BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA



Order Instituting Rulemaking Regarding Emergency Disaster Relief Program.

Rulemaking 18-03-011

OPENING COMMENTS OF THE CALIFORNIA CABLE & TELECOMMUNICATIONS ASSOCIATION ON THE ASSIGNED COMMISSIONER'S PROPOSAL

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For California Cable & Telecommunications Association

OF THE STATE OF CALIFORNIA

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Pursuant to the Assigned Commissioner's Ruling and Proposal issued in this proceeding dated March 6, 2020 ("ACR") as modified by the *Email Ruling Extending Time of Opening Comments and Reply Comments* dated March 25, 2020, the California Cable & Telecommunications Association ("CCTA")¹ hereby submits these comments, inclusive of an alternative proposal for network resiliency, in response to the ACR's question of whether the Commission should, among other things, require communications service providers to deploy sufficient backup power to communications facilities across the state to maintain service to 100% of customers when electric utilities are authorized to shut off power and during other emergency events, given the reach and impact of state-wide de-energization events and wildfires.²

CCTA appreciates the difficulties that the citizens of California endure during wildfire season and Public Safety Power Shutoff ("PSPS") events. CCTA looks forward to being a

² ACR at 1.

¹ CCTA is a trade association consisting of cable providers that have collectively invested more than \$40 billion in California's broadband infrastructure since 1996 and whose systems pass approximately 96% of California's homes.

constructive participant in the Commission's process and to providing the type of realistic contributions set forth in these comments.

I. INTRODUCTION

The ACR³ proposes to require communications service providers to replace the commercial power supply for a minimum of 72 hours⁴ to 100% of voice and "web browsing"⁵ customers, through the preferred use of clean energy generation, for each communications network in California. The "ultimate purpose" of the ACR proposal⁷ is to establish "rules for resiliency by summer 2020, if not sooner, in advance of the upcoming fire season."8 In addition to requiring responses to the questions on the Proposal, the ACR also requires all communications provider respondents to submit responses on their current mitigation efforts being undertaken to ensure continuity of service in preparation for the upcoming 2020 wildfire and grid outage season. 9 CCTA's comments address questions regarding the appropriate applicability of the proposed measures on all communications providers and offer general observations on questions concerning clean energy generation ¹⁰ and current mitigation efforts aimed at minimizing the need for backup generation. In addition, CCTA submits for the Commission's consideration an alternative proposal for network resiliency that would ensure connectivity to first responders and other critical facilities and to the backhaul network for wireless carrier customers during a power outage. The alternative proposal is discussed in detail in Section 4(d) below.

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³ See ACR at Appendix A.

⁴ Proposal at 3.

⁵ Proposal at 4.

⁶ *Id*.

⁷ ACR at 2.

⁸ *Id*.

⁹ March 6, 2020 Ruling at 7.

¹⁰ See Response to Question 5a.

CCTA must first underscore that a Commission policy that authorizes electric utilities to voluntarily shut off power, while at the same time requires the cable industry to maintain backup power to fully replace that commercial power supply in order to keep communications networks operating, is unreasonable and unsafe. Maintaining cable network reliability and services is fundamental to CCTA members that today provide standby service in the event of ordinary commercial power outages. However, cable networks are not designed – nor have they ever been intended – to be a long-term replacement for the loss of commercial power, and they cannot provide a redundant power source as a wholesale substitute for electric utility networks.

Even if long-term sources of replacement power for communications networks as contemplated by the Proposal were available, maintaining backup power throughout a communications system during a PSPS event – when electric utilities have determined that it is unsafe to provide electricity – would pose unacceptable safety risks similar to those that PSPS events are intended to avoid. While the Proposal states that "Communications service providers – just like their electrical corporation counterparts – have a duty to maintain continuity of service in times of disaster," that statement ignores the fact that the Commission, as well as the California Legislature, ¹² authorizes investor-owned utilities ("IOUs") to de-energize their respective systems under certain circumstances to avoid the risk of fire ignited by electric utility facilities. The Proposal would subject California communities to the same types of safety risks that proactive power shutoffs are intended to avoid.

Moreover, even if the industry were able to maintain fully operational networks when the IOUs shut off power, most individual customers will not be able to access services if they lack

¹¹ Proposal at 1.

¹² See Senate Bill (SB) 901.Stats. 2018, Ch. 626.

¹³ See Order Instituting Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions R.18-12-005.

commercial power at their premises because they do not have a source of backup power for their home. The ubiquitous cordless phones and many "web browsing" devices, including smart appliances, televisions, and computers depend on commercial power, suggesting that the astronomical expenditures to replace commercial power for at least 72 hours would not have the intended outcome of assuring the presumed access to consumers. Indeed, the reality is most people rely on cell phones during a disaster. The majority of California's population (55.4%) chooses to have no landline phone at all and instead relies on battery-powered mobile phones. ¹⁴ Moreover, the percentage of California homes that relied exclusively on landline service in 2018 was only 1.8%. ¹⁵ The Commission must consider that when the marketplace is working to provide consumers with options for addressing power needs, a mandate to deploy a duplicative power grid capable of delivering a minimum of 72 hours of backup power would simply raise costs to consumers with very little benefit to consumers.

While CCTA has serious concerns regarding the scope of the Proposal and with the absence of a specific citation to any factual record to warrant the proposed measures, ¹⁷ we are all

¹⁴ U.S. Department of Health and Human Services, Center for Disease Control and Prevention National Center for Health Statistics National Health Interview Survey Released 12/2019, https://www.cdc.gov/nchs/data/nhis/earlyrelease/Wireless state 201912-508.pdf

¹⁵ See Id at Table 2.

¹⁶ See Pub. Util. Code § 321.1: "The commission shall take all necessary and appropriate actions to assess the economic effects of its decisions and to assess and mitigate the impacts of its decisions on customer, public, and employee safety."

¹⁷ The ACR states that "The record developed thus far in this proceeding makes clear that emergency call and notifications often fail during disasters such as wildfires, floods, and earthquakes, leaving the public in a communications void and, at critical times, in peril" (ACR at 2) but that dramatic statement of the record is made without citation. While the Cable Industry acknowledges that those events can compromise all infrastructure, including that of communications, CCTA disagrees that the record developed in this proceeding makes clear that the ability to make calls or notifications "often fails" during floods and earthquakes. Regarding communications failures, the Commission allowed into the record a staff report titled Safety Principles for Communications Providers (Staff Report). (See Administrative Law Judges' Ruling Denying Motion to Strike Rulemaking 18-03-011 and Rulemaking 18-12-005). CCTA objected to the entry of that Staff Report into the record because, among other things, there was little information concerning the document's origin, author and purpose, it contained numerous inaccurate and misleading "assertions of fact"; and contained inaccurate statements of law. While a Motion to Strike was denied, the Ruling determined that, if the proceeding intends to rely on the Staff Report to support a future decision, "parties will be afforded an opportunity to offer opening and reply comments on the substance of the

in this together, and the cable industry will continue to find ways to address concerns surrounding the impact of IOU power shutoffs. For example, the cable industry is working directly with the Governor's Office of Emergency Services ("Cal OES") to find solutions, developing cable technologies that use less electricity, and participating in related workshops at the Commission. We are also working directly with electric utilities to mitigate harm stemming from their prolonged outages. The electric utilities are the principal actors in these events, as they are the entities that initiate power shutoffs, and are best situated to provide critical information and resources to assist in developing solutions. This proceeding stems from electric utility-related wildfires and prolonged PSPS events. The cable industry hopes and expects that the electric utilities will invest in their respective networks and take all steps necessary to reduce the scope and scale of PSPS events in the future and, when they are necessary, to improve communications between the electric utilities and communications providers.

II. RESPONSE TO ACR QUESTIONS CONCERNING PROPOSAL

ACR Question 2(a). Should the Commission apply the definition from D.19-08-025?

The Proposal seeks to "promulgate resiliency rules for communications service providers" that "shall be applicable to all companies owning, operating, or otherwise responsible for infrastructure that provide or otherwise carry 9-1-1, voice, text messages, or data." While it offers no citation to any authority, the ACR appears predicated on the belief that cable IP voice services and Internet access in the event of power failure 20 are within the Commission's jurisdiction. Respectfully, however, the Commission can only extend regulations

report. Therefore, parties' due process rights are preserved." (ALJ Ruling at 3.) Therefore, if this ACR's assertion of fact concerning communications failures relies in any way on the Staff Report, parties must be afforded an opportunity to respond.

¹⁸ Proposal at 1.

¹⁹ Proposal at 2.

²⁰ Proposal at 4.

to services over which it has jurisdiction. The Proposal's network resiliency requirements are a form of public utility regulation, as they would mandate the provision of "web browsing" and certain other services to 100% of customers by adopting performance reliability and service quality standards for providers of facilities for the transmission of interconnected voice over internet protocol ("VoIP") and broadband internet access service ("BIAS"). The requirement that all providers deliver those services is tantamount to imposing the requirement on the service offerings themselves. While some of the CPUC's proposals may be appropriate for carriers of last resort ("COLRs")²¹ or rate-of-return telephone utilities under the Commission's jurisdiction that collectively have service territories covering all of California and are required to offer voice service to customers in their given service territories, the Commission lacks jurisdiction over VoIP and BIAS services to impose the mandates set forth in the Proposal.²² Accordingly, neither the definition set forth in the Proposal,²³ nor the definition set forth in D.19-08-025, save for COLRs and rate of return telephone corporations, should apply.

Indeed, the U.S. Court of Appeals for the Eighth Circuit held that interconnected VoIP service is an "information service" under the Communications Act.²⁴ Accordingly, the court determined that "any state regulation of an information service conflicts with the federal policy of nonregulation," so that such regulation is preempted by federal law."²⁵ In an amicus brief, the

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²¹ A COLR is required to serve upon request all customers within its designated service areas and is eligible for high cost fund subsidies. *See* General Order 133-D, § 1.3(d). Wireline COLRs consist primarily of incumbent local exchange carriers.

²² The Proposal appears to exceed the Commission's statutory authority in that VoIP service is not a public utility service. See *VoIP Coalition Application for Rehearing of Decision 19-08-025, Decision Adopting An Emergency Disaster Relief Program for Communication Service Provider Customers* dated September 23, 2019. ("AFR") The Commission has yet to act on the outstanding AFR...

²³ Proposal at 2: "These requirements shall be applicable to all companies owning, operating, or otherwise responsible for infrastructure that provide or otherwise carry 9-1-1, voice, text messages, or data."

²⁴ Charter Advanced Services (MN), LLC v. Lange, 903 F.3d 715, 719 (8th Cir. 2018) ("Charter") (application for rehearing en banc denied; petition for certiorari pending sub nom. Dan M. Lipschultz et al. v. Charter Advanced Services (MN), LLC, et al., Case No. 18-1386).

²⁵ Id. at 718 (quoting Minnesota Pub. Utilities Comm'n v. FCC, 483 F.3d 570, 580 (8th Cir. 2007)).

Federal Communications Commission ("FCC") further stated that a state commission's "sweeping assertion of regulatory authority over VoIP service threatens to disrupt the national voice services market," and that "[u]nder the longstanding federal policy of nonregulation for information services, states are independently prohibited from subjecting information services to any form of state economic regulation." The Proposal is especially subject to conflict preemption given that the FCC has already evaluated backup power requirements for in-home VoIP equipment, and any attempt by the Commission to do so here throughout communications service provider networks risks conflict with federal policy.

Additionally, the Commission lacks jurisdiction over BIAS.²⁸ Article XII of the California Constitution and the California Public Utilities Code establish the Commission's authority over "public utilities."²⁹ The Public Utilities Code notably does not grant the Commission authority to regulate BIAS, a jurisdictionally interstate service.³⁰ The Commission itself has specifically acknowledged that it does not have jurisdiction over BIAS.³¹ Moreover, as discussed below, the federal Communications Act expressly prohibits common carrier regulation of "information services," and the FCC has classified BIAS as an "information service."

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²⁶ *Id.* at 10, 18.

²⁷ Ensuring Continuity of 911 Communications, Report and Order, 30 FCC Rcd. 8677 ¶¶ 3, 9 (2015) ("VoIP Backup Power Order"); see also 47 C.F.R. § 9.20(b), (d) (codifying FCC VoIP backup power and disclosure requirements).

²⁸ Proposal at 1. "Broadband Internet Access Service" is commonly referred to as "BIAS."

²⁹ See Cal. Const. Article XII, § 6, for example, which provides that the Commission "may fix rates, establish rules, examine records, issue subpoenas, administer oaths, take testimony, punish for contempt, and prescribe a uniform system of accounts for all *public utilities* subject to its jurisdiction." (Emphasis added.) Article XII, § 5 provides that "The Legislature has plenary power, unlimited by the other provisions of this constitution but consistent with this article, to confer additional authority and jurisdiction upon the [CPUC]...."

³⁰ See Pub. Util. Code § 216(a)(1) (itemizing entities subject to public utility regulation).

³¹ See, e.g., D.13-12-005 ("It is well-established that Internet service is classified for state and federal regulatory purposes as an "information service" and that state commissions such as the [CPUC] do not have jurisdiction over information services even if the providers also provide "communications services" that are subject to state regulation."); D.06-03-013 ("In adopting these principles the [CPUC] does not assert regulatory jurisdiction over broadband service providers; Internet Service Providers; Internet content or advanced services; or any other entity or service not currently subject to regulation by the [CPUC].").

Accordingly, subjecting BIAS to public utility regulation at the state level would conflict with this federal law and policy and would be preempted.³²

Federal law further limits the Commission's authority to take other actions involving BIAS. The FCC's classification of BIAS as an "information service" was recently upheld by the U.S. Court of Appeals for the D.C. Circuit in *Mozilla Corp. v. FCC.*³³ As noted above, the federal Communications Act expressly prohibits imposing common carrier regulations on providers of "information services."³⁴ As the D.C. Circuit previously explained when reversing the FCC's own imposition of common carrier regulation on BIAS despite its classification as an information service:

We think it obvious that the Commission would violate the Communications Act were it to regulate broadband providers as common carriers. Given the Commission's still-binding decision to classify broadband providers . . . as providers of "information services," such treatment would run afoul of [47 U.S.C.] section 153(51) 35

Thus, any attempt to impose public utility regulations on BIAS at the federal level would directly conflict with the federal Communications Act, and any such attempt at the state level would be preempted as directly conflicting with and undermining this federal law and policy.

Moreover, the FCC's *Restoring Internet Freedom Order* reaffirmed that BIAS is inherently an interstate service, and the *Mozilla* panel did not hold otherwise.³⁶ The interstate nature of BIAS places the service firmly within the jurisdiction of the FCC, which has a long

³² Adopting an ACR Proposal that regards broadband to be a public utility also would violate due process and Commission decision-making requirements. *See* Pub. Util. Code § 1705 (requiring conclusions of law).

³³ *Mozilla Corp. v. FCC*, 940 F.3d 1, 45 (D.C. Cir. 2019) ("*Mozilla*") ("We conclude ... that the Commission permissibly classified broadband Internet access as an 'information service'....").

³⁴ See 47 U.S.C. § 153(51) ("A telecommunications carrier shall be treated as a common carrier under this chapter only to the extent that it is engaged in providing telecommunications services.").

³⁵ *Verizon*, 740 F.3d at 650.

³⁶ In re Restoring Internet Freedom, Declaratory Ruling, Report and Order, and Order, 33 FCC Rcd. 311, ¶ 200 (2018) ("RIF Order").

history of preempting state regulation of "information" or "enhanced" services such as BIAS.³⁷ In particular, the FCC has made clear that BIAS should not be subject to public-utility classification or regulation.³⁸

Nor does the D.C. Circuit's decision in *Mozilla* allow for the ACR's Proposal. Federal law and policy prohibiting public utility regulation of information services generally (and BIAS specifically) is longstanding,³⁹ and is embodied in the federal Communications Act.⁴⁰ As noted above, the U.S. Court of Appeals for the Eighth Circuit recently reiterated, "any state regulation of an information service," such as BIAS, "conflicts with the federal policy of nonregulation" and is preempted.⁴¹ The Ninth Circuit has similarly upheld preemption of state regulatory requirements that would have had the effect of frustrating the federal policy of *de*regulating enhanced services.⁴²

Although the *Mozilla* decision vacated the express preemption directives set forth in the FCC's *RIF Order*, that decision does not cure the defects in the Proposal or otherwise give states free rein to regulate BIAS providers as public utilities.⁴³ The federal law exempting information

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³⁷ See, e.g., id.; In re Protecting and Promoting the Open Internet, Report and Order on Remand, Declaratory Ruling, and Order, 30 FCC Rcd. 5601, 5804 ¶ 433 (2015); In re Vonage Holdings Corp. Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission, Memorandum Opinion and Order, 19 FCC Rcd. 22404 (2004) ("Vonage Order"); In re Petition for Declaratory Ruling that pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service, Memorandum Opinion and Order, 19 FCC Rcd. 3307 (2004); In re Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards, Report and Order, 6 FCC Rcd. 7571 (1991).

³⁸ RIF Order ¶ 20 ff.

³⁹ See n.22, supra; see also 47 U. S.C. § 230(b)(2) ("It is the policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.").

⁴⁰ See 47 U.S.C. § 153(51) (requirements governing telecommunications carriers apply to a provider "only to the extent that it is engaged in providing telecommunications services").

⁴¹ Charter Advanced Servs. (MN), LLC v. Lange, 903 F.3d 715, 719 (8th Cir. 2018); Minn. Pub. Utils. Comm'n v. FCC, 483 F.3d 570, 580-81 (8th Cir. 2007) ("[D]eregulation is a valid federal interest[] the FCC may protect through preemption of state regulation." (quotation marks omitted)).

⁴² Cf. California v. FCC, 39 F.3d 919, 933-34 (9th Cir. 1994) (upholding preemption of state requirements on enhanced services where "it would not be economically or operationally feasible" to comply with state requirements without doing so for interstate services as well, "thereby defeating the FCC's more permissive policy").

⁴³ Morible Comp. FCC 940 F.3d 1 (D.C. Gir. 2010)

services from common carrier regulation, and the federal deregulatory policy that the law embodies, was not at issue in *Mozilla*. Rather, the case presented only the narrower question of whether the FCC has statutory authority to expressly preempt all regulatory efforts by state or local governments *in advance*, without a specific statute or regulation to evaluate for consistency with federal law and policy.⁴⁴ The *Mozilla* decision does not alter the rule that "specific" state actions "under the circumstances of . . . particular cases" are subject to preemption where they would conflict with federal law or undermine federal policy.⁴⁵ As explained above, treating BIAS like a public utility service by micromanaging the network and implementing performance reliability standards would create such a conflict with federal law and thereby constitute legal error.

ACR Question 4. Backup Power Requirement:

Question 4 (a) Comments on the proposed backup power requirement

Cable networks today deliver video, high-speed Internet, and voice services to consumers throughout the state. To provide those services, cable companies transmit signals through fiber-optic or coaxial cables to reach our customers. Distribution of these services begins at a regional "headend" as fiber-optic cable is typically fanned out across a cable company's footprint to a series of distribution "hubs." At the distribution "hub", fiber cables connect with local communities to a neighborhood "node." At the node, light signals from the fiber-optic cable are converted to a radio frequency electrical signal, which is then distributed through coaxial cable

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⁴⁴ *Id.* at 86 ("[B]ecause no *particular* state [action] is at issue in this case and the [FCC] makes no provision-specific arguments, it would be wholly premature to pass on the preemptive effect, under conflict or other recognized preemption principles," of the FCC's order (emphasis added)); *see also id.* at 81 (acknowledging that *RIF Order*'s preemption of state laws under "conflict preemption" principles has "intuitive appeal" but was waived by FCC at oral argument).

⁴⁵ *Id.* at 81; *id.* at 85 (noting that if a "state practice actually undermines" the *RIF Order*, the FCC "can invoke conflict preemption.").

— installed on the local utility poles or as underground utility lines – to individual subscriber homes.

The most critical facilities in a network serving the broadest area, headends and hubs, are currently backed up by diesel powered generators that can operate for extended periods of time. Given network architecture, there are significantly fewer headends and hubs in the network relative to nodes. Furthermore, headends and hubs are intentionally located in more secure locations. In contrast to the limited number of headends and hubs in the network, throughout California, CCTA members combined have well over 50,000 nodes, and exponentially more than 50,000 facilities in the network that rely on commercial power. Most nodes, and other nearby facilities, throughout the state are powered by devices called power supplies that have backup battery in the event of a commercial power failure, but these devices cannot all have long-term backup power for a myriad of reasons, including safety, community, and practical concerns. Nodes are localized facilities and are typically pole or ground mounted equipment, located on streets within the public right of way. Cable providers have installed battery backup in their power supplies, which generally provides power to the nodes and other devices for several hours in the absence of commercial power. In addition, cable providers may have portable generators that, in the appropriate situations – and with timely and accurate notice in the event of a proactive PSPS event – can be quickly deployed where it is safe to do so.

Question 4 (c) Should the length of the 72-hour backup power requirement be shorter, longer or indefinite?

Based on current battery technology and practical considerations, there is no way for a cable provider to achieve a 72-hour backup power requirement using backup batteries throughout its system. Large fixed curbside generators would be required to achieve 72 hours of backup power. Fixed curbside generators are diesel powered but, in some instances, could also be

natural gas powered in locations where natural gas is available. Alternatively, propane cylinders can be placed in a cabinet adjacent to generators. However, as described in CCTA's response to Question 5, these alternatives to portable gasoline powered and fixed diesel-powered generators pose a variety of significant obstacles and risks.

Question 4 (d) What other backup power requirements or components should the Commission consider?

CCTA Alternative Proposal for Network Resiliency

The Commission should not adopt one-size-fits-all network resiliency rules. Moreover, the proposed 72-hour backup power mandate, throughout the entire network, is infeasible, unsafe, environmentally unsound, arbitrary, overbroad in scope, and ultimately ineffective. A better approach would be to allow operators of communications facilities to adopt individualized approaches for their networks that optimize public safety outcomes for their customers, communities and employees.

However, without waiving CCTA's objections regarding the Commission's jurisdiction on these matters, ⁴⁶ if the Commission ultimately decides to adopt network resiliency rules, it should adopt a minimum set of requirements for each class of communications facilities.

Additionally those rules should be narrowly tailored to "aid first responders" and "allow the public to communicate in a reliable manner during disasters and PSPS events." The rules should also meet the Commission's goals of providing a minimum of 72 hours of backup power/connectivity and ensure that such backup/power connectivity will be provided in Tier 2 and 3 High Fire-Threat Districts, where the threat of power outages are most likely to occur as a

⁴⁶ See CCTA's Response to ACR Question 2(a) above.

⁴⁷ Proposal at 1.

result of PSPS and other events. As explained below, the following alternate network resiliency proposal meets these objectives *for wireline communication facility operators*, including cable providers.⁴⁸ These rules are designed to provide a baseline of backup power/connectivity. Each operator of communications facilities should provide the details of its compliance with these rules in its Backup Power Plan (see Proposal at 3), which should include the applicable implementation period.

Wireline Communications Facility Operators Would Ensure Connectivity to their Fire and Police Station, Hospital, and Emergency Command Center Customers during a Power Outage.

It is important to ensure that first responders and other critical facilities have access to reliable service during an emergency. Therefore, notwithstanding limits on the Commission's jurisdiction, CCTA supports a framework that would ensure that wireline communications facility operators are able to ensure connectivity for at least 72 hours to their customers that are fire stations, police stations, hospitals, ⁴⁹ and emergency command centers in Tier 2 and 3 High Fire-Threat Districts. This framework would apply under the following conditions:

- (1) the customer's facility (e.g., a hospital) is powered (either via its own backup power or via commercial power) and is located in the wireline communications facility operator's territory;
- (2) The wireline communications facility operator owns the network components that serve the customer (leased facilities are not included);
- (3) the wireline communications facility operator can obtain the necessary access, permits and/or other relevant approvals to install and maintain equipment, as long as doing so does not present risk of harm to persons or property. The wireline communication facility operator can determine the method to ensure the 72 hours

⁴⁸ CCTA anticipates that the Commission will adopt a different set of network resiliency rules for the operators of wireless communications facilities given the different architecture and use of wireless networks.

⁴⁹ "Hospital" is defined as an institution providing in-patient medical and surgical treatment and nursing care for sick or injured people, and includes an emergency room. It does not include doctor's offices or clinics.

- of service to each customer facility, taking into account, among other things, differences in network configuration and the characteristics of each facility;
- (4) the wireline communications facility operator's facilities have not been damaged and any backup power equipment can be safely accessed by workers for refueling and other maintenance purposes; and
- (5) for PSPS events, the IOU has provided the mandatory 48 to 72 hours' notice to the wireline communications facility operator and has made available as part of such notice to the wireline communications facility operator a Geographic Information System shapefile via a secure data transfer process depicting the most accurate and specific information possible regarding the boundaries of the area subject to deenergization, consistent with standards set for notification to public safety partners in the Guidelines adopted in D. 19-05-042, issued June 4, 2019 in R.18-12-005 and further notification guidelines applicable to public safety partners established in that proceeding.

<u>Implementation Period</u>: The Commission should adopt a reasonable timeframe to allow wireline communications facility operators to adopt this framework.

Wireline Communications Facility Operators Would Maintain Connectivity for 72 Hours for their Wireless Carrier Customers During a Power Outage.

Wireless services are critical during PSPS and wildfire events as well as other emergencies because customers may be displaced from their homes during such events or, even if they can remain in their homes, their homes often lack an independent power source to keep their devices operating. The importance of wireless services during emergencies is borne out by the fact that more than 80 percent of 911 calls originate from mobile phones.⁵⁰

Wireline communications facility operators have an important role in ensuring that wireless telecommunications continue to function during an emergency. As the Commission is well aware, wireless networks rely on wireline networks to provide backhaul and to connect their switches to the public switched telephone network ("PSTN"). Several CCTA members, for example, use their cable network to provide backhaul service to cell towers in California.

⁵⁰ See https://www.nena.org/page/911Statistics.

Accordingly, notwithstanding limits on the Commission's jurisdiction, CCTA supports a framework that would ensure that wireline communications facility operators sustain backhaul service in Tier 2 and 3 High Fire Threat Districts to their wireless carrier customers for at least 72 hours during power outages. This framework would apply under the following conditions:

- (1) the facilities (cell tower or mobile switching center) of the wireless carrier customer are powered (either via backup power supplied by the wireless carrier or via commercial power) and available for use by the wireline communications facility operator;
- (2) the wireline communications facility operator owns the facilities that provide backhaul and other wired connectivity for wireless networks (leased facilities are not included) and those facilities are located in its service territory;
- (3) the wireline communications facility operator can obtain the necessary access, permits and/or other relevant approvals to install and maintain, as long as doing so does not present risk of harm to persons or property. The wireline communication facility operator can determine the method to ensure the 72 hours of service to each customer facility, taking into account, among other things, differences in network configuration and the characteristics of each facility;
- (4) the wireline facilities that provide backhaul for wireless networks have not been damaged and can be safely accessed by workers for refueling and other maintenance purposes; and
- (5) for PSPS events, the electric investor-owned utility has provided the mandatory 48 to 72 hours' notice to the wireline communications facility operator and has made available as part of such notice to the wireline communications facility operator a Geographic Information System shapefile via a secure data transfer process depicting the most accurate and specific information possible regarding the boundaries of the area subject to de-energization, consistent with standards set for notification to public safety partners in the Guidelines adopted in D. 19-05-042, issued June 4, 2019 in R.18-12-005 and further notification guidelines applicable to public safety partners established in that proceeding.

<u>Implementation Period</u>: The Commission should adopt a reasonable timeframe to allow wireline communications facility operators to ensure they are able to provide connectivity to their wireless carrier customers during power outages.

Question 5 (a) Clean Energy Generation, comments and analysis on this issue

The cable industry has approached clean energy generation from both a demand-side perspective and through the active deployment and consideration of non-diesel and non-gasoline fuel solutions. However, as discussed here, significant limitations exist in the use of clean energy generation for backup power, making such use unviable.

CCTA is concerned with the CPUC's consideration of energy generation options that are in the conceptual, planning, development, or nascent stages, with little focus on how providers can actually achieve backup power in the near-term, throughout the entirety of their networks, when more wildfires and PSPS events are expected. At this time, CCTA is unaware of any commercially available "clean energy generation" solutions that can provide 72 hours of backup power to cable facilities throughout the state. In any event, significant environmental, public safety, cost, and community concerns would arise from solutions such as more curbside or pole-attached fuel cells or solar panels, not to mention that there is no widespread demonstrated use of these alternatives, particularly at the field equipment level.

• Exploring and Deploying Non-Diesel/Gasoline Backup Generation Solutions

o Propane

Some cable companies have looked to propane as an alternative fuel to diesel or gasoline. While propane offers certain advantages with regard to carbon emissions, it has not proven to be a favored solution for fueling curbside generators due to cumbersome permitting, maintenance and inspection requirements.

The backup power capacity of a propane generator is limited by the size of its tank. If a generator with a smaller tank must be installed due to space limitations, the tank will need to be refilled to achieve 72 hours of backup power. This creates refueling and transportation issues, as

well as other challenges. Propane also requires the placement of multiple cabinets (power supply, generator, and propane side car) where only a single cabinet exists today. The vast majority of those cabinets are in the ROW, and customers object when these large cabinets are placed close to their homes. In addition, if large cabinets are not built to store a significant amount of propane, then frequent refueling – possibly in the midst of a wildfire or other disaster - would be required to meet the timelines suggested in the Proposal. Such refueling raises significant safety concerns including the personal safety of the employees driving fuel trucks into high risk areas.

Natural Gas

CCTA member Cox has deployed natural gas generators at approximately one-third of its nodes and has been exploring with the gas companies what would be required to bring natural gas to additional areas. However, natural gas generators are far from a complete solution.

Availability of natural gas is dependent upon the distribution grid in California. Currently, that distribution grid is not universally available in all portions of California. Even where available, natural gas may be turned off during earthquakes or wildfires, or at the possibility of such events, and natural gas often requires line extensions and other construction that is contingent on obtaining permits. Thus, deployment over large portions of a network would take significant time that must be accounted for in any proposal.

Solar Panels and Hydrogen Cells

Solar

CCTA is unaware of any product currently offered in the marketplace to provide a viable solar backup option for cable nodes or other cable system field equipment. Even if available at all, potential curbside deployment of solar backup equipment would also raise implementation

issues, such as space limitation at the site of field equipment, permitting, and access to the ROW, and significant environmental issues given the number and size of the solar panels necessary to generate substantial quantities of power to meet the 72-hour backup power mandate. Further, from a practical standpoint, solar may be of limited use in a wildfire given smoke blocking the sun.

Hydrogen Fuel Cells

The use of hydrogen fuel cells raises similar challenges for use to provide backup power at over 50,000 locations within California. The greatest challenges for deployment in the outside plant for California in wildfire prone and other areas generally include: (1) risk of fire to storage fuel tanks: (2) fuel infrastructure availability; (3) space limitations to install large fuel cells in neighborhood locations; (4) permitting challenges with fuel storage; and (5) potential vandalism and accidental damage to facilities (e.g., automobile collision) causing explosions or unsafe operations. In addition, the same challenges related to the propane-based generators also apply to the hydrogen fuel cells, further undermining the viability of hydrogen fuels cells as a feasible widespread alternative.

In summary, the cable industry has explored alternative fuels to support emergency power backup systems and will continue to do so. While technologies under development, such as solar and hydrogen fuel cells, may prove viable at some point in the long-term, there are significant environmental, safety, and community concerns that would arise when attempting to deploy these solutions at curbside or mounted on poles, at the more than 50,000 locations throughout California.

III. CONCLUSION

The cable industry will continue to investigate and invest in methods and technologies to

improve the resiliency of its network. However, at this time there is no viable solution to

provide 72 hours of backup at all cable power sources in California. The deployment of

additional facilities at tens of thousands of locations is clearly a very complex issue that would

pose unacceptable safety risks. It is also important to acknowledge that significant

environmental and community concerns would arise with solutions such as more onsite

generators, larger and/or more batteries or solar panels. When IOUs deem it necessary to shut

off electric power to mitigate fire risk, it would be highly questionable for communications

providers to take actions that may negate IOU efforts, possibly separately and independently

increasing the risk of igniting more fires or compounding the hazards. CCTA urges the

Commission to instead adopt the alternative proposal set forth in section 4(d) of these comments.

Respectfully submitted,

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