

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding
Emergency Disaster Relief Program

Rulemaking 18-03-011

**EXTENET SYSTEMS (CALIFORNIA) LLC (U 6959 C) COMMENTS
ON PROPOSED DECISION ADOPTING
WIRELESS PROVIDER RESILIENCY STRATEGIES**

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ExteNet Systems, Inc. (“ESI”) (U 7367 C)¹, along with its affiliated entity ExteNet Systems (California), LLC (“ExteNet”) (U 6959 C), hereby provides comments identifying errors or oversights based on the record in the Proposed Decision Adopting Wireless Provider Resiliency Requirements issued on June 11, 2020. (“Proposed Decision”). The Proposed Decision correctly places the requirement for network resiliency on the entities that control the overall networks – the wireless service providers (“WSPs”) -- rather than wireless infrastructure providers that provide facility inputs to WSPs’ networks. The Proposed Decision, however, omits important definitions and practical directives necessary to ensure that the new backup power requirements are effectively implemented.

Specifically, the Proposed Decision should include a definition of WSPs that explicitly exempts small cells and distributed antenna systems (“DAS”) provided by third parties. Adding this definition and exemption will avoid impractical applications of the Commission’s Order, confusion and/or legal wrangling over the entity responsible for maintaining a minimum level of wireless service during commercial power outages. The Proposed Decision should also establish a mechanism for coordinating with other state agencies and local jurisdictions to eliminate barriers to implementation of these new resiliency requirements, including exemptions from air quality rules, noise ordinances and local permitting rules that prohibit placement of equipment such as generators in the public rights of way or other municipal areas such as sidewalks.

¹ ESI has filed a motion for party status in this proceeding, which is pending as of today’s date. ExteNet is already a party to this proceeding.

I. THE COMMISSION SHOULD EXPLICITLY EXEMPT SMALL CELLS AND DAS

The Proposed Decision requires WSPs to ensure a minimum level of wireless service,² and distinguishes small cell and DAS, which provide inputs to WSPs' networks.³ The Proposed Decision notes that small cell/DAS wireless infrastructure providers such as ExteNet provide inputs to the WSPs' networks, but they do not control the quality or level of service on WSPs' networks.⁴ The Proposed Decision further refers to "macro cell sites" as the locations that must be able to continue receiving and transmitting signals during a commercial power outage.⁵ Thus the Proposed Decision appears to exempt small cells and DAS, but it does not explicitly do so.

A failure to specifically exempt small cells and DAS locations from the backup power supply will impede development of 5G, and future broadband and voice networks. Small cells are the backbone of 5G and they must comply with certain Federal Communications Commission ("FCC") guidelines for obtaining municipal approvals. The FCC specifically states that in order to qualify as a small cell facility, the calculation of size must include "[a]ll other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure," and cannot exceed 28 cubic feet in volume. 47 C.F.R. § 1.6002(l)(3). It would be an impossible task, with current technology, to maintain 72 hours of backup power within such size constraint. Further, California municipalities have been reluctant to approve large "ground furniture," as generators would be classified, in the public rights-of-way that could provide 72 hours of backup power supply. The Commission must distinguish between small cells, often located in the public right-

² Proposed Decision, at p. 81-83.

³ Proposed Decision, at p. 48-49.

⁴ Proposed Decision, at p. 47.

⁵ Proposed Decision, at p.12.

of-way, and macro sites that are often on leased property, where space is more likely available to place large equipment such as generators

ExteNet is concerned that without an explicit small cell exemption, there will be confusion regarding applicability of the backup power requirements to non-service providers, which could result in delays and legal wrangling. For example, for small cell and DAS facilities installed by third parties, even if the WSP owns some or all of the equipment, the third party may be contractually bound to upgrade or maintain the facilities. It is possible that WSPs might attempt to shift backup power requirements to those third parties in such circumstances.

The Proposed Decision provides a process through which waivers from backup power requirements may be requested if a carrier can demonstrate that it is unable to support backup power due to a safety risk, or that it is objectively impossible or infeasible to deploy backup power.⁶ The Proposed Decision does not set forth a Commission procedure for applying for and receiving such waivers, or a timeframe for Commission action. Given the reality of constraints on Commission resources however, (particularly in light of COVID-19), large numbers of waiver requests would almost certainly both cause delay and overload Commission staff unnecessarily. ExteNet has deployed thousands of small cell and DAS facilities in California, so it alone might need to request thousands of waivers.

An additional reason justifying a blanket exemption rather than requiring small cell and DAS providers to seek waivers on a case-by-case basis is that local jurisdictions are required to approve applications for placement of small wireless facilities within 60 or 90 days (depending on whether colocation or a new pole is involved), 47 C.F.R. § 1.6003. If the Commission cannot ensure that waivers could be processed and issued in a very short timeframe, small cell and DAS

⁶ Proposed Decision, at p.94.

providers could be in the untenable position of waiting for a waiver without knowing if their municipal applications are feasible.

ExteNet emphasizes that even if the Commission explicitly exempts small cell/DAS providers from the backup power requirements in the Proposed Decision, it will continue to provide battery backup where the WSP requests it. In such cases, ExteNet typically provide several hours of backup power through batteries installed on utility poles along with the antennas and associated equipment. Including a blanket exemption for third party small cell and DAS facilities is consistent with the recognition in the Assigned Commissioner's Ruling in this proceeding which found that "there is not a need to adopt a backup power requirement for every single component of communications networks and that circumstances may exist in which placing a generator is not possible or in the public interest."⁷

In addition, most small cell/DAS facilities are part of a heterogeneous network configuration for the carrier and almost always a macro-site (tower) is in the same coverage area and is capable of providing basic coverage. Therefore, exempting small cell/DAS facilities from the 72-hour battery backup requirement will have a negligible effect on availability of wireless service availability.

II. COORDINATION IS NEEDED WITH OTHER STATE AGENCIES TO AVOID CONFLICTING REQUIREMENTS

While the Proposed Decision expresses a strong preference for use of green/renewable power for backup, it acknowledges that in the short term, the only viable backup power technology is likely to be diesel generators.⁸ This is consistent with the record and ExteNet's

⁷ Assigned Commissioner's Ruling and Proposal, at p. 2, §1 (cited hereinafter as "ACR Proposal").

⁸ Proposed Decision, at pp. 2, 99-101.

understanding of available backup power technology.⁹ As ExteNet noted in its Opening Comments, use of renewable energy such as solar as backup power is not feasible for DAS or small cell installations.¹⁰ Solar units would occupy too much space, and cannot possibly be accommodated on utility poles, and in many cases even in the public right-of-way. Further, solar technology is not available with sufficient capacity to power DAS and small cell equipment.¹¹

A. Air Quality Laws May Preclude Widespread Use of Diesel Generators

In California, air quality districts have the primary responsibility for the control of air pollution from all sources other than vehicles. As WIA noted in its opening comments, there are thirty-five Air Quality Management Districts (“AQMD”), which impose a patchwork of differing requirements that may make it difficult to maintain uniform backup power across large networks which may cross multiple districts.¹² WIA provided the example of varying run time restrictions between districts for diesel generators.¹³ Such restrictions may preclude or limit the use of generators to ensure service resiliency for multiple, long lasting commercial power outages.

The ACR Proposal recognized that air quality requirements might preclude the use of generators. It stated, “environmental and clean air requirements, local fire codes, and building safety rules may disallow the citing of diesel generators or battery arrays at specific sites.”¹⁴ Yet the Proposed Decision does not mention such concerns, which were identified also by parties in the record, thus it provides no guidance on how to reconcile conflicting requirements between AQMDs and the new network resiliency rules. ExteNet respectfully submits that the

⁹ See e.g., WIA Opening Comments on ACR Proposal, at p.12 (cited hereinafter as “WIA Opening Comments.”); ExteNet Opening Comments on ACR Proposal, at p. 5-6 (cited hereinafter as ExteNet Opening Comments”).

¹⁰ ExteNet Opening Comments, at p. 5-6.

¹¹ ExteNet Opening Comments, at p. 5-6.

¹² WIA Opening Comments at 13.

¹³ *Id.*

¹⁴ ACR Proposal, at p. 2.

Commission, as a state agency, is in the best position to work with other state agencies to resolve any existing or potential conflicts.

ExteNet is aware that Senators Dodd and Glazer are sponsoring Senate Bill 1099 which would amend existing law to allow local air pollution control officers to issue orders allowing use of backup generators to exceed the normal run time, and testing and maintenance limits during planned power outages or emergency power outages.¹⁵ These new rules were approved by the California Senate, but must still be approved by the Assembly and signed by Governor Newsom. At the earliest, the rules will not take effect until January 1, 2022.¹⁶ In the meantime, it appears that the existing rules would apply, and such rules may permit insufficient run time to meet the backup power requirements set forth in the Proposed Decision.

B. Noise Ordinances May Preclude Widespread Use of Diesel Generators

Deployment of diesel generators will be hampered or precluded by local ordinances. As WIA noted in its Opening Comments, many localities have noise ordinances that effectively preclude the use of large diesel generators often used to provide permanent backup power.¹⁷

ExteNet's experience has been that local communities are extremely sensitive to noise issues associated with small cell and DAS because such facilities tend to be deployed in neighborhoods rather than commercial or industrial areas where macro towers tend to be deployed. ExteNet has received numerous complaints about noise from the fans in wireless antenna boxes that keep the equipment cool. These very small fans are mounted in the communications space on utility poles, typically 30 feet of the ground, yet some residents claim the noise is noticeable. The noise created by diesel generators is exponentially louder than small

¹⁵ S.B. 1099 amendment to Cal. Health and Safety Code, Section 42451.1(b)(2).

¹⁶ *Id.*

¹⁷ WIA Opening Comments, at p. 12.

fans in radio boxes, therefore ExteNet anticipates that backup generators will be source of vocal and repeated complaints from residents.

Similar to the air quality concerns arising from diesel generators, the Commission should coordinate with sister state agencies and local jurisdictions to develop an exemption or other process that will enable WSPs to operate diesel generators for 72 hours or more regardless of residents' complaints. Unlike the proposed legislation discussed above, ExteNet is not aware of any pending legislation that addresses noise concerns arising from the use of backup generators during commercial power outages.

III. COORDINATION IS NEEDED WITH LOCAL JURISDICTIONS TO AVOID CONFLICTING REQUIREMENTS

Small cells and DAS facilities are typically installed on utility poles in the public rights-of-way.¹⁸ The poles are most frequently located adjacent to sidewalks driveways and roadways and there is little or no room adjacent to such poles to locate large diesel backup generators.

Existing agreements with cities for use poles in the public rights-of-way typically do not include provisions that allow for installation of large pieces of equipment such as generators or backup batteries capable of 72 hours of service. Thus if small cell and DAS providers were subject to the 72-hour backup power requirement, at a minimum, they would be required to attempt to renegotiate municipal right-of-way agreements. It is likely, however, that cities would not agree. In ExteNet's experience, local jurisdictions will not permit the installation of large equipment such as generators in the public rights-of-way. Cities are especially averse to installing equipment off poles on sidewalks on the basis that it would obstruct use of the sidewalk and potentially cause a hazard for traffic if a car were to go off the roadway.

¹⁸ ExteNet Opening Comments, at p. 3.

IV. CONCLUSION

The Proposed Decision sets forth a useful set of backup power requirements to ensure that WSPs' wireless services remain available during commercial power outages. It could be improved by making explicit that third party small cell and DAS providers are exempt from the requirements. In addition, the Proposed Decision should coordinate with other state agencies and municipalities to address concerns raised by parties in the record the 72-hour power backup requirement, which at least for the short term can be satisfied only with generators, will conflict with state and local air quality and noise ordinances. Such clarifications are consistent with the record and the public interest and will establish achievable backup power requirements to keep wireless service available during commercial power outages.

Signed and dated July 1, 2020 at Walnut Creek, CA.

Respectfully submitted,

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APPENDIX A

Findings of Fact

1. The Commission initiated Phase I of R.18-03-011 to adopt an emergency disaster relief program for electrical, natural gas, water and sewer, and communications service providers.

2. As part of Phase I of R.18-03-011, the Commission adopted D.19-08-025 requiring communications providers to implement an array of customer protections when the governor of California or the president of the United States declares a state of emergency.

3. D.19-08-025 found that during declared states of emergencies, such as in the 2017, 2018, and 2019 wildfires and 2019 PSPS, California's facilities-based wireless service providers' networks failed, endangering the lives of customers and first responders.

4. The CalOES states that 80 percent of all calls to 9-1-1 during the 2017 and 2018 wildfires came from wireless devices and that this high percentage represents first responder and the public's dependence on data and wireless service.

5. In 2018, wireless service was throttled, adversely affecting the Santa Clara County Fire Department's control and command unit deployed to support relief efforts during the Mendocino Complex Fire.

6. Californians rely on their wireless devices to receive emergency notifications, contact family and friends, and reach first responders during emergencies.

7. In October and November 2019, widespread reports of communications outages across all communications sectors were reported.

8. According to the FCC Disaster Information Reporting System reports, which the Commission takes official notice of pursuant to Rule 13.9 of the Rules of Practice & Procedure, 57 percent of cell sites in Marin County alone were out of service between October 26-27, 2019.

9. Without access to 911 and the ability to reach first responders, Californians cannot access needed services, be safe, or even function in an emergency.

10. The Commission's Communications Division experienced an increase in Major Service Interruption reports from the wireless service providers in 2017, 2018, and 2019.

11. Communications Division received a 16 percent increase in Major Service Interruption reports from 2017 to 2018, and a 123 percent increase from 2018 to 2019.

12. The wildfires and the power outages from the PSPS events contributed to a significant delay in the restoration of communications service as compared to non-fire threat circumstances and wireless communications failed at critical times during wildfire and PSPS events and, as a result, many wireless customers were unable to make calls during times of emergency or disaster.

13. As of December 31, 2018, there were 45,335,804 wireless subscribers in California compared to 13,418,711 wireline subscribers.

14. The number of wireline customers has steadily decreased as consumers begin to rely solely on wireless service.

15. In 2019, approximately 27.4 million 9-1-1 calls were placed via wireless service as compared to approximately 3.6 million placed via wireline service.

16. The first major PSPS event took place on October 9-11, 2019, with the second and third event taking place between October 26- 31 that year.

17. Communications Division staff measured the impact of the 2017-2019 wildfires and PSPS events by analyzing the wireless service providers' major service interruption and disaster information reporting system reports and calculated the number of potentially affected wireless users, macro cell sites, and blocked calls.

18. Communications Division findings are illustrated in this table below, depicting the estimated impact from 2017-2019 wildfires and PSPS events on wireless service in California:

Year	Events	Number of Potentially Impacted Wireless Customers	Approximate Number of Impacted Cell Sites	Approximate Number of Blocked Calls
2017	Napa and Sonoma County Wildfires	96,097	248	814,041
2017	Mendocino and Humboldt County Wildfires	104,441	46	8,271,992
2017	Southern California Wildfires	97,811	457	434,086
2018	Camp Fire Butte County	48,414	51	2,165,308
2018	Hill and Woolsey Fires Southern CA	512,231	492	4,228,585
2019	Kincade Fire and Statewide PSPS	1,122,645	224	n/a

19. The most severe impacts of these fires were in high fire-threat areas, where there were repeated reports of cell site failures, particularly in the 2018 Camp Fire in Butte County, town of Paradise.

20. In 2019, substantial numbers of wireless sites in Butte County were inoperative due to PSPS events.

21. “Facilities-based wireless service providers” are carriers certified by the Federal Communications Commission to provide wireless service, and such providers serve, directly and indirectly, approximately 45,335,804 wireless subscribers in California. Small cell and Distributed Antenna System (“DAS”) providers are not defined as wireless service providers.

22. Resiliency is the ability to recover from or adjust to adversity or change through an array of strategies including, but not limited to: backup power, redundancy, network hardening, temporary facilities, communication and coordination with other utilities, emergency responders, the public and finally, preparedness planning.

23. Wireless service providers that diligently and adeptly utilize resiliency, and its related strategies, demonstrate that they can maintain service during a disaster.

24. Mitigating wireless network disruption through resiliency measures minimizes the likelihood that large numbers of wireless customers will be adversely impacted.

25. In 2019, Verizon utilized an array of resiliency strategies successfully and kept much of its network operational and running on backup power.

26. Verizon demonstrates that using resiliency strategies and backup power results in network preservation.

27. Wireless service providers that have not made these investments suffer more severe impacts and struggle to maintain service.

28. A power outage is the period during which a generating unit, transmission line, or other facility is out of service.

29. There is a public need to adopt a narrowly tailored and reasonable backup power requirement for wireless service providers during disasters and PSPS events.

30. Customers and first responders have a reasonable expectation that they will hear a dial tone, receive emergency alerts and notifications, and can access critical information during an emergency, especially when the power is out.

31. Because of climate change, wildfires and PSPS events will be part of the future with an expected increase in both frequency and severity.

32. Energy and water utilities, customers, and first responders across all levels of government have expressed public safety concern with the failure of wireless service providers to adequately provide service continuity, including 9-1-1, during disasters and during de-energization events.

33. In April 2018, the Commission's Communication Division issued a report analyzing major communication outages during the 2017 winter storms.

34. The April 2018 Communications Division report found that that a total of 964,003 subscribers, or 2.5% of Californians, did not have the capability to dial 9-1-1 for some period of time during the 2017 winter storms.

35. Communications Division's April 2018 report emphasized that many outages could have been prevented with better availability of backup power for wireless service providers and improved reliability of cable facilities for wireline providers.

36. Of the four wireless service providers serving the Town of Paradise, two had no macro cell_sites with backup capacity beyond batteries and the other two

providers had at least one macro cell site, with additional on-site backup capacity in the form of generators.

37. Of the 15 macro cell sites near the Town of Paradise, in the Tier 3 High-Fire Threat District, only three (20 percent) of the macro cell sites have onsite backup generators.

38. Outages were widespread for most wireless service providers during the 2019 PSPS events, with outages occurring in nearly half of the counties in the State.

39. Most macro cell sites out of service in a single day during the 2019 PSPS events occurred on October 27, 2019, with 567 macro cell sites out of service.

40. In 2019, over half of California's counties were impacted by network outages, with Marin County experiencing 57 percent of its 280 cell phone tower sites out of service and Sonoma, Lake, Santa Cruz, Humboldt, and Calaveras counties all facing impacts when over 20 percent of cellphone towers were without power.

41. In the October 2018 wildfires, CalOES saw a total of 341 cell sites go offline, prohibiting 9-1-1 calls.

42. In the October 2018 wildfires, approximately 72,000 people had difficulty reaching 9-1-1, some due to the inability of the wireless system to provide service.

43. California's water utilities rely on communications networks to monitor facilities, maintain contact with field personnel, communicate with personnel and customers, and receive emergency notifications and critical information.

44. California's electrical corporations rely on wireless networks to ensure reliability and resiliency.

45. California's electrical corporations may benefit from a wireless communications network that is more resilient.

46. Ensuring that wireless service provider network operators have reliable backup power will help water utilities maintain safe and reliable service during an emergency.

47. State emergency services personnel find that California's wireless network is not built to survive disasters, and many cell sites do not have resiliency, whether through backup power or ability to survive disruption.

48. In 2019, Sonoma County made the difficult decision to evacuate early in response to the Kincade Fire because they feared what evacuation would be like without reliable access to wireless service to disseminate warnings and alerts.

49. Because of the widespread outages, many fire departments in Sonoma County were forced to operate by radio alone, and had limited ability to receive data or maps.

50. Without a clear backup power requirement for wireless service providers operating in the State of California, the public will be harmed during disasters and commercial grid outage events.

51. Seventy-two hours of required backup power ensures wireless customers have access to communication services, receive emergency alerts and notifications, and access the internet for critical information during an emergency, disaster, or when the power is out.

52. Electrical corporations de-energized 2,290 circuits during the 2019 PSPS events, and the average outage duration was just under 46 hours while over 16 percent of outages lasted longer than 72-hours.

53. Only 8 percent of power outages at macro cell sites during the 2019 PSPS events lasted longer than 72 hours.

54. A 72-hour backup requirement would have, more likely than not, provided uninterrupted power to 92 percent of the macro cell sites in California that lost commercial power during the 2019 PSPS events.

55. Requiring seventy-two hours of required backup power aligns with FCC standards.

56. Deployable generators that have capacity to provide 72-hours of backup power present less siting, permitting, and cost difficulties than requiring 72-hours of on-site backup power.

57. Minimum service levels and coverage include the following: (1) 9-1-1 service; (2) 2-1-1; (3) the ability to receive emergency alerts and notification; and (4) basic internet browsing during a disaster or commercial power outage.

58. A required Communications Resiliency Plan will ensure the wireless service providers transparently describe to the Commission, their ability to maintain: (a) sufficient level of service and coverage to maintain access to 9-1-1 and 2-1-1; (b) the ability to receive emergency notifications; and (c) access to internet browsing for emergency notices in the event of a disaster or power outage.

59. The Communications Resiliency Plan will ensure collaboration between the Commission and the wireless service providers to meet future challenges.

60. The Communications Resiliency Plan will demonstrate that the wireless service providers can maintain service during disasters and outages.

61. The Communications Resiliency Plan will help prepare both the Commission and the wireless service providers to face emerging challenges and implement key learnings as conditions change and we observe response efficacy and effectiveness.

62. Using fossil fuel generators for backup power reliability and resiliency in both the 2020 and 2021 wildfire and PSPS seasons may be necessary to ensure minimum continuity of service.

63. Fossil fuel generation as a backup power resource cannot be a long-term resiliency strategy.

64. Large fossil fuel generators – even when localized in select areas – present potential health risks for individuals who live or work near a temporary generation site.

65. Minimum continuity of service must be available for the public given the dangers associated with widespread, commercial grid outages, including the potential loss of, or damage to, life, health, property, and essential services.

66. Wireless service providers must attest to the Commission that their organizations have an emergency operation plan in place for disaster and PSPS preparedness.

67. Wireless Emergency Operation Plans must be submitted to the Commission by each wireless service provider, as well as, emergency contact information, emergency preparedness exercise attestations, and public communications plans.

68. On March 19, 2020 Governor Gavin Newsom signed Executive Order N-33-20 in response to COVID 19.

69. Executive Order N-33-20 requires all individuals living in the State of California to stay home or stay at their place of residence, except as needed to maintain continuity of operation of the federal critical infrastructure sectors, in order to address the public health emergency presented by COVID-19.

70. The stay-at-home order is indefinite, and as of the date of the issuance of this decision it remains in effect.

Conclusions of Law

1. The Commission has jurisdiction over facilities-based wireless service providers, and authority to ensure the reliability of communications networks in emergencies.

2. California is in an unprecedented climate emergency that has produced increasingly deadly and destructive wildfires, and PSPS events.

3. The State has a duty to ensure, as much as possible, the safety of all Californians.

4. The Commission has responded to this ongoing threat to essential utility infrastructure and services by acting across the breadth of its jurisdiction, addressing energy, water, and communications networks and their customers.

5. The Commission has both the jurisdiction and the authority to require wireless service providers ~~telecommunications carriers~~ to install emergency backup power at macro cell sites in Tier 2 and 3 high fire threat districts, so that those cell sites continue to receive and transmit signal when commercial power sources are cut off.

6. Uninterrupted transport of communications is an essential precondition to the ability of public safety officials to communicate and coordinate with each other and with the public.

7. The Commission has jurisdiction over wireless telephone corporations and other communications utilities.

8. Public Utilities Code § 216 gives the Commission broad jurisdiction over public utilities, including telephone corporations as defined by Public Utilities Code § 234.

9. The Commission's "broad regulatory power over public utilities" derives from Article XII of the State Constitution, which establishes the Commission, and

gives it wide-ranging regulatory authority, including but not limited to “the power to ... establish rules, hold various types of hearings, award reparation, and establish its own procedures.”

10. Public Utilities Code § 216 definition of a “public utility” includes every “telephone corporation” where service is performed, or a commodity is delivered to the public or any portion thereof.

11. Public Utilities Code § 234 definition of a “telephone corporation” includes “every corporation or person owning, controlling, operating, or managing any telephone line for compensation in this state.”

12. Public Utilities Code § 233 definition of a “telephone line” includes “all conduits, ducts, poles, wires, cables, instruments, and appliances, and all other real estate, fixtures, and personal property owned, or controlled, operated, or managed in connection with or to facilitate communication by telephone, whether such communication is had with or without the use of transmission wires.”

13. California’s Constitution, Art. XII, § 3, specifically extends the Commission’s jurisdiction to companies engaged in “the transmission of telephone and telegraph messages.”

14. The Commission’s authority over public utilities includes oversight over both public utility services and facilities pursuant to California Constitution, Art. XII §§ 1-6 and Public Utilities Code § 701.

15. Public Utilities Code § 451 requires the Commission to ensure that utilities, including telephone corporations, “furnish and maintain such adequate, efficient, just and reasonable service, instrumentalities, equipment, and *facilities* ... as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public.” [emphasis added]

16. Public Utilities Code § 761 requires the Commission to ensure the reasonableness and sufficiency of *utility facilities*³¹⁶ and may order “additions, extensions, repairs, or improvements to, or changes in” utility facilities that the Commission finds “ought reasonably to be made.”[emphasis added]

17. Public Utilities Code § 1001 gives the Commission the sole power to grant operating authority to California utilities, *i.e.*, issue a certificate of public convenience and necessity (CPCN) to traditional utilities seeking to operate in California.

18. Public Utilities Code §§ 1001 and 1013 gives the Commission the lone power to grant a “registration” license to companies the Commission has determined lack “monopoly power or market power in a relevant market or markets or to wireless telephone corporations.”

19. In the case of both non-dominant carrier and wireless registrations, the telephone corporations are required to comply with all sections of the Public Utilities Code other than the entrance regulation inherent in Public Utilities Code § 1001.

20. A CPCN or equivalent authority confers upon a public utility telephone corporation numerous benefits in addition to the obligations under the Public Utilities Code, CPUC decisions, and regulations.

21. Public Utilities Code § 7901 states that public utility telephone corporations have the right to interconnect with other service providers³¹⁷ and the ability to access the public rights-of-ways to build or install facilities to provide their services.

³¹⁶ Pub. Util. Code § 761.

³¹⁷ State certification/registration entitles the telephone corporation to interconnect with other telephone corporations under 47 USC §§ 251 and 252 and analogous state law.

22. Public Utilities Code §§ 233, 224.4 extends the Commission's jurisdiction to the facilities wireless carriers rely upon to provision service.

23. Police power authority over matters related to public health and safety is traditionally reserved to the states.

24. States traditionally have had great latitude under their police powers to legislate as to the protection of the lives, limbs, health, comfort, and quiet of all persons.

25. The California Constitution and California statutory law designate the CPUC as the principal body through which the State exercises its police power in the case of essential utility network services.

26. Public Utilities Code § 451 gives the Commission broad authority to regulate public utility services and infrastructure as necessary to ensure they are operated in a way that provides for the health and safety of Californians: "Every public utility shall furnish and maintain such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities, including telephone facilities, as defined in Section 54.1 of the Civil Code, as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public."

27. Protections for Californians as consumers of telecommunication services are set forth in Public Utilities Code §§ 2890-2896.

28. The regulatory measures promulgated in this Decision are consumer safeguards intended to protect the health and safety of utility customers, particularly those encountering wildfires and related public emergencies triggered by historic climate change.

29. The Federal Communications Act does not preempt the Commission from exercising public safety regulation of wireless facilities.

30. The 1993 amendments to the Federal Communications Act ushered in an era of shared jurisdiction.

31. In 1993, Congress passed the Omnibus Budget Reconciliation Act of 1993 (Budget Act), which amended Section 332(c)(3)(A) of the Communication Act § 332) as follows: no State or local government shall have any authority to regulate the entries of or the rates charged by any commercial mobile service or any private mobile service, except this paragraph *shall not prohibit a State from regulating the other terms and conditions of commercial mobile service.*

32. After Congress enacted the revised § 332, the CPUC issued multiple decisions implementing the change in federal law, and harmonizing those changes with existing Commission oversight of wireless telephony.

33. Accordingly, the Commission continues to exercise broad authority over wireless service.

34. In providing a role for states, Congress explicitly declined to occupy the field.

35. Congress did not expressly or otherwise, preempt state health and safety rules.

36. A 72-hour backup power requirement is not tantamount to rate regulation.

37. The scope of § 332's preemptive language is limited to regulations that *directly and explicitly* control rates, prevent market entry, or require a determination of the reasonableness of rates.

38. The Commission retains the unequivocal authority to regulate "other terms and conditions of service:" for wireless service providers

39. The emergency measures rules adopted herein do not conflict with federal law or regulations, and therefore, are not subject to conflict preemption.

40. A backup power regime does not run afoul of § 332(c)(3)(A) because the FCC has no current backup power rules.

41. The underlying facts of the Seventh Circuit Court of Appeals, *Bastien v. AT&T Wireless Servs., Inc.* are fundamentally different, and therefore not applicable here.

42. None of the requirements in this Decision conflict with the FCC's 2018 Order for 5G and advanced wireless network deployment.

43. The Commission has long regulated the safety-related aspects of utility networks, extending to provisions relating to backup power, support structures, and the requirements in General Orders 95 and 128, relating to overhead lines and underground facilities

44. Governor Gavin Newsom signed Executive Order N-33-20 requiring Californians to comply with the orders of the California State Public Health Officer and the Director of the California Department of Public Health that all individuals living in the State of California stay home or at their place of residence (Stay-At-Home Order). The Stay-At-Home order is indefinite, and as of the date of the issuance of this Decision, it remains in effect.

45. It is reasonable to require the wireless service providers to collaborate with California's electrical corporations in advance of a de-energization event or wildfire and give notice to their customers if service coverage cannot be maintained.

46. It is reasonable to define resiliency as the ability to recover from or to adjust to adversity or change through an array of strategies, consistent with Section 6.2.2, including, but not limited to: (a) backup power; (b) redundancy; (c) network hardening; (d) temporary facilities; (e) communication and

coordination with other utilities emergency responders, the public; and
(f) preparedness planning.

47. It is reasonable to define an outage, consistent with Section 6.3.2 of this decision.

48. It is reasonable for the wireless service providers to maintain service at macro cell sites through various technological means to ensure customers in Tier 2 and Tier 3 High Fire Threat Districts have access to 72-hour backup power during the upcoming wildfire season and de-energization events.

49. It is reasonable to require the wireless service providers to ensure customers and first responders in Tier 2 and Tier 3 High Fire Threat Districts have access to minimum service levels and coverage through 72-hours of backup power.

50. It is reasonable for the wireless service providers to have twelve (12) months from the effective date of this decision to implement the 72-hour backup power requirement.

51. It is reasonable to define minimum service levels and coverage as including: (1) 9-1-1 service; (2) 2-1-1; (3) the ability to receive emergency alerts and notification; and (4) basic internet browsing during a disaster or commercial power outage.

52. It is reasonable to require each wireless service provider to submit a Communications Resiliency Plan via a Tier 2 Advice Letter within 6 months from the effective date of this decision.

53. It is reasonable to require the Communications Resiliency Plan to include, but not be limited to, the following information:

- Facilities-based wireless service providers shall submit a Communications Resiliency Plan pursuant to section 6.5.2 of this decision, within six (6) months of the effective date of this decision, to the Communications

Division via Tier 2 Advice Letter that describes how the wireless service provider shall maintain a minimum level of service and coverage to preserve access to 9-1-1 and 2-1-1, maintain the ability to receive emergency notifications, and provide access to internet browsing for emergency notices for their customers in the event of a power failure. Each resiliency plan shall include, but is not limited to, the following information:

- ✓ Discussion of their ability to maintain a sufficient level of service and coverage to maintain access to 9-1-1 and 2-1-1, maintain the ability to receive emergency notifications, and access Internet browsing for emergency notices in the event of a disaster or power outage, including identifying how they maintain the resiliency of their networks, as defined in Section 6.2 of this decision
- ✓ Detailed PSPS and grid outage response plans;
- ✓ Detailed Clean Generation and Diesel Generation Near and Long-Term Approaches, consistent with Section 6.7.2 of this Decision;
- ✓ Facilities with and without battery backup, fixed generation, and mobile generator hookups, their location, and the estimated length of time the facilities will operate during a grid outage with and without refueling at each site;
- ✓ The number of mobile generators and refueling trucks and specify which are stationed in California;
- ✓ Identify the ability to replace damaged facilities, including logical and physical network route diversity and temporary facilities (*e.g.*, mobile cell sites and temporary microwave backhaul);
- ✓ Identify titles of management and number of personnel dedicated to refueling and vendors including company and contract agreement;

- Identify the ability to support reporting on system outages as required by CPUC rules, Cal OES regulations and California Government Code;
- Detail how backup generators comply with CARB standards;
- Provide refueling schedules;
- Provide roaming agreements;
- Provide cooperative agreements which are used to pool resources with other providers;
- Identify facilities that do not need backup power, are unable to support backup power due to a safety risk, or that are objectively impossible or infeasible to deploy backup power pursuant to Section 6.6.2.; and
- Identify investment plans to improve network resiliency pursuant to Section 6.6.2. (e.g., deployment of redundant backhaul and deployment of fixed generators).

54. It is reasonable to allow the wireless service providers to identify, in their Communications Resiliency Plans, facilities that do not need backup power, are unable to support backup power due to a safety risk, or are unable to support backup power because the conditions make it objectively impossible or infeasible to deploy backup power. Such conditions may include conflict with state or local laws or ordinances.

55. It is reasonable to allow the wireless service providers to use fossil fuel generation as a primary backup power resource, in the near-term, but require the wireless service providers to transition to a future of renewable backup generation.

56. It is reasonable to require the wireless service providers to submit annual emergency operations plans that discuss emergency response procedures and ensure substantive engagement with the Commission and CalOES during emergencies.

57. The actions directed in this decision require the wireless service providers to comply with the Governor's Executive Order N-33-20, the orders of the California State Public Health Officer and the Director of the California Department of Public Health that all individuals living in the State of California stay home or at their place of residence, except as needed to maintain continuity of operation of the federal critical infrastructure sectors, in order to address the public health emergency presented by the COVID-19 disease.

58. It is reasonable to require the wireless service providers, when implementing the requirements of this decision, to comply with the direction from public health officials regarding shelter-in-place, social distancing, or other measures that may need to be taken in response to the COVID-19 pandemic, consistent with Executive Order N-33-20.

ORDER

IT IS ORDERED that:

1. Facilities-based wireless service providers shall be defined as carriers certified by the Federal Communications Commission to provide wireless service. Such providers shall file a Communications Resiliency Plan pursuant to Section 6.5.2 of this decision, within six (6) months of the effective date of this decision, to the Communications Division via Tier 2 Advice Letter that describes how the wireless service provider shall maintain a minimum level of service and coverage to preserve access to 9-1-1 and 2-1-1, maintain the ability to receive emergency notifications, and access to internet browsing for emergency notices for their customers in the event of a power outage. The Communications Resiliency Plan shall include, but is not limited to, the following information:

Discussion of their ability to maintain a sufficient level of service and coverage to maintain access to 9-1-1 and 2-1-1, maintain the ability to receive emergency notifications, and access to Internet browsing for emergency notices in the event of a disaster or power outage, including identifying how they maintain the resiliency of their networks, as defined in Section 6.2 of this decision

- Detailed PSPS and grid outage response plans;
- Detailed Clean Generation and Diesel Generation Near and Long-Term Approaches, consistent with Section 6.7.2 of this Decision;
- Facilities with and without battery backup, fixed generation, and mobile

generator hookups, their location, and the estimated length of time the facilities will operate during a grid outage with and without refueling at each site;

- The number of mobile generators and refueling trucks and specify which are stationed in California;
- Identify the ability to replace damaged facilities, including logical and physical network route diversity and temporary facilities (*e.g.*, mobile cell sites and temporary microwave backhaul);
- Identify titles of management and number of personnel dedicated to refueling and vendors including company and contract agreement;
- Identify the ability to support reporting on system outages as required by CPUC rules, Cal OES regulations and California Government Code;
- Detail how backup generators comply with CARB standards;
- Provide refueling schedules;
- Provide roaming agreements;
- Provide cooperative agreements which are used to pool resources with other providers;
- Identify facilities that do not need backup power, are unable to support backup power due to a safety risk, or that are objectively impossible or infeasible to deploy backup power pursuant to Section 6.6.2.; and
- Identify investment plans to improve network resiliency pursuant to Section 6.6.2. (*e.g.*, deployment of redundant

backhaul and deployment of fixed generators).

We direct the Communications Division to develop and adopt standardized reporting templates as well as a submittal schedule for the Communications Resiliency Plans within 30 days from the adoption of this decision.

2. Facilities-based wireless service providers shall, in their Communications Resiliency Plan pursuant to Section 6.5.2 of this decision, demonstrate their ability to meet the 72-hour backup power requirement, in Tier 2 and Tier 3 High Fire Threat Districts, consistent with Sections 6.4.2, 6.4.4, and 6.4.6 of this decision, as well as describe their ability to maintain a minimum level of service and their long-term investment plan to comply with the 72-hour backup power requirement of this decision.

3. Facilities-based ~~wireless provider~~wireless service providers shall file emergency operations plans pursuant to Section 6.8.2 of this decision, on an annual basis, with the first due within 60 days of the effective date of this decision to the Director of the Communications Division, the California Governor's Office of Emergency Services, and local emergency response agencies, as an information only filing that contains the ~~wireless provider~~wireless service provider's: (1) emergency operations plan; (2) emergency contact information; (3) emergency preparedness exercise attestation; and (4) public communications plans.

4. Upon the effective date of this decision, the ~~wireless provider~~ wireless service providers, when implementing the requirements of this decision, shall comply with the orders of the Governor's Executive Order N-33-20, the California State Public Health Officer, and the Director of the California Department of Public Health shelter-in-place directives, social distancing directives, and/or other measures that may need to be taken in response to the COVID-19 pandemic.

5. Small cell, Distributed Antenna System ("DAS") and MVNOs shall be exempt from the requirements set forth herein.

65. Rulemaking 18-03-011 remains open.

This order is effective today.

Dated _____, at San Francisco, California