officials clear disaster-affected areas for safe access, Frontier coordinates with other utilities to survey its facilities and determine utility pole damage and aerial network damage.
- Frontier has repair and construction teams standing-by, ready to enter disaster-affected zones to perform any necessary restoration work.

I look forward to participating on behalf of Frontier at the PHC.

Respectfully submitted,



Allison M. Ellis  
Senior Vice President, Regulatory

cc: Liane Randolph, Commissioner  
California Public Utilities Commission

Martha Guzman Aceves, Commissioner  
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