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President Marybel Batjer
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102

Via Email

Dear President Batjer,

I appreciate the message and sense of urgency in your letter dated November 13, 2019 to communications industry leaders regarding the recent public safety power shutoffs (PSPS) implemented by power companies in California.

AT&T considers serving Californians a privilege and an important responsibility. We are committed to providing communications services that the public, and public safety agencies, can trust and rely upon. And we are equally committed to working with the California Public Utilities Commission, CalOES, power companies and our many public safety partners to meet that commitment.

We have conducted an initial assessment of what went right and what went wrong in addressing the extraordinary PSPS events of last month:

- **National Disaster Recovery and Community Response Teams Deployed as Planned.** Our National Disaster Recovery and Community Response Teams deployed statewide, working on a 24/7 basis before and during the multiple PSPS events, utilizing our thousands of fixed generators and mobilizing a fleet of over 2,000 portable generators to our wireline facilities and wireless sites, strategically positioning resources at high-priority CalOES-selected locations and serving wildfire victims on-site at evacuation centers.
- **We Maintained Service Continuity in Fire-Impacted Areas.** By monitoring battery and generator condition, recharging batteries and refueling generators we minimized to the fullest extent possible any service disruptions in the fire-impacted areas in Northern and Southern California. This allowed public safety officials to deploy Wireless Emergency Alerts to both evacuate residents and, where possible, provide warnings to those impacted by the power shutoffs.

AT&T



- **Too Many Customers Were Impacted by Communication Outages Outside Fire-Impacted areas.** Despite our best efforts to prepare and respond, some parts of our network in PSPS impacted areas were affected. The size and scope of these commercial power outages were simply unprecedented and unanticipated. Our network was not designed with the anticipation that a power company would shut off power to over 2 million people at once. We brought hundreds of additional generators from across the country while deploying those generators we have in California, but even those were not enough to cover all our facilities that were left without commercial power. The unprecedented scope of the power outages is causing us to seriously reexamine our fixed and portable generator deployment capabilities for both our wireless and wireline facilities. We apologize to our customers and we want them to know we are actively working to improve our response plans.
- **Industry – State Government Engagement.** AT&T is prepared to take the lead to coordinate a communications industry effort, engaging the CA Governor’s Office and Cal OES, to collaborate and develop solutions to the resiliency issues arising from the October PSPS events (including, but not limited to, cooperative frameworks, where appropriate, that pool network wireless assets during emergencies, flexible backup power solutions, and communications and notifications protocols). AT&T believes that the combined communications expertise of the carriers, in concert with Cal OES emergency response expertise, can lead to the development of best practices for responding to future PSPS events, which can take advantage of any possible synergies and efficiencies.

We recognize adjustments to our response plan are necessary. Towards this goal, AT&T will continue aggressively investing in California to advance and upgrade its network to adapt to the new normal - a seemingly unending fire season and power shut-off events. Specifically, we are preparing a capital investment plan to expand backup power and our fleet of generators. In addition, we have convened an executive level strike-force to review these October incidents. Based on this review we are developing an action plan to inform our capital investments and revise response plan during power shutoff events.

Over the course of these recent incidents, AT&T maintained regular communications with CalOES and the CPUC as part our established protocols, including embedded staffing at the CalOES State Operations Center, and, through CUEA and in some instances directly to Cal OES, provided regular county-by-county lists of carrier-aggregated, service-impacted sites, status of wireless sites online, sites on generator, and sites offline, to state officials three times every day of the power shutoffs. We understand there has been concern expressed about this process and we are committed to working with Cal OES and our other public safety partners to address those concerns.

We also think it important to recognize the extraordinary size and duration of these PSPS events that occurred throughout the state within about the same time frame. During the October shutoff events, AT&T faced the task of maintaining services across over 34 impacted



counties – affecting ten times the customers as any previous PSPS event. As we collectively confront the effects of climate change and with them the new normal of wildfire risks, we strongly urge that the notification process, geographic scope and duration of these PSPS events be critically analyzed by the Commission. AT&T, along with its communications colleagues, will continue to have a constructive role in improving the protocols of PSPS.

Continuing to provide services that our customers can count on is paramount to us. AT&T is prepared to help meet the extraordinary challenges California faces. Mr. Jeff Luong, Vice President of AT&T's Wireless Engineering and Construction, will provide specific information at the Pre-Hearing Conference scheduled for Wednesday, November 20, as well as respond to any questions you might have. In advance of that conference, I refer you to Attachment 1 to this letter, which provides a summary of AT&T's actions leading up to, during and following the PSPS events. Attachment 2 provides responses to specific inquiries within your November 13 letter.

I think these events warrant an approach to problem solving that is as unprecedented as the events themselves. Instead of rushing to establish one set of rules when no fire, no mudslide or no industry participant is the same in this competitive market, we should take leaders from the communications carriers with expertise and policymakers to collaboratively develop best practices and protocols that would have positive direct results for the community and our customers. I spent the morning at the Tech Interactive with their leadership and with young people in the heart of Silicon Valley who pride themselves on being creative, innovative and problem solvers. That is the spirit with which we should approach this, but we must do it with a sense of urgency and with clear priorities. AT&T commits to such a process that elevates us all to problem solving for the best outcome.

Sincerely,

A handwritten signature in black ink that reads "Rhonda Johnson".

Rhonda Johnson
President, AT&T California

Cc: Honorable Governor Gavin Newsom, Governor of the State of California
Liane Randolph, Commissioner, California Public Utilities Commission
Martha Guzman Aceves, Commissioner, California Public Utilities Commission
Cliff Rechtschaffen, Commissioner, California Public Utilities Commission
Genevieve Shiroma, Commissioner, California Public Utilities Commission
Mark Ghilarducci, Director, California Governor's Office of Emergency Services
Thomas Porter, Director, California Department of Forestry and Fire Protection (CAL FIRE)
Amy Tong, Director, California Department of Technology
Jeff Luong, VP- Ran Construction, AT&T

Attachment 1

AT&T Network Response and Performance -- October PSPS Events

The recent public safety power shutoffs (PSPS) were unprecedentedly and unexpectedly broad, impacting over 34 counties. Hundreds of wireless sites and thousands of wireline facilities were left without commercial power. Immediately upon notification of the PSPS events by PG&E, our disaster response team triggered well-defined action plans. Based on maps provided by PG&E, network engineers quickly determined the facilities that would be potentially impacted, and prioritized facilities serving the most critical areas to have the greatest impact. Fuel levels for facilities with fixed generators were assessed and topped off with fuel. Generator deployment began immediately, even prior to the power shut off starting, and continued around the clock. In addition, hundreds of generators were brought in from out of state to augment the hundreds of wireless mobile generators and thousands of wireline mobile generators stationed strategically across California. Thousands of AT&T California employees were mobilized to support restoration efforts. In addition, specially trained wireless and disaster restoral employees were brought in from across the country. Vendor resources trained in generator deployment and refueling were also secured. Fuel trucks were also triggered to mitigate local fuel supply risk.

Because of our efforts we were able to mitigate service disruption to a significant number of customers. However, we recognize that we were not able mitigate all customer disruption.

Across the entire region impacted by the largest of the October PSPS events, our wireless network performed at 97% of normal throughout all affected counties. However, certain counties had substantial network impact. There are multiple reasons for why this occurred, but simply put our network was not designed with the anticipation that a power company would shut off power to over 2 million customers at once. Although we brought generators in from across the country, even that was not enough to cover all of our wireless and wireline facilities that were left without commercial power. This is causing us to seriously reexamine our fixed and portable generator deployment plans for both our wireless and wireline facilities. We will address this through a capital investment plan and revised response plan particularly focused on Tier 3 (Extreme) and Tier 2 (Elevated) wildfire threat areas as detailed below.

Specific AT&T Actions Taken In Response to the October PSPS Events

- **24/7 Preparedness Actions In Advance of Power Shutoffs.** Our teams worked on a 24/7 basis before the events began to prepare for power shutoffs. Before and during each PSPS event, AT&T maintained communication with PG&E, Southern California Edison, and SDG&E to ascertain frequently changing areas impacted by planned commercial power shutoffs. As the situation changed, we adapted. AT&T maintains a fleet of mobile resources, in addition to our fixed-power resources, strategically positioned across the state, including to high-priority CalOES-selected locations, to provide backup power solutions, as well as expand coverage to help keep first responders connected with both

wireless and Wi-Fi coverage. We also established refueling centers to keep our generators refueled and running.

- **Statewide Mobilization and Deployment.** AT&T deployed a fleet of over 2,000 portable generators to our facilities and wireless sites across the state. In addition to thousands of members of our California team, we brought in out-of-state technicians who worked around the clock to continuously relocate portable generators and address power-induced issues as needed to maintain services for those in need.
- **Communication with Public Safety Partners and Government Officials.** AT&T maintained regular communications with CalOES as part our normal process with the California Utilities Emergency Association (CUEA), through embedded staffing at the CalOES State Operations Center, including the precise county-by-county updates of carrier-aggregated, service-impacted sites, with the status of wireless sites online, on generators, and offline to state officials at 7:00am, 1:30pm, and 7:00pm every day of the power shutoffs. When requested by CalOES and in the best interest of public safety, we began providing this information in an AT&T-specific format. We understand there has been concern expressed about this process and we are committed to working with Cal OES and our other public safety partners to address these issues.
- **Support for Fire Victims at Evacuation Centers.** Throughout the events we shared information with our customers and the general public by posting relevant information on our website and social media accounts, by sharing information with local media, and by providing updates to local and state elected officials and public safety stakeholders. AT&T's community response teams were on-site at 17 fire evacuation centers, providing wildfire victims with on-site charging stations and bottled water, access to communication services via phones and tablets, and other customer support.
- **Support for Fire Victims and Consumers Impacted By Power Shutoffs.** AT&T further supported those affected by power shutoffs as well as fire victims by providing unlimited talk, text and data access credits and waiving overage charges to customers in power shutoff and fire-impacted zip codes. AT&T also supported customers in all counties impacted by the power shutoff by waiving wireline service fees through November 22, 2019 for remote call forwarding, remote access to call forwarding, and other call forwarding features.
- **AT&T Contributed \$100,000 to the California Fire Foundation to Aid Communities Impacted by the Kincade Fire.** AT&T contributed \$100,000 to the California Fire Foundation as part of its pledge to aid communities impacted by the Kincade Fire and its ongoing commitment to serving the people and communities of California. The California Fire Foundation provides emotional and financial assistance to families of fallen firefighters, firefighters and the communities they protect. The foundation's mission includes survivor and victim assistance programs and a range of community initiatives.

Ultimately, the unprecedented nature of the most recent PSPS events – particularly the size and scope of the three PSPS events that occurred in October but also the increasing frequency of PSPS events generally – requires changes to our disaster recovery processes, and we are

committed to making improvements. Below are an initial series of actions we have planned and started to implement:

- **Industry – State Government Engagement.** AT&T is prepared to take the lead to coordinate a communications industry effort, engaging the CA Governor’s Office and Cal OES, to collaborate and develop solutions to the communications network resiliency issues arising from the October PSPS events (including, but not limited to, cooperative frameworks, where appropriate, that pool network wireless assets during emergencies, flexible backup power solutions, and communications and notifications protocols). AT&T believes that the combined communications expertise of the carriers, in concert with Cal OES emergency response expertise, can lead to the development of best practices for responding to future PSPS events, which can take advantage of any possible synergies and efficiencies.
- **California capital investment.** Responding to the new normal of power shutoff events will require even greater investments in our network. AT&T intends to increase its capital investment to harden our network resiliency and service during PSPS events and emergencies. This will include a mandate that all new cell sites have a fixed generator (where allowed and feasible), an aggressive plan to retrofit existing sites in critical fire risk areas with additional backup power solutions (where allowed and feasible) and particularly focusing as a priority Tier 3 and Tier 2 areas, and an expanded fleet of mobile generators strategically staged across the state again focusing on the high fire threat areas.
- **Incident review and action plan for October Power Shutoff Events.** AT&T has convened an executive level strike-force to review these October incidents. Based on this review we are developing an action plan that will inform our capital investments and revised response plan during PSPS events.
- **Revised response plan for PSPS Events.** AT&T has implemented a statewide PSPS response plan as a result of the adoption of the PSPS policy as a wildfire mitigation plan. As a result of the October shutoffs, we are aggressively revising and upgrading this response plan to reflect the results of our experience pre-power shut-off, during power shut-off and post power shut-off.
- **Proposed Policy Reforms.** We support a variety of policy reforms and improvements to the power shutoff process. We will follow-up with appropriate state officials over the next 30 days to discuss these various policy reforms.
- **Communication Action Plan for Public Safety Partners.** AT&T will initiate discussions with state-county-tribal government and emergency response personnel to develop a communication structure for PSPS events.

Attachment 2

1. Responsiveness during the latest wildfires and public safety power shutoffs to keep communications services on.

Specifically identify:

1(a) 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.

AT&T's Response:

AT&T's Central Offices and Mobile Telephone Data Centers have fixed generators designed to last at least 72 hours, as well as 4 hours of backup batteries to provide power when generators need service.

For both Central Offices and Mobile Telephone Data Centers, fixed generator fuel levels are regularly maintained at a minimum of 70% capacity and are both remotely and physically monitored. In the event of a planned or unplanned commercial power failure, local emergency fuel providers and our Corporate Fleet Organization are immediately notified. When a generator's fuel level reaches 30% of capacity, AT&T notifies its vendor for refueling and a schedule is made to determine when the tank will need to be refueled, based on the gallons per hour that the generator is known to consume.

[CONFIDENTIAL INFORMATION. Per General Order 66D, AT&T designates the following underscored information as confidential under California Government Code §6254(k); California Evidence Code §1060; CALIFORNIA CIVIL CODE §3426 et seq.; 18 U.S.C Chapter 90 et seq]

AT&T California has [REDACTED] Remote Terminals (RTs) and [REDACTED] VRADs in California, all of which have battery backup power systems designed to last 8 hours. AT&T does not have fixed generators at RTs and VRADs. AT&T recharges those batteries with portable generators. Based on the priority assigned to the location and the number of portable generators that are available, a generator is transported to the location before the batteries fail and is connected, powered on and left until commercial power is restored. The location of the generator is noted, and it is put into a queue for refueling when necessary.

1 (b) 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?

AT&T's Response:

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In Tier 2 AT&T has █ macro cell sites, of which █ have fixed generators. █ of the remaining macro cell sites have camloc that enables a quick installation of a portable generator. There are █ macro cell sites in Tier 2 do not have enough space or have other limitations preventing us from installing a generator.

In Tier 3 AT&T has █ macro cell sites of which █ have fixed generators. █ of the remaining macro cell sites have camlocs. A generator cannot be installed at █ cell macro cell sites in Tier 3 because of space and other restrictions.

All macro cell sites in Tier 2 and Tier 3 have backup battery power that is designed to last a minimum of 4 hours if the site has no fixed generator, and a minimum of 2 hours if the site has a fixed generator.

Refueling plans for macro cell sites: When a site hits 30% fuel level remaining a low fuel alarm is activated, which results in a team being dispatched to refuel the generator.

1(c) 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.

AT&T's Response:

AT&T has convened an executive level strike-force to review these October incidents. Based on this review we are developing an action plan to improve resiliency and the response plan we employ during PSPS events.

We have identified some specific actions to harden our network and will take action to remedy these in our capital improvement plan. This will include a mandate that all new cell sites have a fixed generator (where allowed and feasible), an aggressive plan to retrofit existing sites in critical fire risk areas with additional backup power solutions (where allowed and feasible), and an expanded fleet of mobile generators staged across the state and focused on Tiers 3 and Tire 2

as a priority. In addition, we are also assessing the backup power needs of wireline infrastructure in the same high fire threat areas as a priority.

Backbone – Fiber/Copper

Aerial cable (fiber or copper) can be exposed to wildfire. At strategic locations and where practicable, AT&T installs Interoffice Fiber (IOF) underground. However, even underground facilities are vulnerable to earthquakes, floods, or cuts.

All Central Offices (COs) have diverse IOF routes but not all have diverse paths (some share fiber cables in the same structure). If IOF fiber is disrupted during wildfire or disaster, AT&T's resiliency system is designed to first attempt to re-route the traffic on diverse or alternate paths wherever possible. If diverse routing isn't available, AT&T has the capacity to deploy temporary microwave dishes to provide a high bandwidth connection where operationally and technically feasible.

All AT&T COs and Mobility Transfer Switch Offices (MTSOs) in California have stationary backup emergency generators in the event of a power outage. While running on backup emergency generators all the offices will have sustained electrical power as long as fuel supply and resources are available. In the event that the stationary backup generators fail there is backup battery power in each Central Office which will support the office for a minimum of 4 hours until such time as a portable generator can be moved to the office.

Cell Sites

Similar to COs, if fiber is disrupted AT&T's network is designed to attempt to re-route the circuit through a different path. Depending on the priority of the cell site, AT&T may deploy microwave dishes to provide a high bandwidth connection and restore or occasionally use temporary fiber laid on the ground.

Remote Terminals/VRADs

These locations have pair-gain or optical signal equipment which requires external power to regenerate and/or manage the signal. All non-customer premise locations have battery backup and are equipped with connections for portable generators. Fire and wind can damage equipment if it intrudes past the exterior metal cabinet and/or door seal.

1 (d) 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.

AT&T's Response:

The DIRS reports are being provided with this response.

2. **Engagement and timely responsiveness to requests from Cal OES and CAL FIRE.**

Cal OES Director Ghilarducci has recently identified concerns related to information sharing and coordination with local governments, especially county emergency management departments during emergency events. The November 1, 2018 workshop identified problems that emergency agencies have with getting timely and correct information from the communications providers. They include, but are not limited to, general communication processes and procedures, accuracy and timeliness of providing relevant information, and establishing two-way communication channels that enable the utilities to address local concerns. Though a representative of the communications companies through the California Utilities Emergency Association (CUEA), has a desk in the state warning center, the Director was clear that there was a lack of participation and transparency during the recent events. Therefore, communication providers are directed to take immediate corrective actions that, at a minimum, include:

AT&T Response:

AT&T maintains active participation and has a permanent representative in CUEA and is committed to continue to improve participation and transparency wherever needed to make CUEA more effective in its response to emergencies. Equally important is maintaining communication channels at the local level, which AT&T engages in through its External Affairs teams working with municipal, county, and state officials. In addition, AT&T would support a reexamination of the existing protocols for communications within the State Operation Center for all member companies.

2(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.

AT&T Response:

AT&T's EOC liaison is Alice Perez, Director, External Affairs. Chris Salkeld - Network Emergency Management Coordinator is her back-up. Ms. Perez has completed the SEMS training CalOES offers. Both individuals have working knowledge of utility operations and processes.

2(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.

AT&T's Response:

AT&T's local External Affairs managers are all assigned specific counties, where they communicate with local public safety, government and 911 county coordinators during disasters. We are evaluating ways to improve this line of communication during PSPS events.

2(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.

AT&T's Response:

During emergencies, AT&T's External Affairs managers are assigned both statewide and local roles. At least one External Affairs liaison is on-site at the CalOES State Operations Center and dozens of local External Affairs managers are assigned specific counties, where they communicate with public safety, 911 county coordinators, and will include communications with tribal government during disasters. Additionally, AT&T's External Affairs and community response teams were on-site at evacuation and community centers across the state, providing wildfire victims with on-site charging stations and bottled water, access to communication services via phones and tablets, and other customer support. While we are evaluating ways to improve communications during PSPS events specifically, as with any disaster situation, each External Affairs manager is assigned to be in contact with County stakeholders as appropriate during disaster or PSPS events.

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.

AT&T's Response:

AT&T's wireline and wireless providers extended significant customer protections and support, and when needed, deployed mobile equipment to supplement service in areas that needed additional capacity, in response to the October wildfires and PSPS events. AT&T's efforts included:

- AT&T's wireline providers, AT&T California and AT&T Corp., started activation of its wireline Disaster Recovery Plan ("DRP") on October 9, 2019, and continued to expand the area covered by the DRP throughout the month of October. In all, customers in 47 counties who may have experienced personal loss and/or property damage were eligible for the DRP. Assistance included a waiver of the one-time activation fee for establishing Remote Call Forwarding, Remote Access to Call Forwarding, Call Forwarding features and Messaging services, a waiver of the monthly rate for one month for Remote Call Forwarding, Remote Access to Call Forwarding, Call Forwarding features and Messaging services, and a waiver of the service charge for installation of service at the temporary or new permanent location of the customer and again when the customer moves back to the original premises. Specific activation dates by county and a complete description of the wireline DRP can be found in AT&T California Advice Letter 48084 submitted November 12, 2019.
- Similarly, AT&T's wireless providers, AT&T Mobility and Cricket, monitored the October wildfires and PSPS events and activated the wireless Disaster Relief Plans ("DRP") for post-paid and pre-paid wireless customers in 31 counties and in specific zip codes in fire regions. The Relief Plan for both AT&T Mobility and Cricket was communicated to customers via SMS messaging and provided details about the availability of unlimited talk, text, and data access by issuing credits, and waiving overage charges. Specific activation dates of the wireless DRP can be found in AT&T Mobility Advice Letters 168 and 170 submitted October 28th and November 12th respectively.
- AT&T employees were staged at shelters/evacuation centers for wildfire victims. In October, AT&T retail teams visited 12 shelters/evacuation centers in Northern California and 9 shelters/evacuation centers in Southern California. AT&T efforts included bottled water and health provisions along with charging stations for deployments to shelters that requested them. Specific shelter locations and deployment dates can be found in the advice letters noted above.
- On October 11, 2019, AT&T deployed a Satellite Cell on Light Truck ("SatCOLT") to Hansen Dam, Lakeview Terrace, CA, for fire incident command. This deployment was described in AT&T Mobility Advice Letter 168. Neither Cells on Wheels ("COWs") nor

Cells on Light Trucks (“COLTs”) were deployed by AT&T Mobility related to either the Governor’s October 25 or October 27 state of emergency declarations because there was no network need to increase signal for connectivity.

AT&T has provided a robust description of the efforts undertaken to comply with D.19-08-025 in its advice letters submitted to the Commission following state of emergency declarations by the governor. If the Commission believes additional information is needed on AT&T’s emergency disaster relief efforts, we are available to meet with the Communications Division staff to discuss additional information needs.