BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Regarding
Emergency Disaster Relief Program

Rulemaking 18-03-011
(Filed March 22, 2018)

OPENING COMMENTS OF RURAL COUNTY REPRESENTATIVES OF
CALIFORNIA TO THE ASSIGNED COMMISSIONER’S PROPOSAL

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I. Introduction


II. Comments

On behalf of the Rural County Representatives of California (RCRC), we are pleased to offer comments to the Assigned Commissioner’s Ruling and Proposal (Proposal) dated March 6, 2020. RCRC was granted party status via written ruling by the Administrative Law Judge on November 13, 2019. RCRC is an association of thirty-seven rural California counties, and its Board of Directors is comprised of one elected supervisor from each of our member counties. Given the massive communications outages that occurred during the October 2019 Public Safety Power Shutoff (PSPS) events, establishing resiliency rules for communications service providers is vital to protect public health and safety. RCRC appreciates the Commission’s attempt to expedite
this decision so necessary system improvements can be made before this year’s wildfire season and the associated PSPS events we expect to follow.

In general, we wholeheartedly agree with the Proposal’s assertion that communication service providers have a duty to maintain continuity of service in times of disaster, including during power outages and public safety power shut-offs. It is not an exaggeration to state that losing communication services is often a matter of life and death. Local emergency managers and the electrical utilities themselves depend upon a working communications network to notify the public and customers about PSPS events, service restoration, and other emergencies or evacuation orders that may occur concurrently with a PSPS event. Inversely, residents need uninterrupted access to 9-1-1 services, just as emergency responders need a reliable means to give and receive real-time information. To ensure effective emergency management (and ensure that scarce resources are dedicated where they are most needed), communications providers must provide emergency responders with real-time information on network outages, resiliency, and the status of backup power at communications facilities.

Many residents and customers rely on wireless communication devices to receive notifications and access 9-1-1 services; however, there are large areas of the state with inadequate or unavailable wireless coverage and which instead rely upon landlines for those services. Furthermore, the loss of internet service during a de-energization can have equally devastating results, since many notifications sent via text message contain links to websites where consumers can access more information about the outage or emergency. As analog landlines increasingly transition to broadband-based Voice over Internet Protocol (VoIP), the communications network has lost much of the inherent resiliency that came with traditional copper landlines, since VoIP service is much more easily susceptible to disruption when electricity goes out.

We appreciate the Assigned Commissioner’s holistic observance and desire for consistency with the Order Instituting Rulemaking to Implement Wildfire Mitigation Plans Pursuant to Senate Bill 901 (2018), as well as the Order Instituting Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions regarding emergency preparedness and response, and system hardening in general. Communication facilities, and their associated large equipment, should be treated like many other critical facilities and be subject to resiliency, back-up generation, and disaster planning requirements, including for PSPS events. We agree with the

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1 R.18-10-007 and R.18-12-005, respectively.
Commissioner’s proposal that not every single component of a communications network needs to be equipped with backup power, since the objective is system resiliency. If communications networks have built-in redundancies to ensure maintenance of complete coverage during an emergency, including a power outage, then there should be some accommodation to waive the backup generation requirements.

As directed by the Assigned Commissioner, our comments are outlined according to the topics and questions posed in the Proposal.

1. **APPLICABILITY OF REQUIREMENTS**

   (a) *Is this definition of applicability reasonably tailored to ensure regulatory compliance over all communication service providers? Why or why not?*

   RCRC believes the emergency backup power requirements have broad applicability and that the scope outlined in the Proposal (all companies owning, operating, or otherwise responsible for infrastructure that provides or otherwise carries 9-1-1, voice, text, messages, or data) is appropriate to achieve these objectives. This is especially important to ensure some level of communications capability during a disaster, especially considering that Sonoma County’s lengthy loss of power was combined with loss of gas service, cell service, and landlines. Sonoma County, already subject to a PSPS event, 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 communications to disseminate warnings and alerts. 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.

   (b) *Which types of providers, if any, should be excluded from these requirements because their services are not essential to reliable access to 9-1-1 and the distribution of essential emergency information?*

   Emergency response, and public access to emergency responders, requires resiliency of all communications modes. Simply requiring one type of communications provider to meet minimum resiliency standards would miss the mark, since the dissemination of information often requires multi-channel communications strategies and may blend text alerts with data located on a particular website. There were numerous instances of breakdowns in emergency notification processes during the October 2019 PSPS events when one particular communication medium was

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unavailable. Oftentimes, residents were unable to access critical emergency information because the emergency text alerts they received included a link to access more information, but internet access was unavailable because internet providers did not have adequate backup generation in place to ensure continuity of service.

Furthermore, narrowly focusing on one type of telecommunications provider, such as wireless carriers, could aggravate long-term telecommunication reliability challenges in rural communities as many residents in these areas do not have access to wireless services and therefore rely on landlines. Additionally, even in rural areas, there is a shift away from traditional copper landlines to VoIP, a technology that is reliant on power to be operational, reinforcing the need to look broadly at all telecommunication technology reliance on uninterrupted power. The community of Bonny Doon in Santa Cruz County is illustrative of the problem: The community of 2,600 has little cell phone coverage, AT&T reportedly no longer offers copper land lines to all residents and many rely upon Comcast for phone service, so once Comcast lost power, many residents were left without communications capabilities.

2. (a) For purposes of Phase II, should the Commission apply the definition from D.19-08-025, instead of the proposed definition in the Proposal?

The proposed definition in the Proposal is more straightforward and understandable than the definition from D.19-08-025. By using plain language and clearly articulating its intent, the Proposal more clearly achieves the desired outcomes of the Commission.

3. DEFINITION OF RESILIENCY

(a) Please provide comments on the definition of resiliency in the context of communications service resiliency strategies and their definitions.

The Proposal’s definition of “resiliency” is adequate and the strategies identified should go a long way towards improving system resiliency. Resiliency can only be achieved through a diverse portfolio of integrated strategies, including deployment of backup power (both fossil fueled and renewable), system design redundancy, infrastructure hardening, temporary facilities that can quickly be deployed to address problems as they arise, coordination between service providers, and preparedness planning. Providers will need to incorporate all the proposed strategies to maintain essential service. While the strategies employed may vary among providers, the overarching goal that must be attained is complete system resiliency.
At the very least, all providers should develop a comprehensive resilience plan that outlines how they will implement the various strategies and what steps must be taken to reach those resilience goals. The resilience plan should establish clear lines of communication and coordination with other providers, especially those with nearby facilities or equipment, and evaluate opportunities to collaborate with other providers to improve overall system resiliency. It should also articulate the lines of communication and coordination with electric utilities, local emergency responders, and other stakeholders through information about communications capabilities during a projected energy outage will be shared in accordance with Senate Bill 560 (McGuire, Chapter 410, Statutes of 2019).

One of the most important aspects of system resiliency will be the deployment of backup power (generators, energy storage, etc.) to the various sites and equipment. Where fixed generators or storage cannot be located at the site with sufficient supplies to meet the 72-hour resilience goal, communications providers should strive to prewire those sites so that mobile backup generators or storage systems can quickly be deployed during an outage. Some of the need for backup power at individual sites may admittedly be addressed through engineered system redundancy or the deployment of temporary facilities when the primary facilities are damaged, destroyed, or lose power.

(b) Please comment on any recommendations or modifications that should be considered to the proposed resiliency definition and the resiliency strategies. Please provide a complete discussion for any proposed recommendations and modifications.

RCRC generally believes that the proposed resilience definition and strategies provide adequate initial guidance for communications providers; however, some clarification should be added to the “backup power” strategy. During last year’s PSPS events, there were reports of generators at cell towers being ordered not to start because of a concern about the generator starting a fire. While RCRC is very sensitive to wildfire risks, facility operators should be required to take whatever steps are necessary to ensure that backup generators can be safely powered up during an emergency, including a PSPS event, without creating additional wildfire risk. Furthermore, we recommend that preparedness planning and coordination efforts occur at regular intervals to ensure continuity of service without interruption.

4. BACKUP POWER REQUIREMENT

(a) Please provide comments on the proposed backup power requirement.
We agree that backup power must be sufficient to maintain access to 9-1-1 emergency service, emergency notifications, and access to web browsing for emergency notices, for all customers for a minimum of 72 hours following a power outage. During PSPS events in the Fall 2019, many electrical corporations assumed affected customers would be able to “click through” a hyperlink to find out more information about an event or to find available resources. Given the significant internet outages during those events, and considering that many rural areas have insufficient cellular coverage, RCRC believes that multi-channel communications are essential and so all communications pathways must meet minimum resiliency thresholds in order to ensure that utilities and public safety partners are able to effectively communicate with residents during and emergency.

We agree with the Proposal’s requirement for providers to provide Backup Power Plans annually. These Plans should be made available to the Service List of both R.18-12-005 as well as this Proceeding. This will ensure these documents are available not only for electrical corporations that rely on these providers to serve notices, but also for greater public scrutiny and comment.

RCRC understands that a one-size-fits-all approach to backup power is inappropriate and also understands the need for entities to seek (and the CPUC to approve) waivers in some cases; however, the issuance of waivers should not impair the ability for the communications sector to maintain continuation of service. In addition to continuously maintaining 9-1-1 and emergency notification systems, connectivity must remain for essential community services such as the operations of public and private water systems, jails, schools, health care facilities, and other critical county facilities.

RCRC has a number of misgivings about the Proposal’s direction with respect to utilization of clean energy backup power options. To be clear, RCRC does not oppose the deployment of clean energy backup systems and recognizes their associated air quality benefits. The Proposal requires providers to utilize clean energy backup power options as reasonable before using diesel generators to meet backup requirements and to identify annual targets for reduction of fossil fuel generation. RCRC believes that the core focus should be ensuring that communications systems are resilient as quickly as possible to avoid public health and safety risks that may result from outages like what occurred during last October’s PSPS events.

Clean energy generation is a noble endeavor and undoubtedly could benefit communities by improving air quality (which is especially important in non-attainment areas in Central and
Southern California). The requirement to utilize clean energy backup power options “as reasonable” before using diesel generators should take into consideration technological feasibility and cost-effectiveness, as is commonly the case. Where clean energy backup power options are unavailable or cost prohibitive, there should not be a disincentive to investing in diesel or other fossil-fueled backup generators to ensure system resiliency. If these factors are not taken into consideration, this requirement could ultimately put 9-1-1 and other emergency service and response systems at risk in all areas of the state if the technology is not readily available for procurement. We caution against mandating clean-energy solutions because, although well-intentioned, they could result in delays that could further endanger the public during PSPS events or other disasters. This is why we urge restraint in the Proposal’s requirement that providers “identify annual targets for the reduction of fossil fuel generation.” This proceeding should be focused on ensuring communication system resiliency and should not inhibit attainment of that objective by trying to incorporate ambitious equipment turnover requirements. Having stated these concerns, Backup Power Plans should take into account technological development that facilitates the deployment of clean energy generation options over time. These efforts should prioritize minimizing impacts to ratepayers, as would result from unnecessary generator turnovers before existing equipment reaches the end of its useful life. For example, ratepayers should not be subjected to pay for expensive diesel-powered back-up procurement only for a provider to change to another, cleaner source of generation shortly thereafter. Therefore, adequate planning should account for short- and long-term backup power generation solutions that will ultimately minimize costs for ratepayers.

(b) How should “outage” be defined?

As you may know, prior to Senate Bill 670 (McGuire Chapter 412, Statutes of 2019), telecommunications providers were not required to provide pertinent outage information, such as approximation of areas affected, number of approximate communities affected, and time of repair, nor did outage information get provided to any other entity besides the Federal Communications Commission, including the Governor’s Office of Emergency Services (CalOES) and local offices of emergency services. While SB 670 was a significant step in the right direction, telecommunication outages should not have arbitrarily defined thresholds, such as “community isolation outages based on the risks to public health and safety resulting from the outage.” It is
essential that state and local offices of emergency services have crucial information to address 9-
1-1 service interruptions in a timely manner to more readily respond to such outages.

At a basic level, “outage” should be defined more broadly: an outage is limiting the ability
of a customers’ ability to make 9-1-1 calls or receive emergency notifications. Further, “outage”
should uniformly apply across all populations to ensure that rural outages do not go unreported or
unresolved.3

(c) Should the length of the 72-hour backup power requirement be shorter, longer or
indefinite? Please provide an analysis to support your recommendation.

While we support the Proposals minimum resiliency standard of 72-hours of backup power,
we must note that many communities impacted by the 2019 PSPS events went far longer than 72
hours before service was fully restored. Some communities never had service fully restored before
the initiation of the next PSPS event. While we agree that a 72-hour standard establishes an
appropriate baseline, we must stress that it cannot be acceptable for 9-1-1 or emergency
notification services to go dark for any period of time – especially in rural and high fire risk areas
during the wildfire season. As such, it may be necessary for some communications providers to
go above and beyond that level to ensure that their systems remain operational during prolonged
outages. The possibility of a communications site only remaining operational for 72 hours during
a five-day (or longer) PSPS event is unacceptable. Providers must provide strategic hardening or
deploy widespread temporary facilities to ensure emergency notification and communication
remains available at all times, especially in Tier 2 and Tier 3 High Fire Threat Districts. Adequate
measures must be established to ensure that the backup system’s fuel or batteries are replenished
before the end of the 72-hour period in order to ensure the reliable operation of emergency
communications systems.

5. BACKUP POWER PLANS

(a) Clean Energy Generation: The Proposal directs Providers to utilize clean energy backup
power options (e.g. solar, etc.) as reasonable before using diesel generators to meet the
backup power requirement, among other provisions. Please provide comments and
analysis on this issue, and specifically address the following:

3 North Bay/North Coast Broadband Consortium, Telecommunications Outage Report: Northern California
Firestorm 2017, April 2018 http://www.mendocinobroadband.org/wp-content/uploads/1.-NBNCBC-
i. How should “clean energy backup” be defined?

The purpose of backup power is to bridge the gap to maintain continuous communications service during an outage. While we are largely ambivalent on the type of clean energy sources ultimately chosen by the Provider, we would advise Providers to work with local agencies, including air quality districts, where appropriate to determine if there are limits on siting or otherwise utilizing diesel generators that could prevent their usage. In those situations, procuring cleaner energy options would be an imperative. Clean energy backup generation is a worthwhile goal but should not be pursued if it functionally results in delays in deployment and safeguarding communities, especially in Tier 2 or Tier 3 High Fire Threat Districts.

(b) Waivers: The Proposal directs Providers to submit waivers if they qualify for any of the exemptions enumerated in the Proposal. Please provide comments and analysis on this issue.

While it would be inappropriate to create a waiver for a backup plan, a waiver to procure 72-hour backup power or generation would only be reasonable if there is no impact to consumer access to 9-1-1 and other emergency notification services and information. Any redundant facility should have to demonstrate that it can handle surge capacity in the event a primary facility experiences an outage. Any waiver must be thoroughly vetted by the Commission and should be granted on a case-by-case basis, and potentially for a limited period of time to ensure proper regulatory oversight.

(c) Critical Facility Location Information Sharing: The Proposal directs Providers to share critical facility location information to emergency responders to enhance the ability to defend vital facilities against wildfire damage and ensure facility redundancy. Please provide comments and analysis on this issue.

We appreciate the Proposal’s direction to Providers to share critical facility location information, and in turn providing that information to local emergency response officials. We further appreciate the recognition that single points of failure have resulted in the widespread loss of communication services, significantly impacting vulnerable communities that continue to be subject to provider disinvestment, evidenced by the pervasive lack of appropriate system hardening and redundancy. This must be rectified.

(d) Critical Infrastructure Resiliency, Hardening and Location Information Sharing: The Proposal directs Providers to annually submit geographic information system (GIS)
information with specific location of network facilities and backhaul routes to the Commission. The Proposal directs Commission staff to analyze and process this information, so it is accessible to state and local emergency responders, subject to confidentiality requirement. Please provide comments and analysis on these proposed directives.

This is a suitable pathway. Confidentiality requirements are an appropriate alternative to nondisclosure agreements. We would caution against any allowance of nondisclosure agreements with local agencies prior to sharing information. Local agencies have a breadth of experience maintaining and safeguarding confidential information. The process of providing information to the Commission, which can then be disseminated or made accessible to state and local emergency responders is appropriate.

Further, we support the Commission analyzing locations where a single fiber cut could result in widespread communications outages. Vulnerabilities in the networks, including a lack of redundancy or too many consolidated Provider lines, leave many Californians and emergency responders prone to risk. Unfortunately, Mendocino County has firsthand experience with scenarios involving the havoc a single fiber cut can have on the 9-1-1 system. For example, AT&T did not report customer 9-1-1 outages in Mendocino County resulting in eight communities losing service for nearly 2 days when a 400-foot aerial fiber optic cable was cut due to a vehicular accident. 4 Nor did AT&T and Verizon know how many customers were affected when vandals cut a 700-foot fiber optic cable, resulting in an 18 hour outage. 5 Similarly, and more recently, a vehicular crash near Sacramento International Airport resulted in an AT&T fiber optic cables getting cut, leaving internet outages at the airport for 23 hours because there were no redundancies in place. 6 All flights experienced some delays and others were cancelled on one of the busiest travel days of the year. 7 All of these examples illustrate the overarching need for Provider transparency, redundancies, and system hardening.

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7 Ibid.
6. EMERGENCY OPERATIONS PLANS

(a) Additionally, the Proposal itemizes required content that the Providers must submit to the Commission. Please provide comments and analysis on this issue.

We agree with the Proposal that Emergency Operations Plans be shared with relevant emergency responders but urge an important clarification that such “emergency responders” are those at both the state and local level. While plans should have uniform requirements, we also request that plans adhere to a common template designed by the Commission. This would ensure stakeholders can make apples-to-apples comparisons across Providers.

The Proposal also gives a nod that personnel should be familiar and committed to these Emergency Operations Plans. This corporate culture and accountability dynamic are similar to utility Wildfire Mitigations Plan requirements and is an entirely appropriate directive in the communications industry.

With regard to emergency preparedness exercises, we caution against any physical testing that could impact the public and cause a disruption in service. We request that: 1) local agencies be notified before an exercise is conducted, and 2) that these exercises be reasonably limited to situational or table-top exercises.

Lastly, while it is desirable to have known/predictable/regular times in which state and local emergency responders can receive updates during an active PSPS event or other disaster, we request that real time updates be available upon request by local officials.

7. CURRENT MITIGATION EFFORTS

RCRC believes that the requirement for communications services providers to disclose their current mitigation efforts is entirely appropriate and will help the CPUC and other stakeholders better understand what to expect during this year’s PSPS events.

We generally support all of the required categories, but have an important suggestion to improve (e) regarding identification of barriers. We support requiring providers to “identify barriers to building resiliency into your networks,” but that requirement is missing an important component. Simply identifying barriers is an important first step, but the more important requirement is for providers to describe how they plan to overcome those barriers. Identifying barriers without developing plans for how to overcome those obstacles is self-defeating – providers must develop the internal resiliency to overcome those barriers.

8. OTHER TOPICS FOR COMMISSION CONSIDERATION
RCRC requests the Commission consider requirements for Providers to remain energized during any kind of shelter-in-place order or other emergency circumstance. This need has been demonstrated during the unprecedented response efforts to COVID-19. RCRC is very concerned with the duration and impacts of COVID-19 as we move closer to PSPS weather and fire season. The overlapping effects of widespread communications losses, including telephone, internet, and 9-1-1 service, with wildfires and/or PSPS should be mitigated at the earliest extent possible.

III. Conclusion

The Rural County Representatives of California respectfully requests that the Commission’s Docket Office be directed to accept these comments for filing and incorporate the suggestions made therein.

Dated: March 26, 2020

Respectfully submitted,

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