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November 18, 2019

**Via Electronic-Mail**

President Marybel Batjer  
California Public Utilities Commission  
505 Van Ness Ave., 5<sup>th</sup> Floor  
San Francisco, CA 94102

Re: November 13, 2019 Letter to Communications Industry Leaders

Dear President Batjer:

Thank you for your November 13, 2019 letter to Communications Industry Leaders and the opportunity to provide you with additional information<sup>1</sup> regarding Verizon Wireless' (Verizon's) robust disaster relief preparedness and response efforts during the multiple public safety power shutoff (PSPS) events and concurrent wildfires last month. Verizon recognizes that collaboration and transparency among stakeholders is essential, particularly in this extraordinary and unprecedented new reality of protracted power shutoff events and more frequent disasters.

Verizon is pleased to report that its network fared very well during the recent PSPS events and suffered no impacts as a result of the major wildfires. Verizon strove to communicate proactively and regularly with State and Local leaders and emergency management officials before and throughout the events. Verizon's Relief Team deployed temporary assets, loaner devices and other assistance to Red Cross shelters and local Emergency Operations Centers (EOCs) in the impacted communities, coordinating with local governments, first responders and other public safety partners.

Verizon recognizes, however, that more can always be done to enhance situational awareness and promote public safety, and Verizon remains committed to partnering with the Commission and other State and Local leaders to further develop and implement a reasonable and consistent framework for reporting protocols that builds on the work we have already begun with the California Office of Emergency Services (Cal OES) and other emergency management agencies.<sup>2</sup>

To that end, Verizon will begin making available – on a public and non-confidential basis – information about the percentage of Verizon's cell sites in service during disaster situations so that the Commission, Cal OES, local first responders and the public at large can compare Verizon's performance against aggregate industry data that is made available

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<sup>1</sup> See Verizon's October 29, 2019 response to Cal OES Director Mark Ghilarducci's letter to Verizon and other communications companies. As noted in your November 13 letter, Director Ghilarducci expressed many of the same concerns as you have in your letter. We copied you and the Governor's Chief of Staff Ann O'Leary on Verizon's October 29 response to Director Ghilarducci and are grateful for the opportunity to build on that response to provide you with additional information and lessons learned following the recent PSPS events and wildfires.

<sup>2</sup> See *id.* at p. 2, note 1.

through the FCC's Disaster Information Reporting (DIRS) reports. While Verizon has been filing this information with the Commission on a confidential basis, as provided under applicable State and federal regulations, Verizon believes increased public disclosure of company-specific outage information will further improve information flow and transparency during disasters and other emergencies without compromising competitively sensitive data.

As you know, the unprecedented scale and scope of the multiple electric utility PSPS events and wildfires last month presented considerable challenges for all impacted parties, including communications providers. Verizon is proud of how its award-winning network<sup>3</sup> performed amid the loss of commercial power to 35 counties in Northern California and significant areas (seven counties) of Southern California during the late October PSPS events, while experiencing no customer-facing impacts on our hardened network as a result of the simultaneous Kincadee, Easy, Tick, Getty, Hillside, and Maria fires. We were able to maintain service for the vast majority of our wireless sites that lost commercial power during the PSPS events due to our robust backup power plan and network design.

While your letter cites aggregated, industry-wide data of how networks overall operated in Marin, Sonoma and Napa Counties during the PSPS events, a deeper dive reveals that Verizon's network substantially outperformed the reported aggregated data for all wireless carriers in those counties. For example, at the height of events on October 28, the wireless industry collectively reported approximately 57% of its cell sites out of service in Marin County; by comparison, **only 8% of Verizon's cell sites were out of service in Marin County**. Comparisons in Sonoma and Napa Counties were similar: on October 28, **only 7% and 2% of Verizon's cell sites were out of service in Sonoma and Napa Counties** compared to 27% and 19% for the industry, respectively.

Verizon's strong network performance is no accident; it resulted from the efforts of our network team, which worked around the clock, evaluating potential impacts, optimizing individual cell sites to provide overlapping coverage where feasible, refueling generators, and deploying portable generators as needed. Verizon staffed its own EOC in Walnut Creek 24x7 throughout the events, with Verizon's network engineers constantly monitoring all sites and responding as needed in order to manage the crisis created by the PSPS events.

Once the magnitude of the PSPS events in late October became evident from electric utility notifications, prior to the actual shutoff, Verizon proactively communicated with Cal OES and other stakeholders by informing them where we anticipated Verizon's wireless service might be impacted. Once power was shut off, Verizon deployed portable generators where needed,<sup>4</sup> refueled and repaired generators that failed, and continuously monitored the network.

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<sup>3</sup> In July 2019, Verizon received RootMetrics' overall network performance award for a record 12<sup>th</sup> consecutive time: <https://www.verizon.com/about/news/verizon-best-performing-network-12th-straight-time>. In addition, for the 23<sup>rd</sup> consecutive time, customers rated Verizon #1 in every single category in J.D. Power 2019 Wireless Network Quality Performance Study<sup>SM</sup>, including calls, messages, and data connection experiences.

<sup>4</sup> There were a few discrete locations where deploying portable generators was not feasible.

Verizon did its best to keep Cal OES well informed throughout the PSPS events during the week of October 27-November 1, 2019. At the end of each day during that week, Verizon provided daily reports to Cal OES with information about network impacts and performance and locations where Verizon's Relief Team had deployed. Examples of this communication are attached to this letter as Exhibit A. In addition, Verizon embedded a representative at Cal OES during that week from morning to night, who provided ongoing updates to Cal OES staff twice-daily or more, as requested. Examples of these updates are attached as Exhibit B.

Verizon's Relief Team also ran to the wildfire crisis, providing temporary deployable assets, charging stations, loaner phones, WiFi access, jetpacks, and WiFi routers to about 20 evacuation shelters in Northern and Southern California and 6 local government or public safety partners.

In addition, Verizon provided unlimited calling, texting, and data to impacted customers in Los Angeles, Marin, Napa, Sonoma, San Bernardino and Ventura counties that were affected by the Tick, Kincade, Getty, Hillside, and Easy Fires.

Finally, in recognition of the human toll the fires created with loss of homes, clothes, and other necessities, Verizon donated \$100,000 to the California Fire Foundation, which provides \$250 vouchers to disaster victims through its Supplying Aid to Victims of Emergency (SAVE) program.

These are just some examples of the many actions that Verizon undertook (and consistently undertakes) to maintain its network service and provide support to first responders, public safety, and the community. Verizon recognizes that more can be done, however, and we look forward to working with the Commission and stakeholders in this proceeding on these important issues.

The following responds to the questions in your letter:

**1. RESPONSIVENESS DURING THE LATEST WILDFIRES AND PUBLIC SAFETY POWER SHUTOFFS TO KEEP COMMUNICATIONS SERVICES ON.**

Verizon's network performed very well during the wildfires and PSPS events. While the first PSPS event of October 9-12 was challenging, the PSPS events in late October posed even greater challenges, given that there were four PSPS events throughout Northern and Southern California that rolled into each other, along with multiple wildfires at the same time. The PSPS events in late October commenced in the late hours of Saturday night, October 26 and lasted through Friday, November 1. During this last week of October, our network maintained service without disruption at high levels, with an average of 97% of all macro-sites without commercial power continuing to operate as usual due to our comprehensive backup power strategy and overlapping network design. Although we experienced loss of service at discrete locations, due to topography, technology, or other restrictions, we are currently exploring options for how best to address these issues for the future. We proactively communicated to Cal OES and other impacted stakeholders, including the Commission, regarding those specific areas where we anticipated service disruptions and where we lost service. See Exhibits A, B, C.

- ***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.***
- A substantial majority of our macro sites have four to eight hours of battery backup, and a considerable majority also have permanent (fixed) generators. With a few exceptions, all of those macro sites that do not have permanent generators can be served with portable generators. Fixed generators can run for 24-72 hours on a single fuel tank (the runtime for portable generators is typically slightly less), and both fixed and portable generators can be refueled indefinitely (so long as we have access to the site). Moreover, because of overlapping coverage area cell site design, the outage of one macro site will not always cause service disruption or degradation for a customer.
- Hubs are equipment points in our network that aggregate data, voice and other wireless traffic and then transport that traffic to our mobile switching centers. Our hubs have 8 hours of battery backup, with permanent generators at a majority of hub locations and the ability to add portable generators at remaining sites.
- Our mobile switching centers are the lifeblood of our networks and have massive permanent generators that last for days on a single fueling and can be refueled for indefinite periods (assuming that we have access to the site). They also have large battery arrays that fill a large room. The batteries at full load can operate for 6 hours and are meant to ensure continuity of service while transferring from commercial power to generator power and during refueling of the generator.
- Regarding refueling, Verizon refuels all generators, whether fixed or portable, to ensure continuity of service during either a PSPS or other emergency event. We were not always able to anticipate lost power at certain sites, however, because Verizon did not receive accurate and advance notice of the PSPS for all sites. We had less than 24-48 hours notice for some sites; inaccurate or conflicting lists of sites; and at least 29 sites were never on any notice list. This placed additional burdens on our taxed network teams, as they struggled to ensure that these sites remained in service.<sup>5</sup> Despite this, we still maintained service for the vast majority of our sites.
- ***List of cell sites which you have located in Tier 2/Tier 3 fire threat areas and how long each facility can operate at average load with offsite power. If the site has a generator, how long can this site operate at average load without refueling and what are your refueling plans?***
- Verizon is in the process of compiling a list that it will provide to the Director of the Communications Division of the Commission upon completion. The discussion above of our backup power capabilities applies

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<sup>5</sup> As an example, we did not receive notices for many locations in Marin, and this left our network team scrambling at the last minute to manage the loss of commercial power to those sites.

generally to all our sites including those in Tiers 2 and 3. See response below, however, for discussion of discrete sites that do not have backup power.

- ***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.***
- It's not clear what "hardening" the infrastructure means in the context of wireless antennas. However, certain space and topographical challenges (such as hilly or mountainous areas) may prevent us from deploying backup power to certain wireless facilities. In addition, there may be landlord or local restrictions that prevent installation of generators at certain sites. Where there is damage to certain routes during a wildfire or a PSPS event, the damaged backhaul or transport may cause service outage to sites.<sup>6</sup> Although the loss of these sites may not in many cases result in lost service (due to nearby cell sites in Verizon's network), in some cases, these sites may lose power and service may be disrupted or degraded. Verizon is exploring options for preventing power loss to these sites.
- In the meantime, Verizon is currently in the process of gathering statewide information regarding such locations, and once we have developed a comprehensive assessment of such areas, Verizon will provide this information to the Director of the Communications Division, with appropriate confidentiality protections.
- ***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.***
- These reports were already provided to the Commission.

## **2. ENGAGEMENT AND TIMELY RESPONSIVENESS TO REQUESTS FROM CAL OES AND CAL FIRE**

In recognition of how critical it is for State and Local leaders and emergency management officials to have situational awareness, Verizon was as transparent as possible during the disaster and PSPS events. In addition to the network updates that Cal OES requested from communications providers, Verizon proactively provided daily updates to Cal OES, local governments, the Commission, and the Governor's office. Our updates included information about network impacts, our relief efforts, and locations of lost cell coverage. Please see Exhibits A, B, C, attached hereto.

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<sup>6</sup> This response does not address hardening of backhaul as that service is largely provided to Verizon through third party providers at this time.

- **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.**
- Verizon understands the importance of having representatives who will be able to provide adequate and timely updates to Cal OES throughout an emergency and, to that end, provided representatives who were embedded daily from morning to evening at Cal OES during the October 26-November 1, 2019 PSPS events. During a disaster or major PSPS event, Verizon also staffs its own EOC, and focuses resources on managing and monitoring the network. Verizon has several team members who are trained and made available during significant emergency response events. In a PSPS event of a lengthy duration, such as the ones in Northern California in late October, Verizon places representatives at the Cal OES operations center on a rotational basis. Danna Diamond and Wes Senechal were liaisons with the Cal OES EOC during the PSPS events in late October. Who we will staff in the future will be determined based on schedules.
- **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.**
- Verizon is working to develop processes to communicate information with Cal OES and County EOC liaisons during disasters and PSPS events that can be applied consistently across different jurisdictions. Although we believe that providing information to Cal OES and having Cal OES disseminate the information to local EOCs may be the most efficacious process, we recognize that County EOCs need actionable information.
- Additionally, as indicated above, Verizon intends to publicly disclose Verizon-specific outage percentage information during disasters so that people can compare our network performance during disaster to the aggregate industry information collected and released by the FCC through its DIRS reporting. This will allow consumers and policymakers to review how Verizon's percentage of cell sites out of service in a particular county compared to the industry at large. It also will help our public safety partners to be better able to assess the level of network availability in the community. And it will allow local governments to provide county-specific information to the public about where they may encounter disrupted or degraded service.
- **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.**

- As noted above, Verizon believes that an efficient communications structure includes sharing information with Cal OES, with Cal OES distributing relevant information to local EOCs initially. We also are considering other ideas about information that could be provided to the state, county, and tribal governments, which we will share in this proceeding. For example, during the recent PSPS events, Verizon proactively shared information with Cal OES and impacted State legislators regarding discrete areas of our coverage area that might experience service disruption due to lack of backup power as described above. We welcome a discussion with impacted local emergency response officials on how best to provide them with this information. This could be an area where Commission action would be helpful, e.g., a unified list of local emergency response officials as such does not exist to Verizon's knowledge at present.

### 3. COMPLIANCE WITH D.19-08-025:

- ***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.***
- Verizon has engaged in considerable disaster relief efforts during each of the disasters and PSPS events and prides itself on its partnership with the Red Cross, local jurisdictions, public safety partners, and the community. As noted above, we donated \$100,000 to the California Fire Foundation during the October 2019 wildfires. We also provided data/text/voice overage relief to customers in communities affected by the wildfires.
- As soon as a disaster occurs, our Relief Team reaches out to determine how best it may assist evacuation shelters, first responders, and local governments. For example, we were instrumental in ensuring that Cal Fire's base camp in Ventura County had communications service throughout the fires. Because the base camp was unable to have data lines brought in, Verizon provided four WiFi routers, activated four mobile numbers for Cal Fire's existing cradlepoint routers, and loaned 10 phones and 10 jetpacks to enable the camp to run its communications solely off of Verizon's wireless service.
- We also provided our state government customers with emergency assistance, as needed. During the wildfires, the San Bernardino Field Office experienced service disruption for its office phones due to an underground connection cut. Verizon immediately loaned twelve 4G LTE Wireless Home Phones for the DMV at no cost.
- Verizon's advice letter filings pursuant to D.19-08-025 list various examples of its disaster relief efforts throughout the year. As an example of the magnitude of our efforts, for the most recent PSPS events and wildfires, Verizon engaged in the following disaster relief support:

- **Provision of Temporary Mobile Assets:** Verizon provided a Satellite on Trailer (SPOT) to supplement service in Santa Cruz.
- **Equipment and WiFi to Red Cross Shelters:** Verizon offered or provided equipment to the following Red Cross Shelters during the various fires and PSPS events:

**Kincade Fire:**

- Sonoma County Fairgrounds - Santa Rosa (12 Charging Stations, 1 Power Strip)
- Veterans Memorial Hall - Santa Rosa (2 Phones, 2 Charging Stations)
- Sonoma-Marin Fairgrounds - Petaluma (1 Wireless Home Phone, 2 Charging Stations, 2 Jetpacks)
- Veterans Memorial Hall - Petaluma (2 Phones, 2 Charging Stations, 1 Home Phone Connect)
- Community Center - Petaluma (Declined – Did not need assistance)
- Petaluma Valley Baptist Church (1 Home Phone Connect, 2 Charging Stations)
- New Life Christian Church (1 Phone, 2 Charging Stations)
- Napa Valley Community College (1 Wireless Home Phone, 3 Charging Stations)
- Crosswalk Church - Napa (1 Home Phone Connect, 2 Charging Stations)
- Chardonnay Winery (1 Wireless Home Phone, 2 Charging Stations)
- Napa Expo - Napa (2 Charging Stations, 1 Phone)
- Marin County Fairgrounds (3 Charging Stations, 1 Home Phone Connect )
- Calvary Chapel (2 Charging Stations)
- Sonoma County Health and Human Services (2 Charging Stations, 1 Wireless Home Phone)

**Tick Fire**

- Red Cross Headquarters – Los Angeles (5 Jetpacks)
- College of the Canyons – Valencia (Charging Stations, Wireless Home Phones, Internet Connected Laptops and WiFi)
- West Ranch High School – Valencia (Charging Stations, Wireless Home Phones, Internet Connected Laptops and WiFi)



### **Getty Fire**

- Westwood Recreation Center – Los Angeles (Charging Stations, Wireless Home Phones, Internet Connected Laptops, and WiFi)

### **Hillside and Easy Fires**

- Patriot High School – Riverside (Declined – did not need assistance)
- Thousand Oaks Recreation Center (Charging Stations, Wireless Home Phones, and Internet Connected Laptops)
- Rancho Santa Suzanna (Charging Stations, Wireless Home Phones, Internet Connected Laptops, and WiFi)

### **Maria Fire**

- Camarillo Community Center – Camarillo (Charging Stations, Wireless Home Phone, Internet Connected Laptop) (already has its own WiFi)
- ***Equipment to Local Governments and Public Safety:*** Verizon provided or offered equipment to Cal Fire, and local governments and public safety partners.

### **Cal Fire**

- 10 phones, 19 jetpacks, 2 Cradlepoint Routers

### **Kincade Fire**

- Town of Windsor EOC (relocated to the Sonoma County Office of Education in Santa Rosa) (6 phones, 1 Cradlepoint Router, and 9 Wireless Home Phones)
- Sonoma County Office of Education (6 Basic Phones, 1 Home Phone Connect)
- Lakeport PD (1 Jetpack)
- City of American Canyon (1 Cradlepoint Router)

### **Tick Fire**

- Los Angeles County Fire Department (10 Jetpacks)

### **Getty Fire**

- Los Angeles City Fire Department (Declined – Did not need assistance)
- SCE Community Assistance Center - Chatsworth Lake Church (Attempted to provide charging stations - fires and blocked roads prevented access)

**Maria Fire**

- Ventura County Fire Department – Camarillo (10 Jetpacks and 10 Phones)
- Ventura County Sheriff (Declined - Did not need assistance)
- **Voice/Data/Text Overage Relief:** Verizon provided the following relief to customers affected by the fires.
- For the period from October 28 through November 3, Verizon provided our prepaid and postpaid consumer and small business customers affected by the Tick and Kincade Fires with unlimited calling, texting and data in 53 zip codes within the affected communities of the following counties: Los Angeles; Marin; Napa; and Sonoma.
- For the period October 29 through November 3, Verizon also provided our prepaid and postpaid consumer and small business customers who were impacted by the Getty Fire with unlimited calling, texting and data in 3 zip codes within the affected communities of the following county: Los Angeles.
- For the period November 1 through November 3, Verizon provided our prepaid and postpaid consumer and small business customers affected by the Hill and Easy Fires with unlimited calling, texting and data in 5 zip codes within the affected communities of the following counties: San Bernardino and Ventura.

Verizon appreciates this opportunity to engage with the Commission on these issues and to work together to develop a framework for outage reporting protocols. As discussed, we plan to disclose our company-specific outage percentage information during disasters so that they can be compared to the aggregate industry information publicized by the FCC through its DIRS reporting system. We are currently reviewing and developing further processes for communication with government stakeholders. We understand that the Commission, the state and local governments, and Californians are facing tremendous challenges, as is the industry, and we are committed to partnering with you to address these important issues.

Sincerely,



Rudolph Reyes

Cc: Commissioner Guzman-Aceves  
Commissioner Randolph  
Commissioner Rechtschaffen  
Commissioner Shiroma

**EXHIBIT A**



## **WILDFIRE/PUBLIC SAFETY POWER SHUTOFF UPDATES 2019**

*CalOES and Governor's Office*

This is today's update of the impact of current events on Verizon's wireless network and crisis response efforts as of October 29, at 5:22 pm.

### **NorCal Update**

PG&E is in the process of methodically re-energizing its lines. Verizon engineers are continuing to work around the clock to keep our wireless facilities up and running during commercial power outages resulting from the PG&E public safety power shutoffs (PSPS). We continue to have generators and backup batteries at the majority of our cell sites and all of our switch locations to ensure that our network is operating with minimal disruption.

Even as PG&E is in the process of re-energizing lines from the current PSPS Event ("PSPS Event 3"), we face a new and widespread PG&E PSPS event ("PSPS Event 4") with de-energization scheduled to begin today, October 29, and continue tomorrow. Some sites that have regained power have lost power again due to this new PSPS event. Our network and crisis response teams remain committed to supporting the needs of first responders, CalOES, relief organizations, and residents throughout these events.

***There continues to be no impact on Verizon's network as a result of the Kincade Fire.***

PG&E's PSPS Event 4 is expected to affect 32 counties out of 47 in Northern California. Many of the counties overlap with ones in the existing PSPS Event 3. Our network has performed well with limited service impacts reported as a result of the PSPS. We have further improvement in performance today.

While the situation in the field remains fluid and the numbers are dynamic, we currently have 327 sites that are without commercial power from both the current and new PSPS events. Due to generator and battery backup power, approximately 98% of the impacted sites are operational. Approximately 2% of impacted sites are currently out of service. However, in most cases we have overlapping coverage from neighboring sites. Some customers may experience service disruption or degraded service where overlapping coverage and capacity is limited. We also have facilities out of service in Oakland Hills, Highway 1 Davenport, Highway 35/84, Santa Rosa, Santa Cruz areas and Highway 50. Customers may experience service disruption or degradation in discrete parts of these areas as well.

### **Verizon Unlimited Voice/Data/Text Relief for Customers Impacted by Wildfires**

Beginning October 28 through November 3, Verizon is providing our prepaid and postpaid consumer and small business customers who are impacted by the Tick and Kincade Fires with unlimited calling, texting and data in 53 zip codes within the affected communities of the following counties: Los Angeles; Marin; Napa; and Sonoma.



Beginning October 29 through November 3, Verizon is also providing our prepaid and postpaid consumer and small business customers who are impacted by the Getty Fire with unlimited calling, texting and data in 3 zip codes within the affected communities of the following County: Los Angeles.

Customers can verify eligibility for call/text/data relief by entering their zip code here: <https://www.verizonwireless.com/featured/relief/>.

**Verizon Support of Recovery Efforts at Red Cross Centers:** The following is the latest status of our support at Red Cross Shelters. We added more equipment to some shelters and provided support to two additional locations (Napa Expo, and Marin County Fairgrounds).

- Sonoma County Fairgrounds - Santa Rosa (6 Charging Stations, 1 Power Strip)
- Veterans Memorial Hall - Santa Rosa (2 Phones, 2 Charging Stations)
- Sonoma-Marin Fairgrounds - Petaluma (1 Wireless Home Phone, 2 Charging Stations, 2 Jetpacks)
- Veterans Memorial Hall - Petaluma (2 Phones, 2 Charging Stations, 1 Home Phone Connect)
- Community Center - Petaluma (Declined – Did not need assistance)
- Petaluma Valley Baptist Church (1 Home Phone Connect, 2 Charging Stations)
- New Life Christian Church (1 Phone, 2 Charging Stations)
- Napa Valley Community College (1 Wireless Home Phone, 3 Charging Stations)
- Crosswalk Church - Napa (1 Home Phone Connect, 2 Charging Stations)
- Chardonnay Winery (1 Wireless Home Phone, 2 Charging Stations)
- World Central Kitchen (1 Jetpack)
- Napa Expo - Napa (2 Charging Stations, 1 Phone)
- Marin County Fairgrounds - (3 Charging Stations, 1 Home Phone Connect )
- College of the Canyons – Valencia (closed as of Sunday, 10/27/19) (Charging Stations, Wireless Home Phones, Internet Connected Laptops and WiFi)



- West Ranch High School – Valencia (closed as of Sunday, 10/27/19) (Charging Stations, Wireless Home Phones, Internet Connected Laptops and WiFi)
- Red Cross Headquarters – Los Angeles (5 Jetpacks)
- Westwood Recreation Center – Los Angeles (Charging Stations, Wireless Home Phones, Internet Connected Laptops, and WiFi)

Verizon customers can also help the [American Red Cross](#) in their disaster relief efforts by texting the word REDCROSS to 90999 and \$10 will be added to their Verizon Wireless bill.

### **Other Verizon Support**

- Town of Windsor EOC (relocated to the Sonoma County Office of Education in Santa Rosa)
  - 6 phones, 1 Cradlepoint Router, and 9 Wireless Home Phones
- CalFire
  - 10 phones, 19 jetpacks, 2 Cradlepoint Routers
- Los Angeles County Fire Department
  - 10 Jetpacks
- Los Angeles City Fire Department (Declined – Did not need assistance)

### **SoCal Update**

***There continues to be no impact on Verizon's network as a result of the Tick Fire.***

***There is no impact on Verizon's network from the Getty Fire.***



## **WILDFIRE/PUBLIC SAFETY POWER SHUTOFF UPDATES 2019**

*CalOES and Governor's Office*

This is today's update of the impact of current events on Verizon's California wireless network and crisis response efforts as of November 1.

PG&E has concluded its public safety power shutoff (PSPS) events and SDG&E and SCE are in the process of restoring power and concluding their PSPS events. Verizon is pleased to report that commercial power has been restored to nearly all of our sites, and we have backup power for the remaining few sites without commercial power. We have no sites that are out of service due to the PSPS events.

### **NorCal Update (as of 11/01/19, 3:02 pm)**

***There is no impact on Verizon's network as a result of the Kincade Fire.***

**PG&E PSPS Update:** PG&E has restored service to its customers. Throughout these unprecedented events, Verizon engineers worked tirelessly around the clock to keep our wireless facilities up and running during commercial power outages from the PSPS event. We were able to maintain service on our network with minimal disruption due to backup power (generators and backup batteries) at the majority of our cell sites. We now have no sites that are without commercial power due to PG&E's PSPS event.

### **SoCal Update (as of 11/01/19, 12:54 pm)**

***There continues to be no impact on Verizon's network as a result of the Tick Fire.***

***There continues to be no impact on Verizon's network from the Getty Fire.***

***There continues to be no impact on Verizon's network from the Easy Fire.***

***There is no impact on Verizon's network from the Hillside Fire.***

***There is no impact on Verizon's network from the Maria Fire.***

**Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E) PSPS Update:** Power has been restored to 95% of sites in SCE and SDG&E service territories from the PSPS events. Currently, we have approximately 6 sites without commercial power due to the SDG&E and SCE PSPS events. However, all of these sites are on backup power. We have restored service to Santiago Canyon, Carbon Canyon, and Calabasas. We have no sites out of service at this time.

### **Verizon Donation to Cal Fire Foundation**



The Verizon Foundation today announced a \$100,000 grant to the California Fire Foundation to support the immediate relief efforts for those impacted by the devastating 2019 California wildfires.

"Our hearts go out to Californians who've been affected by the recent wildfires," said Jonathan LeCompte, Verizon West Area President. "We know that disaster recovery takes time and resources, so we're proud to support the California Fire Foundation as they help our neighbors rebuild their lives."

### **Verizon Unlimited Voice/Data/Text Relief for Customers Impacted by Wildfires**

Beginning October 28 through November 3, Verizon is providing our prepaid and postpaid consumer and small business customers who are impacted by the Tick and Kincade Fires with unlimited calling, texting and data in 53 zip codes within the affected communities of the following counties: Los Angeles; Marin; Napa; and Sonoma.

Beginning October 29 through November 3, Verizon is also providing our prepaid and postpaid consumer and small business customers who are impacted by the Getty Fire with unlimited calling, texting and data in 3 zip codes within the affected communities of the following county: Los Angeles.

Beginning November 1 through November 3, Verizon is providing our prepaid and postpaid consumer and small business customers who are impacted by the Hill and Easy Fires with unlimited calling, texting and data in 5 zip codes within the affected communities of the following counties: San Bernardino and Ventura.

We are notifying customers in affected areas by text about this relief. Customers can verify eligibility for call/text/data relief by entering their zip code here: <https://www.verizonwireless.com/featured/relief/>.

### **Verizon Support of Recovery Efforts at Red Cross Centers**

Throughout the duration of the PSPS events, our network and crisis response teams traveled throughout the State to support the needs of first responders, CalOES, relief organizations, and residents.

Below is a summary of recent developments. Most of the shelters in Northern California have now been closed. We provided equipment to a new shelter established for the Maria Fire in Ventura County, as well as to the Ventura County Fire Department.

### ***Kincade Fire***





- Sonoma County Fairgrounds - Santa Rosa (12 Charging Stations, 1 Power Strip)
- Veterans Memorial Hall - Petaluma (2 Phones, 2 Charging Stations, 1 Home Phone Connect)

***Verizon provided/offered support for the following shelters for the Kincade Fire (which are now closed)***

- Veterans Memorial Hall - Santa Rosa
- Sonoma-Marin Fairgrounds - Petaluma
- Community Center - Petaluma
- Petaluma Valley Baptist Church
- New Life Christian Church
- Napa Valley Community College
- Crosswalk Church - Napa
- Chardonnay Winery
- Napa Expo - Napa
- Marin County Fairgrounds
- Calvary Chapel
- Sonoma County Health and Human Services

***Tick Fire***

- Red Cross Headquarters – Los Angeles (5 Jetpacks)

***Verizon provided support to the following shelters for the Tick Fire (which have been closed since 10/27/19)***

- College of the Canyons – Valencia (Charging Stations, Wireless Home Phones, Internet Connected Laptops and WiFi)
- West Ranch High School – Valencia (Charging Stations, Wireless Home Phones, Internet Connected Laptops and WiFi)



### ***Getty Fire***

- Westwood Recreation Center – Los Angeles (Charging Stations, Wireless Home Phones, Internet Connected Laptops, and WiFi)

### ***Hill and Easy Fires***

- Patriot High School – Riverside (Declined – did not need assistance)
- Thousand Oaks Recreation Center (Charging Stations, Wireless Home Phones, and Internet Connected Laptops)
- Rancho Santa Suzanna (Charging Stations, Wireless Home Phones, Internet Connected Laptops, and WiFi)

### ***Maria Fire***

- Camarillo Community Center – Camarillo (Charging Stations, Wireless Home Phone, Internet Connected Laptop) (already has its own WiFi)

Verizon customers can also help the [American Red Cross](#) in their disaster relief efforts by texting the word REDCROSS to 90999 and \$10 will be added to their Verizon Wireless bill.

### **Other Verizon Support**

Verizon customers can help the [World Central Kitchen](#) in their disaster relief efforts by texting the word FOOD to 80100 for [World Central Kitchen](#), and \$10 will be added to their Verizon Wireless bill.

- CalFire
  - 10 phones, 19 jetpacks, 2 Cradlepoint Routers

### ***Kincade Fire***

- Town of Windsor EOC (relocated to the Sonoma County Office of Education in Santa Rosa)
  - 6 phones, 1 Cradlepoint Router, and 9 Wireless Home Phones
- Sonoma County Office of Education
  - 6 Basic Phones, 1 Home Phone Connect
- Lakeport PD



- 1 Jetpack
- City of American Canyon
  - 1 Cradlepoint Router

***Tick Fire***

- Los Angeles County Fire Department
  - 10 Jetpacks

***Getty Fire***

- Los Angeles City Fire Department (Declined – Did not need assistance)
- SCE Community Assistance Center - Chatsworth Lake Church (Attempted to provide charging stations - fires and blocked roads prevented access)

***Maria Fire***

- Ventura County Fire Department – Camarillo
  - 10 Jetpacks and 10 Phones
- Ventura County Sheriff (Declined - Did not need assistance)

Please let us know if you have any questions or if there is further information we can provide at this time.

We anticipate that this will be the last report for this event and the whole team at Verizon sincerely thanks all of our public safety partners for all of their service to the State of California during this most recent crisis.

## Verizon Email to OES, Oct. 26, 2019, 7:27 pm

### Budge;

In preparation for the PSPS events announced for this weekend, the Verizon team is working diligently to prepare for the loss of commercial power and we are doing everything possible to ensure continued communications during the shutoff. We have identified a few locations however, where due to topographical limitations and/or technological challenges, there is reason to believe we may experience a loss or significant degradation of cellular communications. In our efforts to be collaborative and share information, we want to inform you that the specific areas noted below may be impacted. In this new era of frequent PSPS events, we are determined to continue to explore solutions and would welcome robust dialogue in the near future.

Here are the specific locations we have reason to believe may lose wireless connectivity or have degraded service:

*Santa Rosa Area:* Sonoma Highway & Calistoga Road, South of Fountain Grove Parkway, 4<sup>th</sup> Street and Hwy [12, Aston Avenue](#) and Petaluma Hill Road, and West College Avenue and Fulton Road.

*Santa Cruz County:* Parts of UC Santa Cruz, Seacliff area, North of Soquel Drive, Freedom Boulevard area, East of Bay Drive and High Street, and Hwy 1 toward Davenport and Ano Nuevo State Reserve.

*Gilroy:* West of Monterey Boulevard between Luchessa Avenue and 3<sup>rd</sup> Street.

*Vacaville:* Pleasant Valley Road and Vaca Valley Road

*Brentwood:* Parts of Marsh Creek Road

*Orinda Area:* Along Hwy 24 and North Camino Pablo Road

*San Ramon Area:* East of San Ramon - Camino Tassajara Road and Highland Road

*Oakland Hills Area:* Along Grizzly Peak Boulevard and East of Highway 13

*Kyburz/Strawberry Area:* Highway 50 between Kyburz and Strawberry

*San Mateo County:* [Highway 84/35 – Highway 35](#) from Highway 84 to Kings Mountain; Highway 84 from Woodside Road to Old La Honda Road

*San Mateo:* West of El Camino Boulevard between Highway 92 and Crystal Springs Road

*Los Gatos:* Along Shannon Road

*Brentwood:* Parts of Marsh Creek Road

Exhibit A

We will continue to keep you updated on relevant updates. Please don't hesitate to contact us if you have any questions.

Thank you,

**EXHIBIT B**



**WILDFIRE/PUBLIC SAFETY POWER SHUTOFF UPDATES 2019**

*CalOES Data and Format Requirement Request / Verizon Response*

Cal OES is requesting specific information to identify communication outages related to wireless, VoIP, wireline, and broadband. It is absolutely critical that Cal OES have access to real-time information regarding your respective companies' infrastructure during these PSPS events, specifically with regard to your resiliency and backup power. In addition, we are requesting data on the efforts you are taking to restore communications and any gaps that you may have. Please use this updated format to [EF2@caloes.ca.gov](mailto:EF2@caloes.ca.gov) as you submit your data for tomorrow's report.

- 1) Fill in the table as identified below.
- 2) Identify any actions being taken to resolve any communication outages.
- 3) Identify any gaps in resources or challenges to restoring communications.

Here is the data. Please use Heidi's email for questions #2 and #3 as well. Thank you and let me know if you have questions.

COUNTIES	# OF CELL SITES DOWN	# OF CELL SITES ON GENERATORS	% OF CELL NETWORK IMPACTED
Alameda			5%
Alpine			0%
Amador			0%
Butte			0%
Calaveras			6%
Contra Costa			3%
El Dorado			2%
Fresno			0%
Humboldt			2%
Kern			0%
Lake			0%
Los Angeles			1%
Madera			0%
Marin			5%
Mariposa			0%
Mendocino			8%
Merced			0%
Monterey			0%
Napa			0%
Nevada			0%
Orange			0%
Placer			0%
Riverside			0%
Plumas			0%
Sacramento			0%
San Bernardino			0%
San Benito			0%
San Diego			0%
San Francisco			0%
San Joaquin			0%
San Mateo			1%
Santa Clara			0%
Santa Cruz			0%
Shasta			0%
Solano			3%
Sonoma			8%
Tehama			0%
Tuolumne			0%
Yolo			0%
Yuba			0%
1) TOTAL			0%



2) Identify any actions being taken to resolve any communication outages.

Teams working 24/7 to closely monitor and resolve

Generator deployments to sites without generators. Engaged multiple vendors and generators resources from other locations to help with refueling efforts.

3) Identify any gaps in resources or challenges to restoring communications.

Access to cell towers due to fire and road closures

Generator deployment impacting noise in residential areas.

Due to scale of PSPS, need for more generator deployment and refueling. Requires lots of logistics and man power



**EXHIBIT C**



## **WILDFIRE/PUBLIC SAFETY POWER SHUTOFF UPDATES 2019**

*California Public Utilities Commission*

This is an update of the impact of current events on Verizon's wireless network and crisis response efforts as of October 28, at 5:00 pm.

### **NorCal Update**

Verizon engineers are working around the clock to keep our wireless facilities up and running during commercial power outages resulting from the PG&E public safety power shutoffs (PSPS). We have generators and backup batteries at the majority of our cell sites and all of our switch locations, and we will refuel our generators to keep them running as necessary during prolonged outages. During this unprecedented event, our network and crisis response teams are committed to supporting the needs of first responders, CalOES, relief organizations, and residents as long as needed.

### ***There continues to be no impact on Verizon's network as a result of the Kincade Fire.***

34 counties (out of a total of 47 counties in Northern California) have been impacted by the PG&E PSPS. The network is continuing to perform well with limited service impacts reported as a result of the PSPS, with an improvement in performance today.

The situation in the field is fluid and the numbers are dynamic, but we currently have 434 sites that we believe to be impacted by the PSPS event. Due to generator and battery backup power, approximately 95.8% of the impacted sites are operational. Less than 4.2% of impacted sites are currently out of service. However, in most cases we have overlapping coverage from neighboring sites. Some customers may experience service disruption or degraded service where overlapping coverage and capacity is limited. We also have facilities out of service in Oakland Hills, Highway 1 Davenport, Highway 35/84, Santa Rosa, Santa Cruz areas and Highway 50. Customers may experience service disruption or degradation in discrete parts of these areas as well.

### **Verizon Unlimited Voice/Data/Text Relief for Customers Impacted by Wildfires**

Beginning October 28 through November 3, Verizon is providing our prepaid and postpaid consumer and small business customers who are impacted by the Tick and Kincade wildfires with unlimited calling, texting and data in 53 zip codes within the affected communities of the following counties: Los Angeles; Marin; Napa; and Sonoma. Customers can verify eligibility for call/text/data relief by entering their zip code here: <https://www.verizonwireless.com/featured/relief/>.

**Verizon Support of Recovery Efforts at Red Cross Centers:** We are supporting Red Cross Shelters with wireless phones, charging stations, and jetpacks. We dropped off more equipment last night and this morning at shelters. Below is the latest summary of our support.

Exhibit C



- Sonoma County Fairgrounds - Santa Rosa (6 Charging Stations)
- Veterans Memorial Hall - Santa Rosa (2 Phones, 2 Charging Stations)
- Sonoma-Marín Fairgrounds - Petaluma (2 Wireless Home Phone, 2 Charging Stations)
- Veterans Memorial Hall - Petaluma (2 Phones, 2 Charging Stations)
- Community Center - Petaluma (Declined assistance)
- Petaluma Valley Baptist Church (1 Home Phone Connect, 2 Charging Stations)
- New Life Christian Church (1 Phone, 2 Charging Stations)
- Napa Valley Community College (1 Wireless Home Phone, 3 Charging Stations)
- Crosswalk Church - Napa (1 Home Phone Connect, 2 Charging Stations)
- Chardonnay Winery (1 Wireless Home Phone, 2 Charging Stations)
- World Central Kitchen (1 Jetpack)

Verizon customers can also help the [American Red Cross](#) in their disaster relief efforts by texting the word REDCROSS to 90999 and \$10 will be added to their Verizon Wireless bill.

#### **Other Verizon Support**

- Town of Windsor EOC (relocated to the Sonoma County Office of Education in Santa Rosa)
  - 6 phones, 1 Cradlepoint Router, and 9 Wireless Home Phones
- CalFire
  - 10 phones, 19 jetpacks, 2 Cradlepoint Routers

#### **SoCal Update**

***There continues to be no impact on Verizon's network as a result of the Tick Fire.***

#### **VZW:**

- Sites without power: 27
- Sites running on generator: 27
- Sites running on battery: 0
- Sites Out of Service: 0



**WILDFIRE/PUBLIC SAFETY POWER SHUTOFF UPDATES 2019**

*Rick Kovar- Emergency Services Manager for Contra Costa County  
(Update provided upon request)*

Mr. Kovar,

Thank you for taking the time to speak with me earlier today.

Regarding the areas of concern identified yesterday, our network team reports that those areas continue to have coverage as of 2:45 pm today.

We are, however, experiencing 2 issues in Lafayette. Network reports at 2:45 pm that we have 2 assets out of Service in Contra Costa County:

1. Site in Lafayette, called Lafayette, has generator that is down, but CDMA (calls and texts) are operational. Currently troubleshooting generator issue for LTE operations.
2. 2nd site in Lafayette, called Stanley Park, is Out of Service, and we are diligently working on deploying a generator to this asset as quickly as possible.

The situation on the ground is of course fluid and dynamic. But this is the situation in Contra Costa County as of 2:45 pm today.

Please reach out to us should you have any other questions. We want to be a resource to you and our public safety partners.



## **WILDFIRE/PUBLIC SAFETY POWER SHUTOFF UPDATES 2019**

*Councilmembers and Mayors*

Hello Councilmember Sheng,

I'm reaching out to proactively inform you and your staff that cell service in parts of your district may be affected by the PG&E PSPS event.

PG&E has announced another PSPS event for tomorrow. We are working diligently in preparation for the loss of commercial power and are doing everything possible to ensure continued communications during the shut off.

We have a few locations, however, where due to topographical limitations and/or technological challenges, there is reason to believe we may experience a loss or significant degradation of cellular communications.

We want to inform you that the specific area noted below over which you have jurisdiction may be an area impacted. In this new era of frequent PSPS events, we are determined to continue to explore solutions and would welcome robust dialogue in the near future.

We have reason to believe that the Oakland Hills area may lose wireless connectivity or have degraded service.