

CALIFORNIA GOVERNOR'S OFFICE OF EMERGENCY SERVICES

INITIAL STATEMENT OF REASONS

PROBLEM STATEMENT

While existing Federal Communications Commission (FCC) and California Public Utilities Commission (CPUC) impose certain reporting requirements for major telecommunications service outages, they are not specifically tailored to address risks to public health and safety resulting from outages that limit access to 9-1-1 or emergency notifications. For example, reporting is generally not required unless the outage affects at least 900,000 user minutes. As a result, significant outages affecting rural communities may not be reported, leaving those residents at risk of not being able to call 9-1-1 or receive emergency notifications. Similarly, the CPUC requires certain periodic reports pursuant to its General Order 133-D, including out-of-service reporting. But these reports are submitted long after reportable events occur, and are not intended to provide the type of information needed to support situational awareness near in time to outages.

In particular, in the absence of a mandate to submit outage notifications to the California Governor's Office of Emergency Services (Cal OES), county offices of emergency services, county sheriffs, and public safety answering points do not receive timely information relating to telecommunications service outages impacting the ability of people in California to make 9-1-1 calls or receive emergency notifications.

The lack of reporting requirements leaves a significant communication gap between telecommunications service providers and Cal OES. For example:

- In July 2019, there was a significant, nationwide outage for wireless calls for approximately three hours, but Cal OES did not receive notice of the outage.
- Between October and November 2019, Cal OES received inconsistent reports of telecommunications service outages, including in areas where residents were being evacuated because of risks posed by dangerous wildfires. In addition, information provided to Cal OES did not include community-specific data that could have aided Cal OES and local agencies in making operational decisions to protect lives and property.

To address unmet needs in California relating to telecommunications service outages, the Legislature recently passed Senate Bill 670 (2019 – 2020) (SB 670), which was approved by the Governor and chaptered by the Secretary of State on October 2, 2019. SB 670 added section 53122 to the Government Code as an urgency statute to take effect immediately. This new provision of law requires telecommunications service providers, among other things:

- To notify the California Governor's Office of Emergency Services (Cal OES) of a community isolation outage within 60 minutes of discovery of the outage;
- To include, in the notice to Cal OES, the telecommunications service provider's contact name, calling number, and a description of the estimated area affected by the outage and the approximate communities, including cities, counties, and regions, affected by the outage;
- To notify Cal OES of the estimated time to repair the outage and, when achieved, the restoration of service; and
- To ensure that the calling number provided to Cal OES with the community isolation outage notification is staffed by a contact person who shall be available to respond to inquiries about the outage at all times until the provider notifies Cal OES that services has been restored.

In addition, Government Code section 53122 requires Cal OES to adopt regulations that (1) set thresholds for determining whether a telecommunications service outage constitutes a community isolation outage based on the risks to public health and safety resulting from the outage, and (2) specify the medium by which telecommunications service providers notify Cal OES.

Cal OES proposes to adopt regulations to further the purpose and goals of SB 670, specifically to establish appropriate thresholds for determining when an outage constitutes a community isolation outage, and to establish the medium required for submitting notices to Cal OES.

BENEFITS ANTICIPATED FROM THE REGULATORY ACTION

Cal OES anticipates this regulatory action is consistent with and furthers the goals of Government Code section 53122. In establishing appropriate thresholds, the regulatory action will contribute to increased timely sharing of information about community isolation outages with Cal OES, county offices of emergency services, county sheriffs, and public safety answering points.

Sharing information about outages is also anticipated to result in making actionable data available about communities impacted by outages, which can be used by state and local agencies to assess whether communities are in potential risk of being unable to access 9-1-1 services or receive emergency notification.

In addition, reporting community isolation outage will increase situational awareness at the state and local level during disasters, and further inform when alternate forms of communication and notification are needed due to a communication outage.

The proposed regulatory action is also anticipated to further the objectives of Government Code section 53122 to obtain consistent reporting of community isolation outages. Information obtained from the reports may facilitate trend and gap analysis of telecommunications systems, and may help state and local agencies identify and establish alternate methods of communication between residents and emergency responders to mitigate risks caused by community isolation outages. Prompt notifications to Cal OES are anticipated to result in increased emergency mitigating actions necessary to protect lives and property.

PURPOSE AND NECESSITY OF EACH ADOPTION

Purpose

Section 5001: To establish definitions applicable to chapter 1 of the proposed regulations.

Section 5002: To specify outage thresholds affecting access to 9-1-1 services or the ability to receive emergency notifications that require notification to Cal OES.

Section 5003: To specify the medium by which providers of telecommunications service must provide notice to Cal OES to ensure Cal OES receives timely, accurate, and reliable information in a consistent format.

Appendix A: To define the form used for reporting outage requirements.

Necessity

Section 5001: This section establishes definitions, and where appropriate adopts the definitions of terms that are identical to other state and federal definitions of the same terms. Establishing common terminology is necessary to avoid

conflicting definition, and to promote clarity and consistency. The following explains each subdivision of section 5001, including the identification of the basis for any definition identical to another established definition:

Subdivision (a)	Defines “community isolation outage” in reference to the requirements of Government Code section 53122.
Subdivision (b)	Defines the form used for reporting.
Subdivision (c)	Same definition as provided in Public Utilities Code section 239, subdivision (b).
Subdivision (d)	Same definition as provided in Public Utilities Code section 224.4, subdivision (d).
Subdivision (e)	Same definition as provided in Government Code section 53122, subdivision (a)(1).
Subdivision (f)	Same definition as provided in Code of Federal Regulations, title 47, section 4.5, subdivision (a).
Subdivision (g)	Defines “special offices and facilities” to include all telecommunications offices and facilities that are required to support access to the 9-1-1 system, and all offices and facilities that are required for the delivery of alerts, warnings, and other critical information to protect lives and preserve property.
Subdivision (h)	Same definition as provided in Government Code section 53122, subdivision (a)(2)
Subdivision (i)	Same definition as provided in Public Utilities Code section 234.
Subdivision (j)	Same definition as provided in Public Utilities Code section 239, subdivision (a).
Subdivision (k)	Defines “ZIP Code.”

Section 5002, subdivision (a): Government Code section 53122 requires outage thresholds to be set in a manner that ensures any impairment to a community’s ability to access 9-1-1 services or receive emergency notifications that pose risks to the public health and safety be reported to Cal OES. Section 5002, subdivision (a) is necessary to further the purpose of Government Code section 53122 by clarifying that any outage that reasonably poses risks to the public health and safety of a community must be reported to Cal OES. While subdivision (b) establishes conditions that are deemed to meet the reporting threshold, those conditions are not intended to artificially limit reportable events in a manner that frustrates the intent of SB 670. Subdivision (a) is necessary to clarify that telecommunications providers must report all community isolation outages, and

that the appropriate threshold for determining when a community isolation outage exists includes outages limiting customers' ability to make 9-1-1 calls or receive emergency notifications that reasonably pose risks to the public health and safety of a community impacted by the outage.

Section 5002, subdivision (b)(1): Government Code section 53122 requires outage thresholds to be set in a manner that ensures any impairment to a community's ability to access 911 services or receive emergency notifications that pose risks to the public health and safety be reported to Cal OES. This provision is necessary to ensure that outages affecting special offices and facilities are reported to Cal OES, without regard to other thresholds based on the manner in which telecommunications services are provided. For example, if an outage impacts only a special office or facility, the outage would pose a risk to health and safety if it affects the ability of users to access the special office or facility, even if the individuals needing to access those offices or services are not, themselves, within the specified geographic area. It is also necessary to establish a minimum baseline of the individuals affected that will be deemed to constitute a community isolation outage to ensure reports are generated and submitted to Cal OES, so that Cal OES can thereafter forward the alerts to any applicable county office of emergency services, the sheriff of any county, and any public safety answering point affected by the outage. In establishing the minimum number of potentially affected individuals, the proposed regulations are intended to strike an appropriate balance for determining when objective criteria may be indicative of a threat to public health and safety, without setting the threshold so low that outage reports would serve no useful purpose for county offices of emergency services, county sheriffs, or public safety answering points. In addition, the proposed threshold identifies a minimum duration of a reportable threshold that is necessary to ensure timely reporting of outages, and is consistent with similar federal threshold criteria for significant outages.

Section 5002, subdivisions (b)(2)-(3): Similar to the reasons for subdivision (b)(1), establishing the thresholds in reference to the duration of the outage and a baseline number of individuals affected within an identifiable geographic area is necessary to ensure outage thresholds are appropriately tailored to respond to potential risks to public health and safety to geographically dense, and to geographically dispersed communities. Existing threshold criteria for major outage reporting in other contexts, namely FCC and CPUC requirements, serve different purposes and are not specifically tailored to the requirements of Government Code section 53122, which mandate outage reporting when outages isolate communities and inhibit their ability to make 9-1-1 calls or receive emergency notifications. Government Code section 53122 was enacted to address gaps not addressed by existing reporting requirements,

including the need to ensure outages affecting residents in rural and semi-rural communities are reported.

In establishing the minimum number of potentially affected individuals and the minimum duration of the outage, this provision intends to strike an appropriate balance for determining when objective criteria may be indicative of a threat to public health and safety, without setting the threshold so low that outage reports would serve no useful purpose for county office of emergency services, county sheriffs, or public safety answering points. The minimum duration of the outage is necessary to ensure timely reporting of outages, and is consistent with similar federal threshold criteria for significant outages. In addition, including a ZIP Code as an element of the criteria ensures outage thresholds appropriately address the needs of residents of rural and semi-rural communities, as well as densely populated areas. The ZIP Code is also a well-known and commonly used identifier.

Section 5002, subdivision (b)(4): Because of differences in how services are provided, different thresholds are necessary for telecommunications services provided by mobile telephony service. Unlike wireline or VoIP communications, wireless communications depend on the ability of wireless infrastructure to provide coverage within the geographic areas of the wireless infrastructure. Individual users of wireless communications services do not originate or receive calls from fixed locations, and may travel throughout the state. Because of these features of mobile telephony service, significant degradation within any coverage area poses a risk to public health and safety, regardless of how many individuals may or may not be able to access the service. Similar to the reasons for subdivisions (a) – (c), by setting the appropriate threshold at fifty percent of a given coverage area that lasts at least 30 minutes in any ZIP Code, the proposed regulations are intended to identify appropriate, identifiable, and measurable criteria that reasonably indicate a limitation on the ability to make 9-1-1 calls or receive emergency notifications that poses a risk to public health and safety. The minimum duration of the outage is necessary to ensure timely reporting of outages, and is consistent with similar federal threshold criteria for significant outages.

Section 5003: Government Code section 53122 was enacted in part to ensure Cal OES receives timely notification of community isolation outages. Section 53122 also requires Cal OES to establish the medium for submitting such notices. This section is necessary to further the purposes of Government Code section 53122 by requiring notifications via email and phone. Section 5003 also identifies a Cal OES form for reporting outages to ensure reports are consistent and contain the information required by Government Code section 53122.

Appendix A: Similar to the reasons for section 5003, the appendix defines form TDe-281 as the required form for submitting notices to Cal OES. The form is necessary to further the purpose of Government Code section 53122 and to ensure reports to Cal OES are consistent and contain all information required by statute.

IDENTIFICATION OF EACH TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENT, IF ANY, UPON WHICH THE AGENCY RELIES IN PROPOSING THE ADOPTION

In proposing these regulations, Cal OES relied on the enacting legislation (Sen. Bill. No. 670 (2019 – 2020)) and legislative analyses published by the Legislature. Cal OES also reviewed other regulations relating to telecommunications outages, California Public Utilities Commission (CPUC) General Order 133-D, and CPUC Decision 16-08-021.

ECONOMIC IMPACT ASSESSMENT/ANALYSIS

SB 670 added section 53122 to the Government Code, which requires telecommunications service providers to notify Cal OES within 60 minutes of discovery of a community isolation outage impacting customers' ability to dial 9-1-1 or to access emergency services, and to provide specific information to Cal OES, including the telecommunications service provider's contact name and calling number, a description of the estimated area affected by the outage and approximate communities, including cities, counties, and regions affected by the outage. Government Code section 53122 also requires telecommunications service providers to notify Cal OES of the estimated time to repair the outage and, when achieved, the restoration of the service. Providers also must ensure the calling number provided is staffed by a contact person who must be available to respond to inquiries about the outage at all times until the provider notifies Cal OES the service has been restored.

Government Code section 53122 also imposes specific requirements on Cal OES, and as relevant for purposes of the proposed regulations, require Cal OES to establish, by regulation, appropriate outage thresholds for determining whether an outage constitutes a community isolation outage, and the medium by which telecommunications service providers must report community isolation outages. The scope of the proposed regulations is therefore limited. Because Government Code section 53122 establishes the duty to report outages to Cal OES, the information that must be included on outage notifications, and the responsibilities of telecommunications service provider personnel for monitoring outages and being reachable by Cal OES at all times, any potential economic impact caused by the proposed regulations would be

limited to potential, indirect effects the thresholds may have on the volume of outage reports, and to potential impacts caused by the medium of reporting proposed by the regulations.

The proposed regulations assume that telecommunications service providers have an interest in ensuring the reliability of their services, and in furtherance of that interest, already have established business practices for detecting, evaluating, and correcting service disruptions, even minor disruptions that would not rise to reportable levels contemplated by the proposed regulations. The proposed regulations further assume that telecommunications service providers that are required to make reports to the FCC and CPUC have established processes in place for generating and submitting reports pertaining to service reliability, including adequate personnel. In addition, the proposed regulations assume telecommunications service providers will have a working computer system, internet connection, and phone system, such that the medium for reporting that would be established by the proposed regulations will not result in any measurable economic impact.

Based on the above assumptions and limited scope of the proposed regulations, Cal OES does not anticipate the proposed regulations will cause significant economic effects, and will therefore not result in adverse economic impacts.

Specifically, the proposed regulations are not anticipated to create or eliminate jobs within the state. The proposed regulations assume existing technologies and business practices of telecommunications service providers enable providers to assess when an outage meets the proposed thresholds and to submit a report of the outage using an internet and phone connection. In addition, because Government Code section 53122 requires telecommunications service providers to ensure staff are available to respond to inquiries at all times during any community isolation outage, Cal OES does not anticipate the proposed thresholds will have the effect of causing the volume of outage reports to necessitate levels of staffing in addition to, or less than, staffing needs required by Government Code section 53122, irrespective of any particular threshold established by regulation. While a telecommunications service provider could conceivably experience such a high degree of outages causing risks to the public health and safety of its customers that it believes additional staffing would be required to timely submit a volume of outage reports attributable to the reportable thresholds, such a scenario is speculative and unlikely. The proposed regulations presume telecommunications service providers, in their ordinary course of business, already identify, evaluate, and correct service disruptions.

For similar reasons, the proposed regulations are not anticipated to create or eliminate existing businesses within the state, or to expand any business currently doing business within the state. The proposed regulations establish only thresholds that trigger the statutory duty to report, and a simple, no-cost medium of reporting outages to Cal OES. In addition, providers of telecommunications services are already required to make similar reports to the FCC and CPUC, and the proposed regulations contemplate that existing business practices of providers are capable of meeting any needs attributable to the proposed thresholds. Further, the proposed regulations are not anticipated to require significant updates to the reporting and monitoring capabilities of the systems used by the providers of telecommunications services.

In line with the mandate of Government Code section 53122 to establish appropriate thresholds for determining when a community isolation outage exists that causes a risk to public health and safety, the proposed regulations will further the goals and purpose of Government Code section 53122, and are anticipated to contribute to increased availability of information to the state, county offices of emergency services, county sheriffs, and public safety answering points about the ability of residents' abilities to access 9-1-1 services and to receive emergency notifications. Access to such information will result in significant potential benefits to public health and safety, because such knowledge will enable emergency responders and law enforcement to identify issues and respond with appropriate measures to protect lives and property, and to mitigate the potential effects of conditions placing residents in peril.

**EVIDENCE SUPPORTING FINDING OF NO SIGNIFICANT STATEWIDE ADVERSE
ECONOMIC IMPACT DIRECTLY AFFECTING BUSINESS**

While the proposed regulations will establish criteria for determining when an outage constitutes a community isolation outage and will specify the medium by which reports must be made, any economic impact on telecommunications service providers directly attributable to the proposed regulations is speculative, and would not reasonably result in economic impacts directly affecting business. As noted above, telecommunications service providers are presumed to monitor their service levels, including for potential significant outages that may trigger reports to the FCC and CPUC. In addition, Government Code section 53122 establishes the requirement to report community isolation outages, and related obligations.

Relatedly, in establishing only the appropriate threshold for determining when a community isolation outage exists and the medium by which reports must be made to Cal OES, the proposed regulations are not expected to have any

significant statewide adverse economic impact. As discussed above, providers of telecommunications services are presumed to monitor service levels, and are already required to prepare certain outage reports to the CPUC and FCC. In addition, Government Code section 53122 establishes the mandate to report community isolation outages to Cal OES, and provides that the thresholds for determining when an outage constitutes a community isolation outage will be established by regulation. The proposed regulations, in establishing those thresholds, will not create any new or additional obligations, and will at most affect the potential volume of outage reports, if a provider experiences a significant volume of reports that pose risks to public health and safety. In addition, the established medium requires only an internet connection and phone number, and will therefore not result in the requirement of providers to establish or adopt new technologies to produce and provide reports.

REASONABLE ALTERNATIVES TO THE REGULATION AND THE AGENCY'S REASONS FOR REJECTION THOSE ALTERNATIVES

Cal OES initially considered several alternatives to the proposed regulations, but none of the alternatives was as feasible or furthered the objectives of Government Code section 53122 as the proposed regulations.

Cal OES considered existing FCC reporting requirements for significant disruptions to communications. However, SB 670 was enacted in large part because existing reporting requirements are not specifically tailored to reporting outages that directly affect the health and safety of communities, including rural communities. Adopting the same standards as the FCC would not be appropriate because outages posing significant risks to health and safety would not be required to report outages to Cal OES, particularly outages that may pose risks to the public health and safety of residents in rural communities.

Cal OES also considered establishing criteria based on percentages of impacted customers within defined geographical areas. In assessing that possibility, Cal OES anticipated such a requirement would involve too many unknown variables that could impair the reliability of outage reports and establish criteria that would not reasonably be measured on a consistent basis. In particular, because percentages of impacted individuals is highly variable and depends on knowing the total number of individuals in a defined area at any given time, Cal OES anticipated such a criteria would be unmanageable for providers of telecommunications services.

Cal OES also considered establishing thresholds in reference to geographic boundaries of counties, cities, and towns. Such geographic boundaries would likely result in a multitude of separately defined thresholds dependent on individualized threshold for localized geographic regions that would make

compliance thresholds incomprehensible and unmanageable. Alternatively, if more general base numbers were established for the number of impacted individuals based on broad geographic categories (e.g. county, city, town), the thresholds would be less numerous and understandable, but would reasonably result in both over-inclusive and under-inclusive reporting. For example, if a threshold depends on specific, measurable criteria for all counties in California (e.g. number of individuals affected), the established number may simultaneously result in underreporting in certain rural communities, and over-reporting in more densely populated counties. While it is important and critical to know which communities are affected by an outage, including cities, counties, and regions, the criteria proposed by these regulations is tailored to identify outages that pose a threat to public health and safety in a manner that reasonably results in limiting reporting thresholds to those that pose risks to the public health and safety, without defining the thresholds so broadly that community isolation outages go unreported.

Cal OES rejected, without undertaking significant analysis, alternatives that would depend entirely on a telecommunications service provider's individualized assessment as to whether an outage constituted a community isolation outage, without regard to objective criteria. While the threshold criteria should appropriately capture all outages that reasonably meet the criteria described Government Code section 53122, the lack of objective criteria would be inappropriate, especially where, as noted above, Cal OES has consistently received untimely and incomplete outage reports in the absence of established thresholds.

DUPLICATION OR CONFLICT WITH FEDERAL REGULATIONS

The proposed regulations are neither duplicative of, nor in conflict with, federal regulations. As noted above, SB 670 was enacted in part because existing FCC reporting requirements are not tailored to the same public interests as SB 670. Government Code section 53122 requires reporting community isolation outages and requires Cal OES to establish outage thresholds and the medium for reporting outages. The proposed regulations are consistent with, and are not in conflict with, FCC requirements. In particular, Code of Federal Regulations, title 47, part 4, establishes reporting major service interruptions. As relevant for purposes of these proposed regulations, FCC requirements typically involve reporting outages when a certain number of user minutes is impacted by the outage, and when the outage lasts at least 30 minutes. The proposed regulations do not duplicate federal regulations because they establish thresholds, for purposes of Government Code section 53122 reporting requirements, to be based on a specified number of individuals who cannot

access special offices or facilities, outages impacting a defined number of individuals within a given ZIP Code, and outages impacting wireless coverage areas in any given ZIP code. The proposed regulations do not conflict with federal regulations, and where possible adopt definitions of terms that are consistent with definitions of terms used in federal regulations relating to service outages. For example, the proposed regulations adopt the duration of a reportable outage as one that last at least 30 minutes, which is the same duration for reportable outages under FCC outage thresholds for significant outages. In proposing to adopt the same duration of time for community isolation outages, the proposed regulations avoid potential conflict with existing federal regulations.