California Public Utilities Commission

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R2203016

Service Quality Proceeding Phase One Staff Proposal

Communications Division

June 2024

Contents

Executive Summary

Voice service, irrespective of technology type, is a key component of essential utility service to enable health, safety, and full participation in society. Whether it is mass nationwide or statewide outages, community isolation outages, or individual outages, communications service outages cause frequent and significant disruptions to Californians. In California, multiple government data sources have indicated that communications outages in recent years across different technology platforms, such as plain old telephone service (POTS), Voice over Internet Protocol (VoIP),[1] and wireless, have either maintained high occurrence rates or even increased over the years.

A recent service outage drew nationwide headlines when it recorded over 74 thousand incidents[2] at various regions across the entire country. This nationwide outage reminded us of the importance of access to voice service, which provides the ability to access 9-1-1 services and receive emergency notifications. During this mass outage, the San Francisco Fire Department indicated that they were aware of an issue of wireless customers being impacted in their ability to make and receive any phone calls (including to 9-1-1 services) and advised to try accessing 9-1-1 services from a landline.[3] New York Attorney General Letitia James stated, "[n]ationwide outages are not just an inconvenience, they can be dangerous, and it's critical that we protect customers when an outage occurs."[4]

The California Governor's Office of Emergency Services (Cal OES) recently began tracking community isolation outages that limit the ability to make 9-1-1 calls or receive emergency notifications. From 2021 to 2023, both POTS and wireless[5] outages increased substantially; POTS outages doubled from 1,185 to 2,407 incidents and wireless outages increased by 75 percent from 3,315 to 5,865 incidents. During that three-year span, VoIP incurred the most outages among all technology types, topping out at 9,000, 8,421, and 7,181 incidents per year respectively. For the three-year aggregate, VoIP had a total of 24,602 incidents, which accounted for more than POTS and wireless combined. See Table 1 for details.

[1] Throughout the entirety of this document, VoIP refers to interconnected VoIP.

[2] CNBC.com *AT&T Cellular Service Restored After Daylong Outage; Cause Still Unknown* (February 2024) https://www.cnbc.com/2024/02/22/cellular-outages-hit-thousands-in-us-and-att-users-most-affected.html?&qsearchterm=AT&T

[3] X. *San Francisco Fire Department Media* (February 2024) https://twitter.com/SFFDPIO/status/1760618741422072177?ref_src=twsrc%5Etfw%7Ctwcamp%5Etweetembed%7Ctwterm%5E1760618741422072177%7Ctwgr%5E8b5dee9efb66259eee520d75bbf77d2f373c32eb%7Ctwcon%5Es1_&ref_url=https%3A%2F%2Fwww.cnbc.com%2F2024%2F02%2F22%2Fcellular-outages-hit-thousands-in-us-and-att-users-most-affected.html

[4] NBC News. *AT&T nationwide outage under investigation by N.Y.'s attorney general* (February 2024) https://www.nbcnews.com/news/us-news/t-nationwide-outage-investigation-nys-attorney-general-rcna141201

[5] Throughout the entirety of this document, wireless refers to wireless voice service.

The California Governor's Office of Emergency Services: Reported Outages by Network Type (2021-2023)								
Network Type	2021		2022		2023		Total	
	Report Count	% to Total	Report Count	% to Total	Report Count	% to Total	Report Count	% to Total
POTS	1,185	8%	1,759	12%	2,407	15%	5,351	12%
VoIP	9,000	59%	8,421	56%	7,181	46%	24,602	53%
Wireless	3,315	22%	3,319	22%	5,865	37%	12,499	27%
Multiple*	1,791	12%	1,580	10%	266	2%	3,637	8%
Total	**15,291**	**100%**	**15,079**	**100%**	**15,719**	**100%**	**46,089**	**100%**

* Reports that selected two or more network types

Table 1: Cal OES Reported Outages by Network Type (2021-2023)

The Federal Communications Commission created the Network Outage Reporting System (NORS) [6] to track significant communications service disruptions[7] that could affect homeland security, public health or safety, and the economic well-being of the nation. In California, the number of network outage reports increased from 1,930 in 2018 to 5,621 in 2023. During that six-year span, POTS accounted for 63 percent of the outage reports, VoIP accounted for 5 percent, and wireless accounted for 10 percent. Outage reports involving multiple technology platforms accounted for 14 percent, while the remaining 8 percent did not designate a technology type. See Table 2 for details.

NORS Final Reports by Network Type (2018-2023)														
Network Type	2018		2019		2020		2021		2022		2023		Total	
	Rpt Ct	% to Ttl	Rpt Ct	% to Ttl	Rpt Ct	% to Ttl	Rpt Ct	% to Ttl	Rpt Ct	% to Ttl	Rpt Ct	% to Ttl	Rpt Ct	% to Ttl
POTS	1,107	57%	2,418	63%	3,047	64%	2,843	62%	3,045	66%	3,511	62%	15,971	63%
VoIP	195	10%	265	7%	192	4%	189	4%	204	4%	162	3%	1,207	5%
Wireless	238	12%	410	11%	514	11%	581	13%	301	7%	505	9%	2,549	10%
Multiple	216	11%	347	9%	578	12%	643	14%	688	15%	1,195	21%	3,667	14%
NA	174	9%	393	10%	399	8%	321	7%	366	8%	248	4%	1,901	8%
Total	**1,930**	**100%**	**3,833**	**100%**	**4,730**	**100%**	**4,577**	**100%**	**4,604**	**100%**	**5,621**	**100%**	**25,295**	**100%**

Table 2: NORS Final Reports by Network Type (2018-2023)

The California Public Utilities Commission (Commission) established five service standards for POTS under General Order (GO) 133-D. In particular, the out of service repair intervals (OOS) standard focuses on outages and requires telephone corporations[8, 9] to repair 90 percent of the outage tickets within 24 hours. Despite an established standard with penalty mechanism, AT&T, the largest POTS provider in California, has never restored more than 56 percent of their outage tickets within 24 hours from 2018 to

[6] FCC NORS https://www.fcc.gov/network-outage-reporting-system-nors

[7] Outages that last at least 30 minutes and meet other specific thresholds.

[8] CA Pub Util Code § 234 Telephone corporation includes every corporation or person owning, controlling, operating, or managing any telephone line for compensation within this state. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=234.&lawCode=PUC

[9] CA Pub Util Code § 233 Telephone line includes all conduits, ducts, poles, wires, cables, instruments, and appliances, and all other real estate, fixtures, and personal property owned, 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. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=233.&lawCode=PUC

2023. In fact, AT&T's performance has decreased steadily from repairing 56 percent of outage tickets within 24 hours in 2018 to just 39 percent in 2023. See Figure 1 for details.

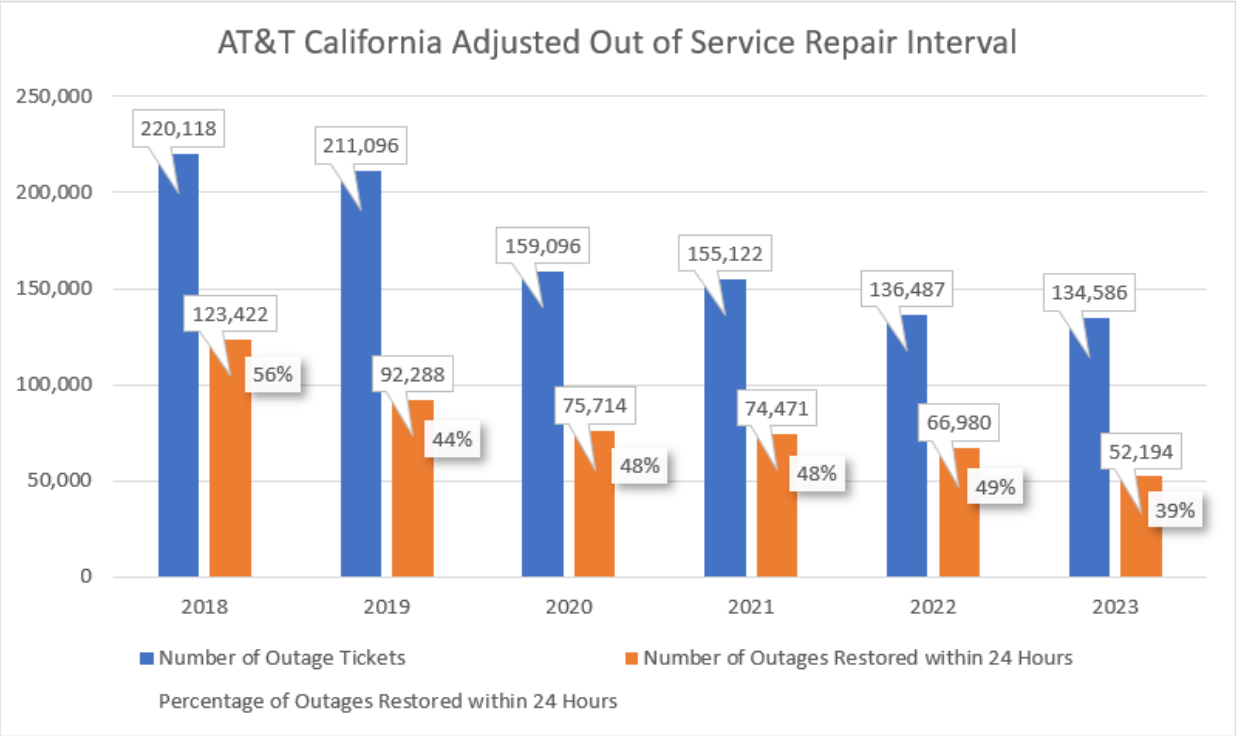

Figure 1: AT&T California Adjusted Out of Service Repair Interval Performance (2018-2023)

The experiences of many Californians, as expressed at public participation hearings, public workshop, and public comments on the docket card for Rulemaking (R.)22-03-016 corroborate the outage data from Cal OES, NORS, and the Commission's GO 133-D reporting. Further, community information suggested that the current reporting thresholds underreport both the occurrence and severity of outages in tribal communities.[10]

[10] At the public workshop on September 7, 2023, Kori Cordero of Yurok Telecoms shared the struggles experienced by tribal community members, "I have a community on the Yurok reservation that currently doesn't have phone service. And I have been working very diligently with our local staff reaching out with Frontier and it's been a really long process and I do agree generally that the outage metrics need to be upgraded. One of the things that we're experiencing is we'll get reports saying there are no outages on the reservation. Keep in mind the Yurok reservation is a very rural area. We do not have cell anywhere on the reservation. We do not have wireless internet service or high-speed internet service anywhere on the reservation… [Folks] don't have access to cell service and will often have to drive 30 minutes to an hour to two hours just to get to an area where they can make a call. For our elders or folks who are not able to drive for medical reasons, it's quite a burden… [E]lders will drive to a tribal office when they're able to get a ride to make a phone call. If the tribal office line is working, they'll be able to schedule something with Frontier, go back wait a week. [If] they don't show up, then do it again. I've had folks who work for three months quite diligently on trying to get their phone reconnected. Often folks give up… [For] folks off the reservation [in] other parts of the county, many of them didn't realize that phone service was available to them. Some folks haven't had phones for upwards of a year or two. Many made their phone payments anyway because they were worried. They want the service. They need the service."
CPUC Workshop on Evaluating Changes to Communications Service Quality Rules (Sept. 7, 2023) – YouTube. https://www.youtube.com/watch?v=mGROesn6Jww

The information discussed above, which is examined in depth in the *Introduction* section, makes clear that the current enforcement regime for POTS has not led to improved service quality for POTS customers. In addition, the light touch approach for VoIP and wireless services has not yielded improved service quality for those customers. NORS and CalOES data show that outage incidents remain significant for VoIP and wireless service customers over the years. For these reasons, the Commission's Communications Division Staff proposes refinements to existing POTS service quality standards and enforcement provisions and extends them to VoIP and wireless services. The rationale behind these refinements are detailed in the *Discussion* and *Recommendations* sections. For a summary of service standards and enforcements recommendations, please refer to *Appendix A*.

Introduction

General Order 133-D Background

The Commission's GO 133 sets minimum service quality standards for voice services with an enforcement mechanism. The Commission last revised GO 133 in 2016 in R.11-12-001.[11] In Decision (D.) 16-08-021[12] issued in R.11-12-001, the Commission adopted GO 133-D and updated enforcement of service quality standards for legacy Plain Old Telephone Service (POTS).

Since the adoption of GO 133-D, both the market and the regulatory environment have changed substantially. The service quality standards and their corresponding enforcement mechanism set forth in GO 133-D apply only to POTS lines. From 2016 to 2023, the number of POTS lines in California decreased by 49 percent from 6,229,123[13] to 3,204,881.[14] Conversely, the number of VoIP and wireless subscriptions have increased.[15] This shift from POTS to VoIP and wireless services also coincided with a change in the regulatory environment. Public Utility Code Section 710,[16] which largely prevented the

[11] Order Instituting Rulemaking to Evaluate Telecommunications Corporations Service Quality Performance and Consider Modification to Service Quality Rules (R. 11-12-001). https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/155082.PDF

[12] Decision Adopting General Order 133-D (D. 16-08-021). https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M166/K558/166558012.pdf

[13] Communications Division Staff Report (May 8, 2018) page 15. https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/communications-telecommunications_and_broadband/service_provider_information/2014-2016-servicequality-staff-report-may-2018.pdf

[14] Number of working lines in California from telephone corporations reporting under GO 133-D (June 2023). https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/service-quality/june-30-2023-go-133-d-carrier-line-counts.pdf

[15] Staff Report - Part 2 Order Instituting Rulemaking to Update Surcharge Mechanisms to Ensure Equity and Transparency of Fees, Taxes and Surcharges Assessed on Customers of Telecommunications Services in California (R.21-03-002), page 16. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M418/K902/418902570.PDF

[16] CA Pub Util Code § 710 (a) The commission shall not exercise regulatory jurisdiction or control over Voice over Internet Protocol and Internet Protocol enabled services except as required or expressly delegated by federal law or expressly directed to do so by statute or as set forth in subdivision (c). In the event of a requirement or a delegation

Commission from regulating VoIP services, sunset on January 1, 2020, opening the door for the Commission to assert regulatory authority more fully over VoIP services.

Pursuant to Public Utility Code Section 2896 (c),[17] the Commission requires telephone corporations to serve customers based on "[r]easonable statewide service quality standards, including, but not limited to, standards regarding network technical quality, customer service, installation, repair, and billing." In D.12-12-038[18] issued in R.09-06-019,[19] the Commission adopted a technologically neutral definition for basic telephone service (basic service)[20] and concluded that "further proceedings are warranted to identify, adopt, and enforce appropriate service quality standards applicable to any carrier, including wireless or VoIP." Ultimately, the Commission has the responsibility to protect all consumers in California, regardless of what type of communications technology they use.

In March 2022, the Commission instituted a rulemaking proceeding to consider proposed amendments to GO 133-D (R.22-03-016 or Service Quality Proceeding),[21] which established service quality rules for California's public utility telephone corporations. During the course of the Service Quality Proceeding, the Commission held six public participation hearings (PPHs) and received over three thousand public comments on the proceeding docket card.

On September 7, 2023, the Commission held a one-day hybrid workshop (public workshop).[22] Representatives from telephone corporations, consumer advocacy groups, rural area county governments, and tribal communities were on hand to share their ideas and experiences on behalf of their constituencies at the public workshop and filed comments over the course of the proceeding.

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referred to above, this section does not expand the commission's jurisdiction beyond the scope of that requirement or delegation.

[17] CA Pub Util Code § 2896 (c) Reasonable statewide service quality standards, including, but not limited to, standards regarding network technical quality, customer service, installation, repair, and billing. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=2896.&nodeTreePath=2.2.17.4&lawCode=PUC

[18] Decision Adopting Basic Telephone Service Revisions (D.12-12-038). https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M039/K603/39603602.PDF

[19] Order Instituting Rulemaking on Reforms to the California High Cost Fund B Program (R.09-06-019) https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/102872.PDF

[20] Commission's Basic Service definition homepage. https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-mapping-program/broadband-public-feedback/basic-service-definition

[21] Order Instituting Rulemaking Proceeding to Consider Amendments to General Order 133 (R. 22-03-016). https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M461/K661/461661140.PDF

[22] Joint summary of the September 7, 2023 Workshop Discussing General Order 133-D by Cal Advocates and Cal Broadband. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K470/520470723.PDF; CPUC Workshop on Evaluating Changes to Communications Service Quality Rules (Sept. 7, 2023) – YouTube. https://www.youtube.com/watch?v=mGROesn6Jww

Current Service Standards

GO 133-D utilizes five service measures to establish the minimum service standards (standards) for voice services. These standards apply to residential and small business customers (five or fewer lines). Currently, not all standards are applicable to all carrier types.[23] The five standards are:

- *Installation interval.* This measures the amount of time it takes to install basic service from when the customer requests service until it is established. The standard, which is assessed at the monthly level, is five business days. The enforcement of this standard applies only to general rate case incumbent local exchange carriers (GRC ILECs).[24]
- *Installation commitments.* This measures the establishment of basic service upon request. The standard, which is being assessed at the monthly level, is meeting 95% of the monthly commitments. The enforcement of this standard also applies only to GRC ILECs.
- *Customer trouble reports.* This measures the number of trouble reports received from customers. These reports cover an array of issues, including service outages and general dissatisfaction with services. The standard, which is assessed at the monthly level, varies by the number of working lines. The standards are six trouble reports per month for every 100 working lines for reporting units with 3,000 or more working lines, eight trouble reports per month for every 100 working lines for reporting units with 1,001 to 2,999 working lines, and ten trouble reports per month for every 100 working lines for reporting units with 1,000 or fewer working lines. The enforcement of this standard applies to GRC ILECs and uniform regulatory framework (URF) carriers with 5,000 or more customers, and URF carriers with Carriers of Last Resort (COLR) designation.[25]
- *Out of service repair intervals (OOS).* This measures the time interval from the receipt of an outage ticket to the restoration of service. The standard, which is assessed at the monthly level, is restoring 90% of the outage tickets within 24 hours based on adjusted results. Adjusted results exclude Sundays, federal holidays, and delays beyond a carrier's control, including but not limited to catastrophic events. The enforcement of this standard applies to GRC ILECs, URF carriers with 5,000 or more customers, and URF carriers with COLR designation.[26]
- *Answer time*. This measures the number of instances when a live agent answers the customer service phone call within 60 seconds. The standard, which is assessed at the monthly level, requires live agents to answer 80% of the phone calls within 60 seconds. The telephone corporation must present customers with the option to speak with a live agent either directly upon dialing the customer service hotline or via an Interactive Voice Response (IVR) or

[23] See Appendix B.

[24] Ibid.

[25] Decision Adopting General Order 133-C and Addressing Other Telecommunications Service Quality Reporting Requirements (D.09-07-019). https://docs.cpuc.ca.gov/PublishedDocs/WORD_PDF/FINAL_DECISION/104429.PDF

[26] Ibid.

Automatic Response Unit (ARU) system. The enforcement of this standard applies to GRC ILECs, URF carriers with 5,000 or more customers, and URF carriers with COLR designation.[27]

During the five assessment years from 2018 through 2022, 99.4% of the total assessed GO 133-D fines, totaling $20.3 million, were assessed for failure to meet the OOS standard. During that time span, no telephone corporations failed to meet the customer trouble reports standard, whereas failure to meet the installation interval, installation commitments, and answer time standards collectively accounted for just 0.6% of the total assessed fines at $129,800. See Table 3 for details.

GO 133-D Assessed Fine Amounts by Service Standards (2018 - 2022)						
Servcie Measures	**2018**	**2019**	**2020**	**2021**	**2022**	**Total**
Out of Service Repair Intervals	$5,027,625	$4,611,300	$4,147,175	$3,266,550	$3,295,125	**$20,347,775**
Installation Intervals	$0	$0	$150	$1,200	$2,400	**$3,750**
Installation Commitments	$0	$2,100	$0	$2,400	$2,475	**$6,975**
Customer Trouble Reports	$0	$0	$0	$0	$0	**$0**
Answer Time	$74,894	$27,432	$0	$0	$16,754	**$119,080**
Total	**$5,102,519**	**$4,640,832**	**$4,147,325**	**$3,270,150**	**$3,316,754**	**$20,477,580**

Table 3: GO 133-D Assessed Fine Amounts by Service Standards (2018-2022)

Current Requirements for VoIP and Wireless Services

While the current service quality standards and enforcement mechanism in GO 133-D focus primarily on POTS provided on time division multiplexing (TDM) technology,[28] GO 133-D also includes some regulatory requirements for VoIP and wireless voice services. These requirements include reporting major service interruptions and providing wireless coverage maps, both of which include specific reference to VoIP and wireless voice services.[29]

Parties' Perspectives

Over the course of the proceeding, carrier representatives and consumer advocacy groups have remained consistent in their respective positions.

Carrier representatives stressed that competition is the best mechanism to improve service quality and that additional regulations are unnecessary. AT&T asserted that service providers have incentives to provide high service quality, therefore additional enforcement mechanisms are not necessary.[30] Cal Broadband, formerly CCTA, proposed a two-year data collection period for VoIP service providers on current GO 133-D service standards to determine whether there are any issues that the Commission

[27] Ibid.

[28] Plain old telephone service (POTS) and time division multiplexing (TDM) are used interchangeably to describe legacy telephone or voice service throughout GO 133-D and this Proceeding. To align on terminologies, staff will use POTS throughout the rest of this document.

[29] General Order 133-D Section 4. Major Service Interruption; 5. Wireless Coverage Maps.

[30] Opening Comments of AT&T on Workshop Summary and Presentations, page 23. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K541/520541452.PDF

should address.[31] The Cellular Telephone Industries Association (CTIA) highlighted that wireless networks are based on radiofrequency technology and are subject to variable performance based on factors outside a carrier's control.[32]

On the other hand, advocacy groups[33] and rural community representatives asserted that the enforcement framework and penalty mechanism in GO 133-D need to be updated.[34] Advocacy groups emphasized that reliable communications service is not just a convenience; these services facilitate safety and access to emergency services, healthcare, education, and other essential services.[35]

Advocates argued that for marginalized communities, the stakes are even higher.[36] Representatives from Lake County, a rural county predominantly covered by Tier 2 and Tier 3 high fire-threat districts,[37] emphasized that their communities rely on wireless services to make emergency calls and messages.[38] A representative from another rural county, Modoc County, described a situation when part of the county went multiple days without wireless coverage, leaving residents stranded with no means of communication for assistance.[39] Center for Accessible Technology argued that competition alone will not result in high service quality levels, as evidenced by these communities experiencing persistent problems with their communications services.[40]

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[31] Comments of the California Cable & Telecommunications Association in Response to Administrative Law Judge's Ruling Requestion Comments on Network Examination and Armis Reporting, pages 18-20. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M500/K050/500050171.PDF

[32] Comments of CTIA on Joint Summary of September 7, 2023 Workshop, pages 8-9. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K541/520541783.PDF

[33] Advocacy groups include the Public Advocates Office, Center for Accessible Technologies, The Utility Reform Network, the California Alliance for Digital Equity, and the Small Business Utility Advocates.

[34] Comments of the Public Advocates Office on the Joint Summary and Presentations of the September 7, 2023 Workshop Discussing General Order 133-D, page 7. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K522/520522250.PDF

[35] Comments of the Small Business Utility Advocates on Workshop Presentations and Summary, page 3. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K515/520515954.PDF

[36] Ibid.

[37] California High Fire-Threat District map https://files.cpuc.ca.gov/safety/fire-threat_map/2021/CPUC%20HFTD_v.3_08.19.2021.Poster%20Size.pdf

[38] Comments of the Public Advocates Office on the Joint Summary and Presentations of the September 7, 2023 Workshop Discussing General Order 133-D, page 5. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K522/520522250.PDF

[39] Ibid.

[40] Comments of Center for Accessible Technology, The Utility Reform Network, and California Alliance for Digital Equality on Joint Workshop Summary, page 6. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K541/520541150.PDF

Tribal Communities' Perspectives

Similar to the marginalized communities in rural areas, tribal communities in California also face challenges with their communications services. During the workshop on September 7, 2023, Matt Rantanen, Director of Technology for the Southern California Tribal Chairman's Association and Director the Tribal Digital Village Network, summed up the reality that confronts communities, "[p]eople need these services… It boils down to the lowest common denominator, and that's emergency [services]."[41] In 2022, the Karuk Tribe, situated in Orleans, California, filed a formal complaint with the Commission against Frontier, citing the carrier's negligence in addressing constant POTS service quality issues.[42] The complaint specifically detailed a POTS outage that lasted roughly 48 hours in December 2021.[43] One impacted person was unable to contact emergency services during that outage, which led to a casualty.[44] Kori Cordero, CEO of Yurok Telecoms, provided comments summarizing the needs of several tribal members, including elders that had gone without service for several months without a response from the carrier. [45] These comments illustrated that many tribes in the state experience service quality issues with their communications services, although the level and type of issues vary by location.

Essential Communications Services

The Commission has previously emphasized the importance of essential utility services.[46] In Decision 20-07-032 issued in R.18-07-006, the Affordability Rulemaking,[47] the Commission adopted the following as essential communications services for residential customers:

- Basic service or wireless voice service with 1,000 minutes per month
- Fixed broadband at a connection speed of 25 megabits per second (Mbps) downstream / 3 Mbps upstream and a minimum capacity of 1,024 gigabytes (GB) per month.

Irrespective of technology and network types, essential services enable health, safety, and full participation in society for residential households.[48]

To provide a relevant service quality framework for essential communications services, the Commission must update GO 133-D's service standards and enforcement mechanisms. The GO needs a

[41] CPUC Workshop on Evaluating Changes to Communications Service Quality Rules (Sept. 7, 2023) – YouTube. https://www.youtube.com/watch?v=mGROesn6Jww

[42] Karuk Tribe vs. Frontier formal complaint, February 2, 2022. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M447/K557/447557217.PDF

[43] Ibid.

[44] Ibid.

[45] CPUC Workshop on Evaluating Changes to Communications Service Quality Rules (Sept. 7, 2023) – YouTube. https://www.youtube.com/watch?v=mGROesn6Jww

[46] Essential utility services encompass electric, gas, water, and communications services.

[47] Decision Adopting Metrics and Methodologies for Assessing the Relative Affordability of Utility Service (D. 20-07-032) pages 25-33, 90. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M344/K049/344049206.PDF

[48] Decision 20-07-032, pages 10-11.

comprehensive update and must more fully include VoIP and wireless voice services to ensure all Californians have access to reliable voice services that enable health, safety, and full participation in society.

Environmental and Social Justice Action Plan

Environmental and Social Justice (ESJ) communities, for the purpose of Commission policies and programs, are predominantly communities of color or low-income communities that are underrepresented in the policy-setting or decision-making process. Since 2019, the Commission adopted two versions[49] of the ESJ Action Plan to advance policies and programs in the following communities:

- Disadvantaged communities, defined as census tracts that score in the top 25% of CalEnviroScreen 3.0[50] [51]
- All tribal lands[52]
- Low-income households
- Low-income census tracts

The Commission's ESJ Action Plan 2.0 aims to consistently integrate equity and access considerations throughout the Commission's regulatory activities. To achieve this goal, the Commission must continue building systematic approaches for considering ESJ issues in proceedings, decisions, and throughout the implementation processes highlighted in advice letters, general orders, and resolutions.[53]

Goal #3 of the 2.0 plan is to strive to improve access to high-quality water, communications, and transportation services for ESJ communities. Specifically, per Action Step 3.4.4,[54] the Commission must continue to understand the challenges of ESJ communities with respect to affordability in

[49] Environmental and Social Justice Action Plan Version 1.0 (February 2019). https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/environmental-and-social-justice.pdf; Environmental and Social Justice Action Plan Version 2.0 (April 2022). https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf

[50] CalEnviroScreen is a mapping tool that uses environmental, health, and socioeconomic information to produce scores for every census tract in California, which helps identify communities that are most affected by many sources of pollution. The scores are mapped so that different communities can be compared. An area with a high score is one that experiences a much higher pollution burden than areas with low scores. https://oehha.ca.gov/calenviroscreen/about-calenviroscreen

[51] This definition of "Disadvantaged Communities" reflects a small change from Version 1.0 of the ESJ Action Plan to reflect the most recent designation of "Disadvantaged Communities" by the California Environmental Protection Agency (CalEPA) in CalEnviroScreen, Version 3.0. A new version of CalEnviroScreen, Version 4.0, was finalized in October 2021 and CalEPA will make a subsequent designation of "Disadvantaged Community" given the new data. The definition in the ESJ Action Plan will be subsequently updated to reflect this change once it is in effect.

[52] Land within any Indian reservation as defined in 18 U.S.C. 1151 subsection (a).

[53] Environmental and Social Justice Action Plan Version 2.0 (April 2022) page 23.

[54] Environmental and Social Justice Action Plan Version 2.0 (April 2022) page 40.

communications services. One way to achieve this is to utilize the Commission-adopted Affordability Framework[55] established in the Affordability Rulemaking[56] to inform programmatic and investment work moving forward. The three pillars of the Affordability Framework are defining affordability, setting essential service levels,[57] and adopting metrics to assess the affordability of essential services. Specifically, the framework enables a spatial and temporal comparison of the affordability of essential services.

To implement the Affordability Framework, the Commission adopted two definitions of vulnerable communities for spatial and temporal comparisons: Disadvantaged Communities (DACs) and Areas of Affordability Concerns (AACs). Both DACs and AACs, which refresh periodically to reflect updated demographics and other measurable data, provide the spatial and temporal results at the census tract level[58] for the Commission to integrate ESJ considerations into the agency's work.

To ensure consideration of ESJ communities, GO 133-D must go through a comprehensive update to account for spatial and temporal comparisons, which will enable the Commission to create visual aids and apply geographical filters to the GO's service standards and enforcement mechanisms.

Disadvantaged Communities Pursuant to Senate Bill 535

To streamline the many definitions of vulnerable community, the Commission adopted the California Environmental Protection Agency's (Cal EPA) designation of DACs in the Affordability Rulemaking Phase Two Decision (D.) 22-08-023.[59]

In 2012, Senate Bill 535[60] established the initial requirements of minimum funding levels for DACs. The legislation also gives Cal EPA the responsibility of identifying those communities, which must be based on geographic, socioeconomic, public health, and environmental hazard criteria.

In 2022, Cal EPA released its updated designation of DACs, which includes the following four categories of geographic areas:

[55] Affordability Metrics Framework Staff Proposal (January 2020). https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M325/K620/325620620.PDF

[56] Rulemaking 18-07-006 Affordability Rulemaking. https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/affordability

[57] The essential service level for communications services is basic service for voice and 25 Megabits per second (Mbps) downstream / 3 Mbps upstream for broadband.

[58] Standard Hierarchy of Census Geographic Entities. https://www2.census.gov/geo/pdfs/reference/geodiagram.pdf

[59] Decision Implementing the Affordability Metrics (D. 22-08-023). https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M496/K428/496428621.PDF

[60] Senate Bill 535 (De León, Chapter 830, Statutes of 2012). http://www.leginfo.ca.gov/pub/11-12/bill/sen/sb_0501-0550/sb_535_bill_20120930_chaptered.html

- Census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0 (1,984 tracts).[61]
- Census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores (19 tracts).
- Census tracts identified in the 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0 (307 tracts).
- Lands under the control of federally recognized tribes.

See Figure 2 for a detailed map of Cal EPA's updated designation of DAC census tracts.

[61] California Office of Environmental Health Hazard Assessment, CalEnviroScreen 4.0 homepage. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

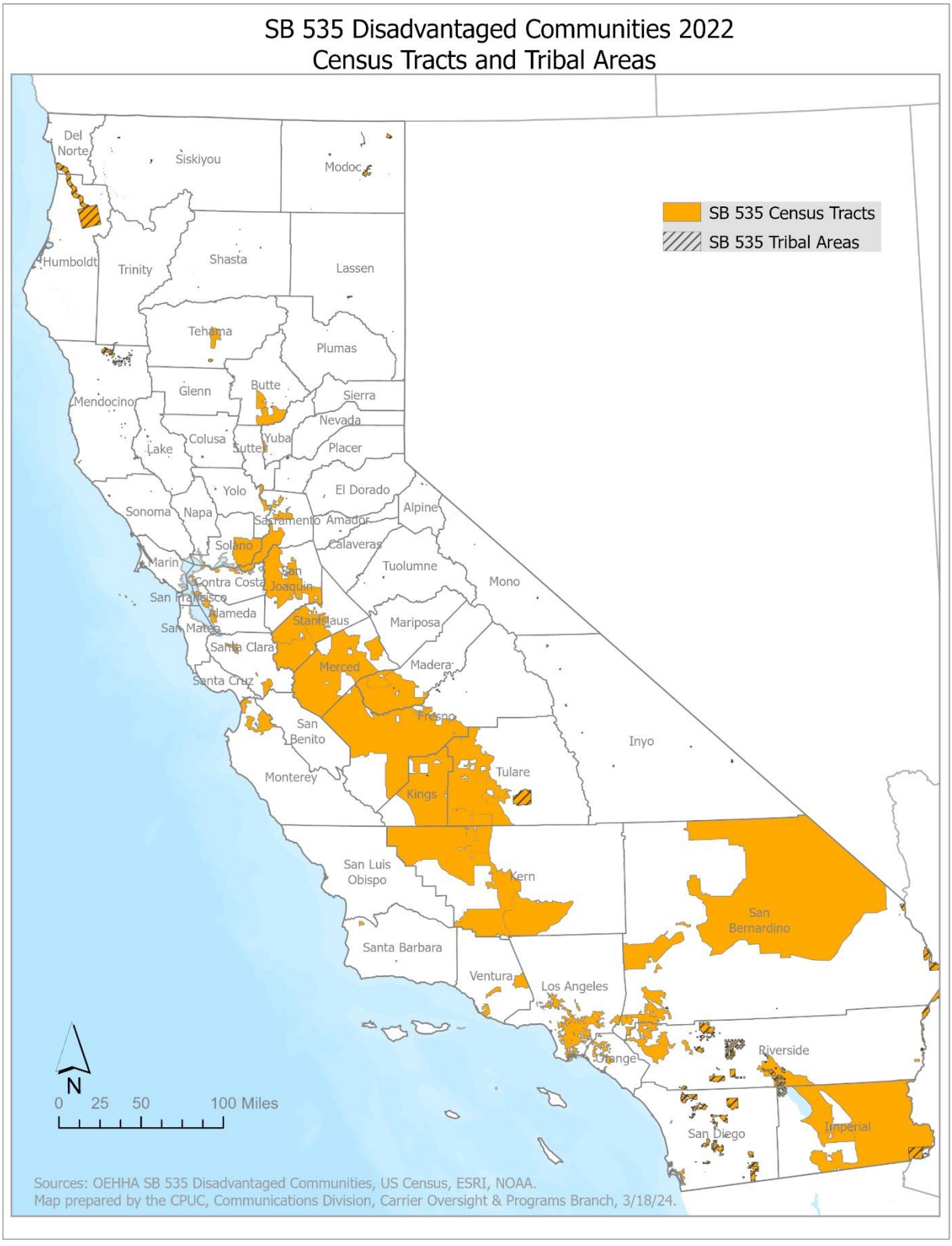

Figure 2: SB 535 Disadvantaged Communities Census Tracts and Tribal Areas

Areas of Affordability Concerns

The Commission introduced the AACs in the Affordability Metrics Implementation Staff Proposal,[62] and adopted this geographical designation in D.22-08-023. The AACs, presented at the census tract level, are areas where the Affordability Ratio (AR) metric[63] for representative low-income households is disproportionately higher than the rest of the state. The higher the AR metric, the less affordable it is for households to pay for essential utility services. The AACs can be imputed for a specific essential utility service. For a map of the Communications AACs, please refer to Figure 3.

[62] Affordability Metrics Implementation Staff Proposal (November 2021). https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/affordability-proceeding/r1807006--staff-proposal-on-affordability-metrics-implementation.pdf

[63] Affordability Metrics Framework Staff Proposal (January 2020) pages 35-45.

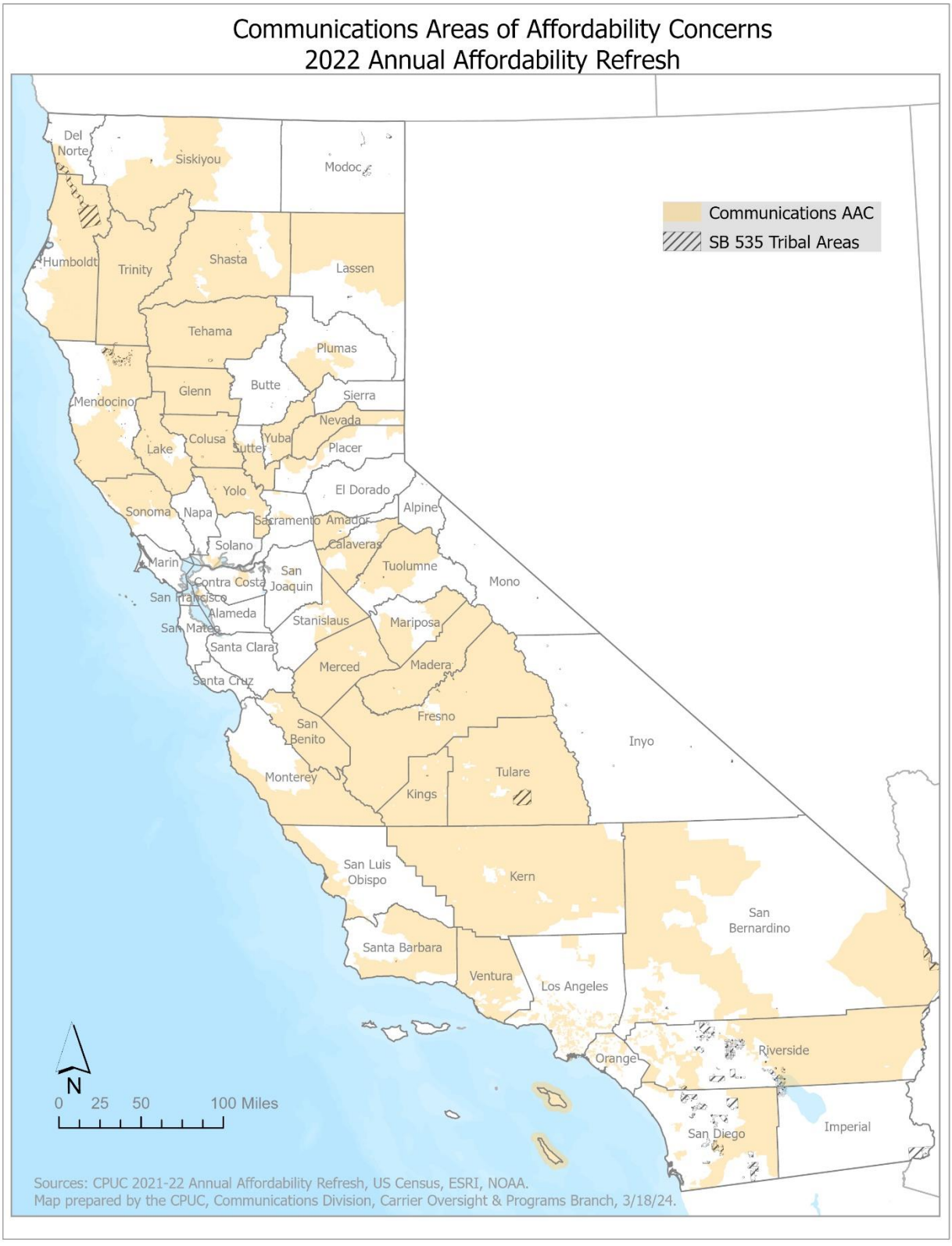

Figure 3: Communications Areas of Affordability Concerns – 2022 Annual Affordability Refresh

For an overlay of both vulnerable communities, Disadvantage Communities and Communications Areas of Affordability Concerns, please refer to Figure 4.

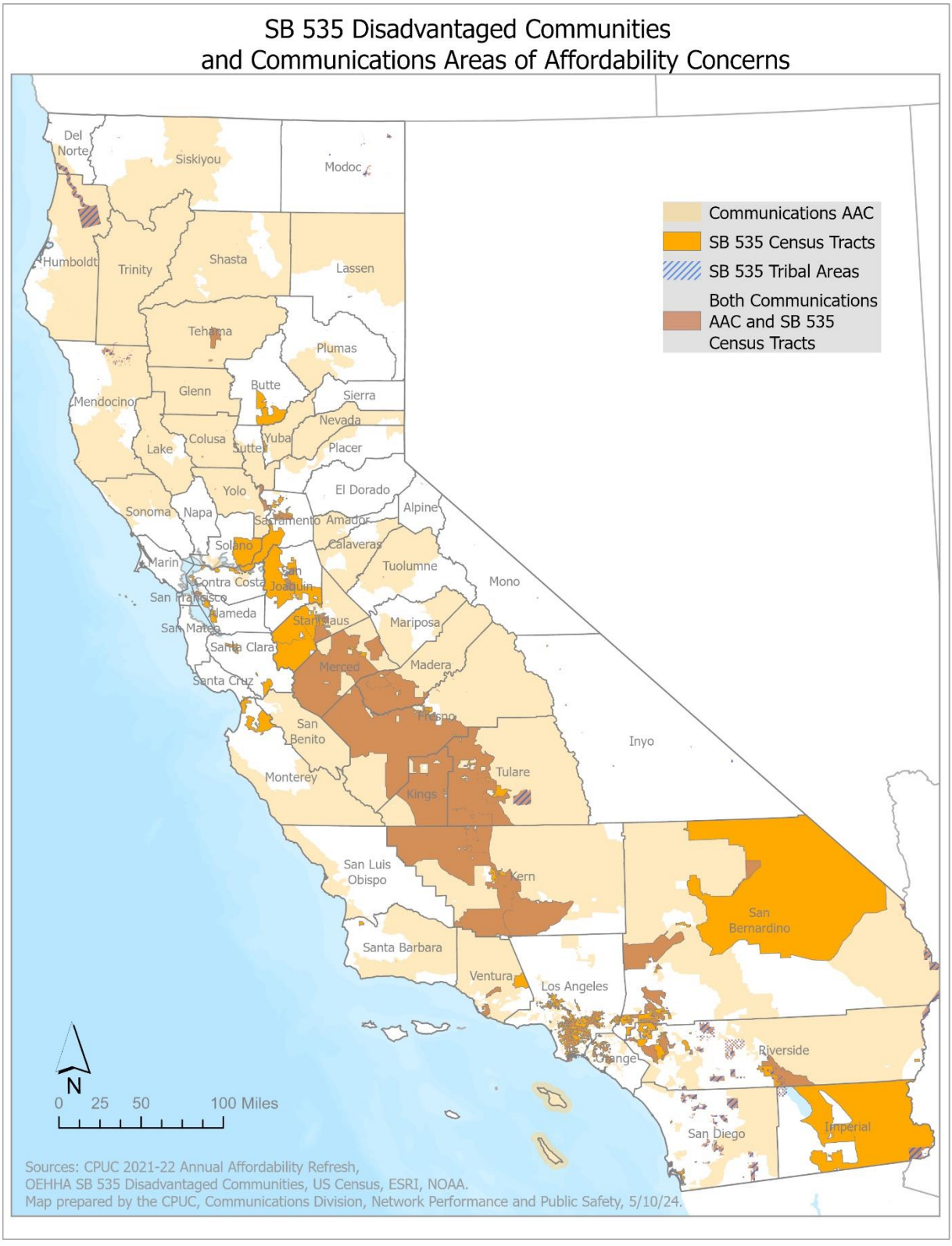

Figure 4: Overlay of Disadvantaged Communities and Communications Areas o Affordability Concerns

Integration of Environmental and Social Justice and Service Quality

The Commission initiated R.22-03-016 to consider whether the existing service quality standards in GO 133-D meet the goals of the Commission and remain relevant in the current regulatory environment and market. The Commission established Phase One to examine the effectiveness of the current GO 133-D standards and enforcement framework for voice service and to consider whether they should extend to VoIP and wireless voice services.

Phase One presents the opportunity to update service quality standards to account for spatial and temporal comparisons in order to consider ESJ communities. With established geographical filters such as DACs and AACs absent, current GO 133-D standards cannot examine service quality performances at ESJ communities or at any geographical designation. As examined in the *Tribal Communities' Perspectives* section, tribal communities, which are included as part of the ESJ Action Plan, face immense hardship when it comes to access to reliable communications services, highlighting the need to integrate more effective policies for ESJ communities.

Public Engagement

To engage the general public, the Commission held six public participation hearings (PPHs) from December 2022 to May 2023, collecting 380 individual comments during the hearings.[64] The comments cover an array of topics. While some (50 comments) did not highlight any complaints, the overwhelming majority of comments (330 comments) detailed complaints in one of the following areas: service quality, customer service, and billing / high costs. Of the three complaint types, service quality complaints account for the majority. See Figure 5 for a complete breakdown of complaint types.

[64] Public Participation Hearing transcript (December 6, 2022). https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M501/K974/501974629.PDF; Public Participation Hearing transcript (December 8, 2022). https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M501/K974/501974630.PDF; Public Participation Hearing transcript (April 18, 2023, two sessions). https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M511/K719/511719069.PDF; Public Participation Hearing transcript (May 3, 2023, two sessions). https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M512/K707/512707618.PDF

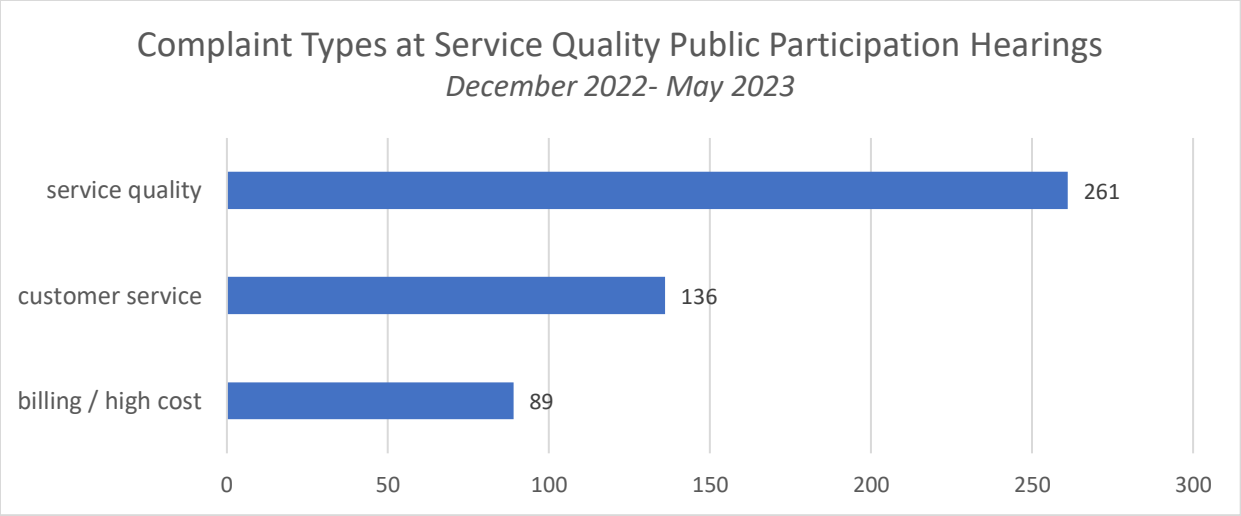

Figure 5: Complaint Types at Service Quality Public Participation Hearings

Staff classified all 380 comments across 23 key issues; some comments encompass more than one issue.[65] Figure 6 exhibits the top ten most mentioned issues. Seven of the top ten issues are service quality type issues. Of these seven service quality type issues, cell signal (poor), issues with maintaining POTS,[66] outage (extended), outage (constant), subpar service in rural areas, and slow customer response can all be addressed via updates to service quality standards and enforcement of GO 133-D.

[65] The 23 issues are: speed below advertised, technology neutral, subpar service in poor areas, cell signal 5G (poor), lack of competition, network resiliency (poor), no or slow broadband, equipment / safety, identity theft, static on line, dropped calls, network signal (poor), customer service (upselling), spoofing / spam, slow customer response, subpar service in rural areas, outage (constant), no complaints, outage (extended), bill is expensive, maintain POTS, cell signal (poor), and customer service (poor).

[66] Issues with maintaining POTS refer to comments where customers stressed their reliance on traditional wireline phone service and their preference over VoIP and wireless.

Figure 6: Top 10 Issues at Service Quality Public Participation Hearings

As previously mentioned, the Commission held a public workshop on September 7, 2023, in Sacramento, California regarding GO 133-D and service quality.[67] Cal Advocates, Small Business Utility Advocates, Joint Consumers,[68] AT&T, Frontier, CTIA, and Cal Broadband presented their recommendations on both voice service quality metrics and enforcement. The public workshop also included roundtable discussions with tribal and local government representatives from the Yurok Tribe, the Hoopa Valley Tribe, the Southern California Tribal Chairman's Association, Inyo County, Lake County, and Modoc County.

Since the initiation of the rulemaking, the general public has filed over 3,300 comments on the proceeding docket card. The public comments cover 65% of the zip codes in California.[69] See Figure 7 for a geographical depiction of the communities that filed comments.

[67] Joint summary of the September 7, 2023 Workshop Discussing General Order 133-D by Cal Advocates and Cal Broadband. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K470/520470723.PDF; CPUC Workshop on Evaluating Changes to Communications Service Quality Rules (Sept. 7, 2023) – YouTube. https://www.youtube.com/watch?v=mGROesn6Jww

[68] Joint Consumers consist of the Center for Accessible Technology, Communications Workers of America, and The Utility Reform Network.

[69] There is at least one comment from the general public in each zip code identified.

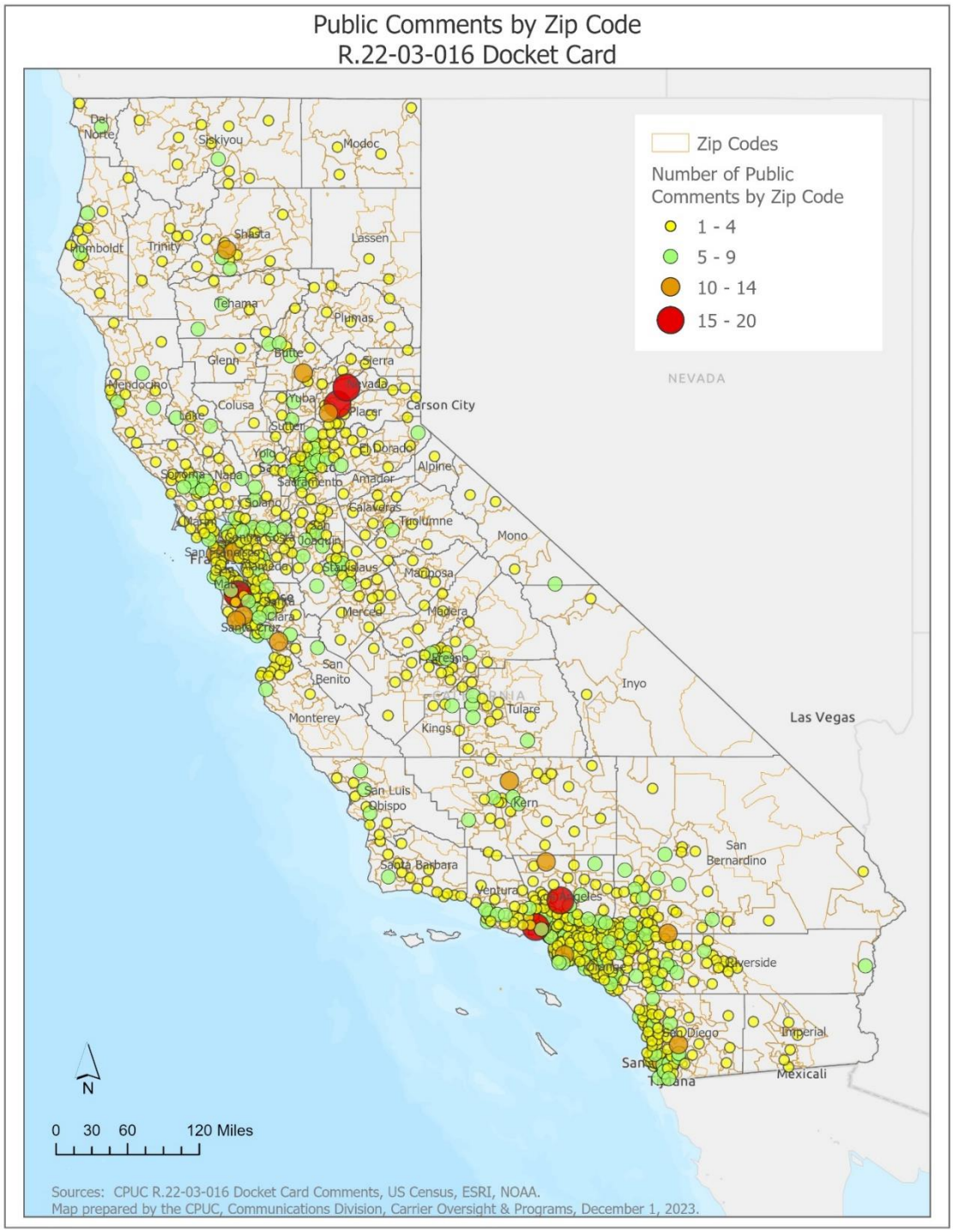

Figure 7: Docket Card Public Comments by Zip Code

Discussion

GO 133-D Service Quality Standards

Table 4 depicts the violation count of the five service quality standards from 2018 through 2022. During that five-year span, the installation interval, installation commitments, and answer time standards collectively had 17 violations that incurred fines. The out of service repair interval standard alone had 30 violations that incurred fines. The customer trouble report standard is the only one for which telephone corporations did not incur any fines.

GO 133-D Violation Count by Service Standards (2018 - 2022)						
Servcie Measures	**2018**	**2019**	**2020**	**2021**	**2022**	**Total**
Out of Service Repair Intervals	8	7	7	3	5	**30**
Installation Intervals	0	0	1	1	2	**4**
Installation Commitments	0	1	0	1	2	**4**
Customer Trouble Reports	0	0	0	0	0	**0**
Answer Time	3	3	0	0	3	**9**
Total	**11**	**11**	**8**	**5**	**12**	**47**

Table 4: GO 133-D Violation Count by Service Standards (2018-2022)

The following subsections describe each of the five GO 133-D service quality standards individually.

Out of Service Repair Intervals (OOS) Standard

The OOS measure calculates the time it takes from the receipt of an outage ticket to when the service is restored. The standard is to restore 90% of the outage tickets within 24 hours based on adjusted results, which includes several exemptions. From 2018 to 2022, there were 30 violations, resulting in $20.3 million in assessed fines. For comparison, the other four service quality standards collectively accounted for almost $130 thousand in assessed fines in the same five-year span.

Staff determined that there are several challenges with the OOS standard:

Statewide results lack geographical granularity

The enforcement of the OOS standard is based on statewide results. Since the OOS measure is imputed by aggregating individual outage tickets to the statewide level, it lacks the necessary geographical granularity for further analysis. The statewide level reporting does not provide the necessary data to understand how specific communities are impacted by outages, and whether certain communities or individual customers are disproportionally impacted.

Single threshold lacks severity consideration

The OOS standard only measures whether telephone corporations can repair 90% of the outage tickets within 24 hours. As for the outage tickets that are not repaired within 24 hours, the current threshold provides no information about when or if those outages will be repaired. Furthermore, under the current OOS standard, telephone corporations can technically leave select outage tickets unattended indefinitely and still be compliant as long as 90% of their outage tickets are repaired within 24 hours.

Enforcement mechanism lacks outage duration consideration

Lacking any consideration beyond the 24-hour threshold, the OOS standard neglects the impact caused by outages of longer durations. It is noteworthy that other agencies have at least taken outage duration into consideration. In April 2023, Commission staff published a Service Quality Outage Analysis (outage

report).[70] The outage report highlighted the Federal Communications Commission's Network Outage Reporting System (NORS) report, which details outages across various duration intervals, such as under 24 hours, 24 – 48 hours, 48 – 72 hours, 72 – 96 hours, and above 96 hours. During the four-year period from 2018 to 2021, NORS recorded 15,651 outages in California from ten telephone corporations[71] that provided POTS, VoIP, and wireless services. While the majority of those outages (9,169) were less than 24 hours, a significant number of outages (3,879) persisted over 96 hours.[72] The impact of outages over 96 hours are exponentially greater than those between 24 to 48 hours.

Unreasonable exemptions

In terms of enforcement, only the adjusted results are subject to fines in GO 133-D. Adjusted results exclude Sundays, federal holidays, and circumstances beyond the carrier's control.[73] Catastrophic events, such as declared state or local emergencies, are unplanned events that may warrant exemptions. However, Sundays and federal holidays are regular occurrences for which exemption does not seem appropriate in the current marketplace. Californians should have access to essential services at all times, not limited to only weekdays, Saturdays, and non-federal holidays.

In its current state, the OOS standard fails to consider the severity of the outstanding outage tickets that are not repaired within 24 hours, and whether they disproportionally impact some communities more than others. Moreover, the enforcement of the standard contains too many exemptions, which dilutes its overall effectiveness.

Installation Interval Standard

The installation interval measure calculates the average time it takes for customers to receive basic service from the day they order services to the date when services become operational. The standard for this measure is five business days. During the five-year span from 2018 to 2022, there were only four noncompliance instances that resulted in fines.

Under the current GO 133-D rules, staff identified several challenges with the installation interval standard. First, the results of the installation interval measure are presented as an average of all installation occurrences. The results can be aggregated to different levels, such as exchange, wire center, or host switch, depending on how many lines are at each aggregation hub, and do not necessarily reflect nuances of individual lines. Under the current reporting structure, telephone corporations can have numerous lines incurring installation intervals of more than five business days, yet still meet the standard because the measure reports the average duration of all occurrences. Furthermore, the installation interval standard applies only to GRC ILECs. Given these factors, the installation interval standard does

[70] Service Quality Outage Analysis (April 2023). https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523424.PDF

[71] AT&T, Centurylink, Charter Fiberlink, Comcast, Cox, Frontier, Sprint, T-Mobile, Verizon Wireless, Verizon Wireline (in alphabetical order).

[72] Service Quality Outage Analysis (April 2023), page 26. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523424.PDF

[73] The circumstances include, but not limited to, the following: cable theft, third party cable cut, lack of premise access, absence of customer support to test facilities, customer's requested appointment, as well as catastrophic events.

not adequately affirm the Commission's commitment to ensure that basic service is available throughout California.[74]

Installation Commitments Standard

The installation commitments measure shows the establishment of basic service as a percentage of fulfilled commitments divided by total commitments. The standard for this measure is 95%. Similar to the installation interval standard, the installation commitments standard also applies only to GRC ILECs and has a high compliance level, with only four noncompliance instances that resulted in fines from 2018 to 2022.

The installation commitments measure also reports results at an aggregate level instead of individual lines. Since results are reported at an aggregate level, be it exchange, wire center, or host switch, telephone corporations can still meet the 95% standard even if they have uncommitted line(s). Like the installation interval measure, the reporting structure of the installation commitments measure does not adequately affirm the Commission's commitment to basic service, as telephone corporations can still meet the standard even if they have uncommitted lines.

Customer Trouble Reports Standard

The customer trouble reports measure tallies customer reports of outage issues as well as general customer dissatisfaction. The minimum standard varies between six to ten percent of the total working lines depending on the number of working lines connected to either an exchange or wire center, whichever is smaller.

From 2018 to 2022, none of the reporting telephone corporations incurred a fine for failing to meet this standard. However, that does not mean all telephone corporations were in full compliance for every month during those five years. For example, in January 2022, AT&T California received customer trouble reports that surpassed the standard of ten percent of the total working lines across all reporting levels.[75] However, it was not assessed a fine because it became compliant the following month. Under our current rules, the Commission does not assess a fine against a telephone corporation until it reaches a chronic failure status, which entails failure to meet the standard for three consecutive months. The first two months of noncompliance with any of the five standards does not result in fines.

The customer trouble reports standard fails to recognize the importance of each working line. The telephone corporations can meet the standard as long as the number of reports is below six to ten percent of the working lines. In other words, under the current rules, having six to ten customer trouble reports per 100 working lines is acceptable. Furthermore, besides the count of customer trouble reports, this standard does not consider if the issues in these reports are being resolved, the time needed to resolve the issues, and whether the issues are chronic recurrences.

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[74] Decision 96-10-066, pages 2 to 6.

[75] AT&T 2022 Service Quality Report. 10.4% for units with ≥ 3,000 workings lines; 11.6% for units with 1,001 to 2,999 working lines; 17.3% for units with ≤ 1,000 working lines. https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/reports/quarterly-service-quality-reports/2022-quarterly-service-quality-reports/4th-quarter-2022/att-ca-2022-4th-quarter.pdf

Answer Time Standard

The answer time measure tallies the number of customer service calls that reach a live agent within 60 seconds. The standard is to have a live agent answer 80% of the calls within 60 seconds, either directly or via an IVR or ARU system.

From 2018 to 2022, there were only nine noncompliance instances that resulted in fines for this standard. However, the high compliance level may not necessarily mean that customer inquiries are being resolved within a reasonable amount of time. First, this standard focuses only on the time interval it takes for a live agent to answer the call. It does not require the live agent to actually provide a solution.

With regards to the 60-second benchmark, it is yet another single threshold that lacks consideration of the duration of non-compliance. A call that takes 61 seconds for a live agent to answer is very different from one that takes 30 minutes to an hour before reaching a live agent. Despite the drastically different wait times, both scenarios miss the 60-second threshold and thus have the same impact on the answer time performance. Currently, telephone corporations can allow 20% of the customer service calls to go unanswered by a live agent as long as the other 80% of the calls are answered within 60 seconds. Once again, having only a single threshold becomes problematic. The time limit of 60 seconds notwithstanding, the answer time standard errs at not considering whether the customers' issues are being resolved.

GO 133-D Parameters

To complement the five service measures, GO 133-D's current applicability and enforcement mechanism incorporate several key parameters.

Carrier Types

Currently, the telephone corporations that adhere to GO 133-D's reporting and enforcement requirements fall into three different carrier types:

- URF ILEC[76]
- URF competitive local exchange carrier (CLEC)[77]
- GRC ILEC[78]

However, not all five service quality standards apply to all three carrier types. The installation interval and installation commitments standards apply only to GRC ILECs. The customer trouble reports, out of service repair intervals, and answer time standards apply to GRC ILECs, facilities-based URF carriers with 5,000 or more customers, and COLRs regardless of how many customers.

Applicability and enforcement restrictions based on the number of customers can be problematic for the current regulatory environment, especially in less populated areas. Tiffany Martinez of Modoc County expressed such concern at the public workshop, "*[w]e only have 8,500 people according to the census in our entire county. So for us to reach the threshold and have something put on the map for our area, it looks like according to these rules, we get thrown into another service area that maybe doesn't highlight*

[76] See Appendix B.

[77] Ibid.

[78] Ibid.

our area as strongly as it would if the data was centralized to our county or a specific region. We just can't trigger some of these 5000 or more customers; that's almost our entire county population."

Chronic Failure Status

Fines for failing to meet a service quality standard apply only when the telephone corporation reaches a chronic failure status. Chronic failure status is defined as failure to meet the same service quality standard for three consecutive months. No fines are assessed for failing to meet the standard for the first two months.

In 2022, AT&T failed the meet customer trouble reports standard for a month, yet it was not assessed any fines because it was able to meet the standard the following month.[79] With the chronic failure status parameter, telephone corporations can avoid being fined for failing to meet a standard for up to two consecutive months as long as they meet the standard the very next month.

In theory, the chronic failure status stipulation allows a telephone corporation to do absolutely nothing to meet any standard for two consecutive months since it will not be penalized if it meets the standards in the following month. For example, from 2018 through Q2 of 2023, Consolidated Communications missed the OOS standard for two consecutive months on six separate occasions.[80] Each time the telephone corporation narrowly missed getting into chronic failure status because it would meet the standard the very next month. See *Appendix C* for details.

As an enforcement parameter, the chronic failure status stipulation is counterproductive to the original intent of establishing uniform minimum standards of service that telephone corporations must consistently meet.

Adjusted Data

Currently, telephone corporations report both unadjusted and adjusted data for the OOS measure. However, adjusted data allow for the following exemptions that are not subject to fine considerations:

- Sundays
- Federal holidays
- Other exemptions
    - Catastrophic events
    - Absence of customer support
    - Lack of premise access

Of the exemptions listed above, only catastrophic events are unplanned, and therefore it is reasonable for telephone corporations to exclude the days and hours during which these catastrophic events are taking place. However, telephone corporations should bear the responsibility of planning for all other "exemptions" currently permitted by GO 133-D.

[79] See Customer Trouble Reports Standard subsection for details.

[80] 2019 July and August; 2020 July and August; 2021 July and August; 2022 April and May; 2023 Jan and Feb; 2023 April and May.

Statewide Level Performance

Section 3 of GO 133-D clarifies the standards for all five service measures. While each standard utilizes records from individual customer occurrences or working lines, the actual determination of whether the telephone corporation meets the standard is based on aggregated results of all applicable records at the statewide level. In addition, the GO does not enforce any of the five standards with any geographical granularity. For the telephone corporations subject to GO 133-D that have near-statewide communications networks, achieving the standards does not guarantee that all customers or communities are having their installation commitments fulfilled or having their outages repaired within 24 hours because the current enforcement mechanism assessed results only at the statewide level.

GO 133-D Penalty Enforcement

Background

Pursuant to Public Utility Code §2107[81] and §2108,[82] the Commission has the authority to enact penalties and assess monetary fines for failures or negligence to comply with any order. Every violation of compliance is regarded as a separate and distinct offense. Furthermore, for continuing violations, each day's continuance is regarded as a separate and distinct offense.

Fines Calculation

Section 9 of GO 133-D details the fine calculations for telephone corporations if they fail to meet the service quality standard for three consecutive months and thus fall into chronic failure status. The fines are calculated by multiplying the three following factors together:

- Number of months in chronic failure status.
- Scaling factor, represented as a percentage of the carrier's working lines relative to the entire state.
- Base fine amount, determined by the daily fine amount multiplied by 30 days.

As for the base fine amount, there are two distinct fine structures for the five standards:

- *Flat base fine*. The installation interval, installation commitments, and out of service repair intervals standards have a base fine amount of $25,000 per day, which totals to $750,000 per month.

[81] CA Pub Util Code § 2107 Any public utility that violates or fails to comply with any provision of the Constitution of this state or of this part, or that fails or neglects to comply with any part or provision of any order, decision, decree, rule, direction, demand, or requirement of the commission, in a case in which a penalty has not otherwise been provided, is subject to a penalty of not less than five hundred dollars ($500), nor more than one hundred thousand dollars ($100,000), for each offense.
https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=2107.&nodeTreePath=2.1.20&lawCode=PUC

[82] CA Pub Util Code § 2108 Every violation of the provisions of this part or of any part of any order, decision, decree, rule, direction, demand, or requirement of the commission, by any corporation or person is a separate and distinct offense, and in case of a continuing violation each day's continuance thereof shall be a separate and distinct offense.
https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=2108.&nodeTreePath=2.1.20&lawCode=PUC

- *Escalating base fine*. The customer trouble reports and answer time standards have an escalating base fine structure which increases in accordance with the number of consecutive months in chronic failure status. The daily fine amount begins at $500 per day and maxes out at $2,000 per day. In terms of the monthly fine amount, it ranges from $15,000 to $60,000 per month.

Investment in Lieu of Fine

At the public workshop held on September 7, 2023, both AT&T and Frontier reasoned that the monetary fines that result from failing to meet service quality standards have no nexus to improving service quality because they are going into the state's general fund. On the other hand, investment projects will improve service quality and help customers.

Section 9.7 of GO 133-D provisions that in lieu of paying the monetary fine for failure to meet a service quality standard, telephone corporations may propose to invest at least twice the amount of their annual fine in projects that improve service quality in a measurable way within two years.

As detailed in the outage report,[83] the Commission approved AT&T's proposal to invest $11.8 million in projects to improve service quality for their failures to meet the OOS standard in 2017 and 2018. However, instead of improving its performance in the OOS measure, AT&T's OOS performance declined in subsequent years.

Refunds

Under the directive of Section 8 of GO 133-D, telephone corporations report the amount of customer refunds and the number of customers receiving refunds in their quarterly reporting to the Commission. The GO requires the telephone corporations to utilize their existing tariff or customer guidebook provisions to detail the policy for these customer refunds.

See Table 5 and Table 6 for AT&T and Frontier's reported refunds in 2022. Telephone corporations report the number of customers and the refund amount at the monthly level. The average refund per customer is derived from the two fields provided in the report.

AT&T Customer Refunds per GO 133-D Reports (2022)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of customers receiving refunds	30,282	13,974	10,155	11,516	7,239	9,917	9,824	11,587	13,119	8,780	13,050	19,762
Monthly refund amount	$401,326	$173,468	$49,183	$51,790	$37,285	$52,001	$53,907	$68,395	$73,503	$50,167	$81,363	$120,742
Average refund / customer	$13.25	$12.41	$4.84	$4.50	$5.15	$5.24	$5.49	$5.90	$5.60	$5.71	$6.23	$6.11

Table 5: AT&T Customer Refunds per GO 133-D Reports (2022)

[83] Service Quality Outage Analysis (April 2023), pages 15-16.
https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523424.PDF

Frontier Customer Refunds per GO 133-D Reports (2022)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of customers receiving refunds	80	51	28	27	28	50	35	42	37	42	26	29
Monthly refund amount	$1,426	$1,225	$985	$1,286	$324	$877	$813	$1,410	$624	$710	$247	$1,050
Average refund / customer	$17.82	$24.02	$35.18	$47.62	$11.56	$17.54	$23.23	$33.58	$16.88	$16.92	$9.51	$36.21

Table 6: Frontier Customer Refunds per GO 133-D Reports (2022)

Although the data provides a broad overview of refunds, several key components are missing from the current refund requirements, such as reasons for the refunds, the number of days that the customers' services were affected, and how soon the customers receive the refunds. Also, the building blocks of the fine mechanism in GO 133-D for all service measures are based on a daily fine amount, yet the current refund data reported by each telephone corporation does not specify what the refund is for, nor does it indicate what the daily refund amount is.

GO 133-D Other Reporting Requirements

Staff Investigations and Corrective Action Plan

Section 7 of GO 133-D provisions staff investigations and corrective action plans by telephone corporations when they fail to meet service quality standards for two consecutive months or more. Both aim to address prolonged periods of failure to meet minimum service levels. The Commission previously approved correction action plans proposed by telephone corporations in lieu of paying the fine, yet these plans did not necessarily bring about the level of improvements contemplated by the Commission. For example, the Commission approved AT&T's alternative proposals for mandatory corrective action for two consecutive years in 2018[84] and 2019.[85] Those two corrective action plans amounted to $11.8 million worth of investment projects. Instead of improving its performance, AT&T evinced a decline in performance and failed the OOS standard from 2019 to 2023, restoring less than 50% of the outage tickets during that span.[86]

[84] Resolution T-17625. Approval of AT&T California's (U-1001-C) Advice Letter setting forth its annual fine and alternative proposal for mandatory corrective action for failing to meet required service quality performance standards in Year 2017 pursuant to General Order 133-D. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M241/K840/241840081.PDF

[85] Resolution T-17655. Approval of AT&T California's (U-1001-C) Advice Letter setting forth its annual fine and alternative proposal for mandatory corrective action for failing to meet required service quality performance standards in Year 2018 pursuant to General Order 133-D. https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M298/K187/298187988.PDF

[86] Refer to Figure **Error! Main Document Only.**: AT&T California Adjusted Out of Service Repair Interval Performance (2018-2023)

Major Service Interruption

Section 4 of GO 133-D requires telephone corporations[87] to provide major service interruption reporting. For this requirement, the Commission adopted the Federal Communications Commission's (FCC) Network Outage Report System (NORS) requirements,[88] as well as an annual Eligible Telecommunications Carrier (ETC) outage report. Under the NORS's framework, telephone corporations are required to report network outages that last at least 30 minutes and satisfy other specific thresholds for all service types, including POTS, VoIP, and wireless services.[89] For all reportable outages, telephone corporations must submit a NORS notification within 120 minutes with preliminary information.

Wireless Coverage Map

Section 5 of GO 133-D requires wireless telephone corporations[90] to provide coverage maps on their websites and at retail locations. Furthermore, telephone corporations must disclose equipment[91] limitations that may affect wireless coverage depiction and wireless service availability. The rationale of this requirement is to enable each customer to make an informed decision on whether the customer "*generally may expect*" to receive adequate signal strength to place and receive calls when outdoors and under normal operating conditions.

The requirements depicted in Section 5 lack key specifics. The language "*generally may expect*" does not necessarily mean one is able to place and receive calls. With the aid of a Geographical Information System (GIS), telephone corporations instead need to provide customers with the capability to identify the exact coverage level for a specific address.

Regarding equipment limitations, telephone corporations need to ensure their customers have the proper equipment that can accommodate changes in wireless technology. As Tiffany Martinez of Modoc County shared at the public workshop held on September 7, 2023, "*the CDMA technology[92] is being turned off, and it's being mandated to go to 5G technology. In our county, we don't have 5G. So this*

[87] Telephone corporations that have been granted a franchise or a Certificate of Public Convenience and Necessity (CPCN) or a Wireless Identification Registration (WIR), as well as those registered under Public Utilities Code Section 1013 and those who are subject to Public Utilities Code Section 285.

[88] Federal Communications Commission (FCC) Network Outage Reporting System (NORS) homepage. https://www.fcc.gov/network-outage-reporting-system-nors

[89] The Commission requires providers of wireline, wireless, cable circuit-switched telephony, satellite, paging, and Signaling System 7 (SS7) communications services to submit outage reports regarding disruptions to communication when disruptions meet several reporting thresholds as defined in Part 4 of the Commission's Rules on any facilities provided for a fee to one or more unaffiliated entities by radio, wire, cable, satellite, and/or lightguide: two-way voice and/or paging service, and/or SS7 communications. https://www.ecfr.gov/current/title-47/chapter-I/subchapter-A/part-4

[90] Facilities based telephone corporations that are wireless carriers and have been granted a CPCN or a WIR.

[91] In GO 133-D, this is referred to as material limitations.

[92] CDMA (Code-Division Multiple Access) refers to any of several protocols used in second-generation (2G) and third-generation (3G) wireless communications.

CDMA technology being turned off has impacted our residents very heavily."[93] Telephone corporations have to be held accountable to ensure their customers have the appropriate equipment to place and receive calls using their network. If there is a network upgrade, such as the case in Modoc County where the telephone corporation transitioned their network from 3G to 5G, the telephone corporation must do their part to ensure that existing customers have the proper equipment suitable for the network to ensure seamless services and coverage during technology transition.

Section 5 intends to establish guidelines in the form of wireless coverage maps to enable customers to identify if a specified geographical location has coverage. However, the guidelines do not currently require that telephone corporations ensure that customers can indeed place and receive calls when outdoors at a specific location. As the proceeding examines incorporating wireless technology, it needs to establish stronger guardrails with enforcement mechanisms to ensure service coverage.

Recommendations

During the course of the proceeding, advocacy groups have proposed several metrics and standards that aim to improve service quality for voice services. For the public workshop, panelists were directed to specifically address the metrics and standards[94] that were under consideration. Panelists from advocacy groups largely supported these metrics and standards. On the contrary, panelists from carrier representatives rejected the metrics and standards under consideration, yet did not offer any recommendations in place of them.

Without any clear direction from the workshop, staff proposes the following recommendations based on the analyses and testimonials examined in the *Introduction* and *Discussion* sections:

Definition Adoption. Adopt a definition for access line to clarify terminology ambiguity.

Service Standards Recommendations. Encompass all existing parameters and requirements, but with additional updates to establish uniform service standards for all platforms of voice services.

Enforcement Recommendations. Ensure uniform standards apply to every customer regardless of their geographical location by expanding on existing daily fine and escalating base fine mechanisms.

Definition Adoption

Access Line

The current GO defines "*line*" as "an access line, with or without wires, which runs from the local central office, or functional equivalent, to the subscriber's premises." Despite the definition, however, confusion

[93] CPUC Workshop on Evaluating Changes to Communications Service Quality Rules (Sept. 7, 2023) – YouTube. https://www.youtube.com/watch?v=mGROesn6Jww

[94] The metrics and standards include the following: network availability ≥ 99.9%; radio access network availability ≥ 99.9%; service availability: 4G LTE mobile data ≥ 99.9%; service availability: voice ≥ 99.9%; call completion rate ≥ 95%; call setup time ≤ 5 seconds; call failure rate < 1%; call drop rate < 1%; mean opinion score ≥ 3.5. Administrative Law Judge's Ruling Noticing Workshop (August 21, 2023).
https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M517/K843/517843373.PDF
https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M518/K155/518155088.PDF

arises as the GO utilizes several line-related terminologies – lines, access lines, and working lines – interchangeably without clear differentiation.

For example, Section 9.1 uses "*access lines*" in the context of an annual line count on June 30th to determine the scaling factor of telephone corporations, which is used to impute fine amounts. The exact equation in the GO is as follows:

$$Carrier's\ Scaling\ Factor = \frac{Carrier's\ Access\ Lines}{Total\ CA\ Access\ Lines\ in\ June}$$

The *access line* terminology also appears in Section 9.4, which describes the fine calculation of the customer trouble reports standard in the context of "customer trouble reports per 100 *access lines*." However, in Section 3.3, instead of using *access lines*, it uses *working lines* in the context of "number of trouble reports per 100 *working lines*" to explain the customer trouble reports standard.

Subsequent to the adoption of GO 133-D, the Commission also adopted a definition of access line in Decision (D.) 22-10-021, which the Commission should consider in addressing the access lines/working lines dichotomy in the current GO 133-D.

Proposed update:

Staff recommends using a single terminology in *access line* as defined in Decision 22-10-021[95] for clarity. D.22-10-021 defines access line as follows:

> A wire or wireless connection that provides a real-time two-way voice telecommunications[96] service or VoIP service[97] to or from any device utilized by an end user, regardless of technology, which is associated with a 10-digit NPA-NXX number or other unique identifier and a service address[98] or Place of Primary Use[99] in California.

Service Standards Recommendations

The purpose of GO 133-D is to establish and utilize various service quality measures to bring about a uniform minimum standard of service quality in voice services in California. However, as illustrated in the *Discussion* section, the current standards have not been effective in achieving GO 133-D's intent. The service standards recommendations being proposed are targeted to ensure all Californians can have

[95] Decision Updating the Mechanism for Surcharges to Support Public Purpose Programs (D. 22-10-021) https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M497/K868/497868303.PDF

[96] "Telecommunications" has the same meaning as in 47 U.S.C. Section 153(50): "The term 'telecommunications' means the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."

[97] "VoIP service" means service as defined in Pub. Util. Code Section 239.

[98] "Service address" means the physical address in California where fixed telecommunication service is provided.

[99] "Place of primary use" is defined (a) for mobile telecommunications service in Pub. Util. Code Section 247.1(c)(6); and (b) for interconnected VoIP service providers in Pub. Util Code Section 285(d).

reliable voice service and have their inquiries addressed appropriately regardless of their geographical location and socioeconomic status.

Single Threshold versus Multiple Thresholds

The GO currently utilizes single thresholds to enforce minimum service quality standards. While single thresholds can establish a bright line for ease of measuring telephone corporation service quality compliance, they are inadequate in capturing the severity of service failures.

For example, the OOS measure utilizes a single threshold standard of repairing outage tickets within 24 hours based on adjusted results. Under the current scheme, a noncompliant outage ticket that takes 24 hours and 1 minute to restore service is no different from another noncompliant outage ticket that takes five days to restore service in terms of enforcement. Both scenarios are counted as outage tickets that are not repaired within 24 hours, and therefore have the same impact on the telephone corporation's OOS performance. From the customer's perspective, however, not having service for just over a day is very different from not having service for five days. At the same time, treating a one-day outage as indistinct from a five-day outage provides a signal to telephone corporations that there is no regulatory difference between these different outcomes.

Proposed changes:

- Eliminate the use of single thresholds across outage-related service measures. See the *POTS Outage Repair Standard*, *VoIP Outage Repair Standard*, and *Wireless Community Isolation Outage Repair Standard* subsections for details.
- Incorporate multiple thresholds to reflect increasing severities with escalating penalties. See the *POTS Outage Repair Standard*, *VoIP Outage Repair Standard*, and *Wireless Community Isolation Outage Repair Standard* subsections for details.

Out of Service Repair Intervals Standard

From a functionality standpoint, the out of service repair intervals (OOS) standard is the most relevant service standard among the five standards in GO 133-D. From 2018 through 2022, the OOS standard accounted for over 99% of the assessed fines for telephone corporations in chronic failure status. See Table 7 for details. Despite the relatively large sum of penalties, enforcement of this standard has been largely ineffective at ensuring compliance, as repeat offenders have not been able to achieve sustained improvements in their OOS performance on a month to month or even year to year basis.

GO 133-D Assessed Fine Amounts by Service Measures (2018 - 2022)						
Servcie Measures	**2018**	**2019**	**2020**	**2021**	**2022**	**Total**
Out of Service Repair Intervals	$5,027,625	$4,611,300	$4,147,175	$3,266,550	$3,295,125	**$20,347,775**
Installation Intervals	$0	$0	$150	$1,200	$2,400	**$3,750**
Installation Commitments	$0	$2,100	$0	$2,400	$2,475	**$6,975**
Customer Trouble Reports	$0	$0	$0	$0	$0	**$0**
Answer Time	$74,894	$27,432	$0	$0	$16,754	**$119,080**
Total	**$5,102,519**	**$4,640,832**	**$4,147,325**	**$3,270,150**	**$3,316,754**	**$20,477,580**

Table 7: GO 133-D Standard Failure Assessed Fine Amounts (2018-2022)

In its current state, the OOS standard has some notable shortcomings. The standard is measured at the statewide level, which lacks the necessary granularity to ensure that telephone corporations are adhering to the standard for each community within their service territories. Additionally, the single threshold standard that only measures whether an outage ticket can be repaired within 24 hours fails to

consider the impact of extended outages. Currently, whether an outage lasts 24 hours and 1 minute or two years has the same impact to the performance of this measure. As Kori Cordero shared at the public workshop, some tribal customers are out of service for weeks, months, and even years.[100] Those extended outages have much greater impact to those customers than outages that last 24 hours and 1 minute. Lastly, there are too many exemptions permitted when gauging the outage tickets against this standard. Sundays, federal holidays, and delays beyond a carrier's control, including but not limited to catastrophic events are among the allowable exemptions that do not result in fines for delinquencies.

Under GO 133-D, an outage is measured in hours and minutes from the time when the telephone corporation receives a trouble report to the time when service is restored. However, these individual outages may not include community isolation outages. The California Governor's Office of Emergency Services (Cal OES) requires telephone corporations that offer access to 9-1-1 service to electronically submit community isolation outages notifications via email.[101] From 2021 to 2023, Cal OES reports recorded 46,089 outages, of which VoIP and wireless accounted for 53% and 27% of the reported outages respectively. Refer to Table 1: Cal OES Reported Outages by Network Type (2021-2023) for details. Cal Broadband had originally proposed that the Commission should collect two years of GO 133-D-related data to determine whether there are any issues worth addressing. The results of the data collected by Cal OES over the three-year span adequately confirm the necessity to extend outage-related service standards to VoIP and wireless services.

Per the Federal Communications Commission (FCC), "it is valuable for public safety agencies to have reliable, timely, and actionable outage and infrastructure status information during 'sunny day' disruptions to communications services and natural disasters."[102] Whether it is community outages or individual cases, an outage represents the period when the service is not available to the customer. Outages may be accounted for differently due to the unique attributes of each technology (POTS, VoIP, or wireless). From the customer's perspective, however, all outages are one and the same and ultimately boil down to the inability to make or complete a call. During an emergency, customers must be able to reach 9-1-1 or emergency service using whatever technology platform available to them, be it POTS, VoIP, or wireless. Adequate standards and enforcement must be in place to ensure these communications services are available at times of need.

Proposed changes:

- All URF ILECs, GRC ILECs, and URF CLECs should adhere to the OOS standard, regardless of how many customers they have.

[100] Joint summary of the September 7, 2023, Workshop Discussing General Order 133-D by Cal Advocates and Cal Broadband. https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K470/520470723.PDF; CPUC Workshop on Evaluating Changes to Communications Service Quality Rules (Sept. 7, 2023) – YouTube. https://www.youtube.com/watch?v=mGROesn6Jww

[101] California Government Code § 53122 https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=53122.&lawCode=GOV

[102] FCC Outage Information Sharing homepage https://www.fcc.gov/outage-information-sharing

- The OOS standard must incorporate outages from both individual trouble ticket reports as well as community isolation outages[103] to ensure all customers have the ability to access 9-1-1 services or receive emergency notifications.
- The threshold for compliance can remain at restoring an outage ticket within 24 hours, but penalties should increase in accordance with the length of outages. See the *POTS Outage Repair Standard*, *VoIP Outage Repair Standard*, and *Wireless Community Isolation Outage Repair Standard* subsections for details. subsections for details.
- In addition to statewide level results, the OOS measure should also be reported and assessed at the census tract geography to compare against Disadvantaged Communities (DACs) or Areas of Affordability Concerns (AACs) to further the Commission's ESJ efforts. Noncompliance in DACs and AACs should incur a higher base penalty amount. See the *Fines* subsection for details.
- Extend the OOS standard to VoIP and wireless voice services in addition to POTS.
- Refer to the *Adjusted Data* subsection for recommended changes on exemptions.

The proposed changes aim to address the shortcomings of the current OOS standard, which applies only to POTS. Voice service is an essential service. Since voice service is delivered by different technology platforms, such as POTS, VoIP, and wireless, it is crucial to establish service standards to assess outages across these various technology platforms. Below are the proposed outage repair standards for each type of voice service.

POTS Outage Repair Standard

POTS voice service is a legacy voice service that runs primarily on copper lines. For POTS, the key is to maintain access lines, wire centers, and central office equipment to ensure customers can stay connected, including during public safety power shutoff events or unplanned power outages. As such, the OOS standard, which is based on whether outage tickets are repaired within 24 hours, is an appropriate service quality performance measure to ensure the quality of service (QoS). However, to improve its effectiveness, staff recommends three primary updates to assess the OOS performance for POTS: a) identify different levels of outage durations; b) apply escalating penalties based on those durations; and c) establish higher base fine amounts for violations in DAC or AAC communities.

Similar to how NORS delineates outages of different durations, staff recommends that the OOS standard should account for durations of different intervals and not just the 24-hour threshold. Instead of taking the total number of the repair tickets, the OOS standard should require assessment of each reported incident at the individual access line level. Furthermore, staff recommends utilizing a multiplier to increase the fine amount based on the duration of the outages. This multiplier concept essentially mirrors the escalating fine amounts that are assessed on telephone corporations under GO 133-D for failing the Customer Trouble Reports and Answer Time standards.[104] Staff recommends keeping the initial compliance threshold at repairing outage tickets within 24 hours. For outages greater than 48

[103] California Government Code § 53122 (c) (1). https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=53122.&lawCode=GOV

[104] GO 133-D. Section 9.4 Customer Trouble Reports (CTR) Fine; Section 9.5 Answer Time for Trouble Reports and Billing and Non-billing Inquiries Fine.

hours, staff proposes applying corresponding multipliers to the base fine to impute the fine amount. See Table 8 for the proposed multipliers based on outage duration of each access line.

POTS Outage Repair Standard				
Outage Duration	24 to 48 hours	Above 48 to 72 hours	Above 72 to 96 hours	Above 96 hours
Multiplier	1x	2x	3x	4x

Table 8: POTS Outage Repair Standard

To illustrate, for an access line outage that lasts five days or 120 hours in a non-ESJ community, the *fine amount* would be $50, which is the sum of the following:

- $5 for the first day of outage beyond the 24-hour standard
- $10 for the second day of outage beyond the 24-hour standard
- $15 for the third day of outage beyond the 24-hour standard
- $20 for the fourth day of outage beyond the 24-hour standard

If an access line outage of the same duration (five days or 120 hours) occurs in an ESJ community, the fine amount would be $100, which entails the following breakdown:

- $10 for the first day of outage beyond the 24-hour standard
- $20 for the second day of outage beyond the 24-hour standard
- $30 for the third day of outage beyond the 24-hour standard
- $40 for the fourth day of outage beyond the 24-hour standard

VoIP Outage Repair Standard

As stated previously,[105] the Commission adopted a technologically neutral definition for basic service[106] and concluded that future service quality proceeding must also include consideration for VoIP services.

In August 2022, the Commission initiated an Order Instituting Rulemaking to consider changes to licensing status of VoIP carriers (R.22-08-008 or VoIP proceeding). The VoIP proceeding focuses on interconnected VoIP. These services can be further differentiated between fixed VoIP and non-fixed (nomadic) VoIP. Per the FCC, fixed VoIP service is the functional equivalent of fixed telephone service by means of a device that connects to a single access point, hence constrained to a fixed location. Nomadic VoIP service, however, enables customers to connect a handset or other IP-enabled portable device such as a laptop to multiple access points, enabling voice service on the move without hard-wire or fixed access line constraints.[107]

[105] See General Order 133-D Background subsection (pages 5-6).

[106] The Commission's definition of basic service is available here: https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-mapping-program/broadband-public-feedback/basic-service-definition

[107] Order Instituting Rulemaking Proceeding to Consider Changes to Licensing Status of Interconnected Voice over Internet Protocol Carriers (R.) 22-08-008 (pages 4-5). https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M496/K674/496674130.PDF

Key elements of basic service include providing a voice-grade connection from the customer residences to the public switched telephone network or successor network, as well as receiving a voice-grade connection to the residence.[108] As such, the outage repair standard for POTS, which is based on whether outage tickets are repaired within 24 hours, is also an appropriate measure to assess the QoS of both fixed VoIP service as well as VoIP service that is both fixed and nomadic.[109] In addition to keeping the initial compliance threshold at repairing outage tickets within 24 hours, staff also recommends applying multipliers to the base fine for outages greater than 48 hours. See Table 9 for details.

VoIP Outage Repair Standard				
Outage Duration	24 to 48 hours	Above 48 to 72 hours	Above 72 to 96 hours	Above 96 hours
Multiplier	1x	2x	3x	4x

Table 9: VoIP Outage Repair Standard

At this time, staff does not recommend extending this service standard to nomadic-only VoIP service that does not have any fixed VoIP component or functionality.

Wireless Community Isolation Outage Repair Standard

Voice services, regardless of technology type, enable health, safety, and full participation in society, especially during emergencies. At times of emergency, wireless voice service, due to its mobile nature, is often a viable technology platform to access 9-1-1 services. In 2018, there were 27 million 9-1-1 calls made statewide across all agencies, and 81% (21.7 million) of those calls were via wireless services.[110] In 2022, the percentage of 9-1-1 calls via wireless services had risen to 86%.[111]

In California, Cal OES is the state agency that is responsible for overseeing and coordinating emergency preparedness, response, recovery, and homeland security activities within the state. In August 2020, Cal OES officially began collecting community isolation outage data for all voice service types: POTS, VoIP, and wireless. For wireless service, a community isolation outage lasts at least 30 minutes and affects at least 25 percent of a carrier's coverage area in a single zip code.[112]

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[108] Basic service definition. https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/broadband-mapping-program/broadband-public-feedback/basic-service-definition

[109] For VoIP services that are both fixed and nomadic, they still must maintain a fixed VoIP connection at all times in order for the nomadic capability to work.

[110] Statistics shared by Scott Howland, Chief Information Officer of the California Highway Patrol's Information Management Division, at the 2019 Communications En Banc.
https://adminmonitor.com/ca/cpuc/en_banc/20190520/

[111] Comments of the Public Advocates Office on the Joint Summary and Presentations of the September 7, 2023 Workshop Discussing General Order 133-D (page 4)
https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K522/520522250.PDF

[112] California Code of Regulations, Title 19. Public Safety, Division 2. California Governor's Office of Emergency Services, Chapter 1.5 Community Isolation Outages, § 2480.2. Community Isolation Outage Reporting Thresholds.
https://www.law.cornell.edu/regulations/california/19-CCR-2480.2

Telephone corporations are required to provide a community isolation outage notification to Cal OES within 60 minutes of discovery of the outage. Telephone corporations are also required to provide the estimated time of repair of the outage, as well as a restoration of service notification when the outage is restored.[113]

The outage repair standard for POTS and VoIP, which is based on whether outage tickets are repaired within 24 hours, also presents an appropriate measure to assess the QoS of wireless voice service, especially during a community isolation outage. Since the telephone corporations are already required to report detailed records of these outages to Cal OES, incorporating this measure for wireless services would add minimal administrative burden, if any. Similar to the outage repair standards for POTS and VoIP, staff recommends adding a multiplier to the base fine amount based on the duration of the outages. The initial compliance threshold for repairing outage tickets should remain at 24 hours. Please see Table 10 for details.

Wireless Community Isolation Outage Repair Standard				
Outage Duration	24 to 48 hours	Above 48 to 72 hours	Above 72 to 96 hours	Above 96 hours
Multiplier	1x	2x	3x	4x

Table 10: Wireless Community Isolation Outage Repair Standard

To recap the standards across the different technology platforms, please see Table 11.

Outage Repair Standards by Technology Platform - POTS, VoIP, and Wireless				
Platform	**Measure**	**Base Standard**	**Multiplier**	**Geographical Filter**
POTS	POTS Outage Repair Standard	24 hours	Yes	Yes
VoIP	VoIP Outage Repair Standard	24 hours	Yes	Yes
Wireless	Wireless Community Isolation Outage Repair Standard	24 hours	Yes	Yes

Table 11: Outage Repair Standards by Technology Platform

Installation Interval and Installation Commitments Standards

Per GO 133-D, the standard for installation interval is five business days, whereas the standard for installation commitments is meeting 95% of the total commitments. Collectively, these two service quality standards are put in place to ensure telephone corporations establish basic service[114] within five business days. However, as mentioned in the *Discussion* section, these two standards present some unique challenges.

Currently, the enforcement of these two standards is limited to only GRC ILECs. The most recent line count in June 2023 indicated that the GRC ILECs account for only 1.4 percent (46,241 lines) of the 3,204,881 POTS lines in California. In contrast, URF ILECs and URF CLECs account for 44 percent

[113] California Government Code § 53122.
https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=53122.&lawCode=GOV

[114] Basic service is the voice component of essential communications services (Decision 20-07-032.)
https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M344/K049/344049206.PDF

(1,413,555 lines) and 54 percent (1,745,085 lines) of the POTS lines, respectively.[115] Excluding the URF ILECs and the URF CLECs essentially means over 98 percent of the POTS lines are not bound by these two standards.

According to the most recent ILEC map,[116] the URF ILECs, which include AT&T, Frontier, and Consolidated Communications, cover more than half the ILEC service territories in California. Collectively, the GRC ILECs and the URF ILECs represent the Carriers of Last Resort (COLRs),[117] which are required to provide telephone service to all customers upon request, both residential and small business, within their service area to ensure Californians have access to landline telephone service, and hence access to 9-1-1, universal service programs, and other necessary communications.[118] Moreover, each COLR must also demonstrate the ability to promote the goals of universal service in low income and non-English speaking communities.[119]

From a compliance standpoint, there were only eight violations from 2018 through 2022 during which GRC ILECs reached chronic failure status by failing to meet the standard for three consecutive months and incurred a total fine amount of $10,725. Despite a high level of compliance with these two standards, it does not necessarily mean that all current or prospective GRC ILEC customers can acquire basic service within five business days. Hence, staff proposes the following changes to the application of these two standards.

Proposed changes:

- The installation interval standard can remain at five business days,[120] but the installation commitments standard should require telephone corporations to fulfill 100% of the commitments, rather than 95% of the commitments as currently required. Staff recommends combining both standards into one – the *Installation Standard*, which requires the establishment of basic service[121] within five business days of when a customer places an installation service order. Limited exemptions are permitted. See the *Adjusted* subsection for details.
- Extend the *Installation Standard* to both the GRC ILECs as well as the URF ILECs, which would include all COLRs and be consistent with Decision 96-10-066.

[115] Number of working lines in California from telephone corporations reporting under GO 133-D (June 2023). https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/service-quality/june-30-2023-go-133-d-carrier-line-counts.pdf

[116] Map of ILECs in California (2023). https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/communications-division/documents/high-cost-support-and-surcharges/chcf-a-1/ilec-territories-2023_230412.pdf

[117] See Appendix B for COLR definition.

[118] Decision 96-10-066, Appendix B, Section D.

[119] Decision 96-10-066, Appendix A, Section 6, Subsection D.

[120] Business days are Mondays through Fridays, excluding federal holidays.

[121] Basic service should include basic service for POTS, but also the equivalent of basic service for VoIP with no cost burden to the customer.

- To ensure compliance for existing and prospective customers, the *Installation Standard* needs to be based on individual service orders and not on aggregate totals or averages.
- For service orders that fail the *Installation Standard* of five business days, apply a base fine amount and multiply that by the number of noncompliance days to calculate the total fine amount: Refer to the *Fines* subsection for details.

Adoption of the above recommendations would extend the *installation standard* to all ILECs. Staff recommends that the Commission seek comments from Parties on whether the application of the *installation standard* should also extend to other wireline companies, such as CLECs. At this time, the *installation standard* does not apply to wireless service.

Customer Trouble Reports Standard

This service quality standard sets the limit for the number of trouble reports permitted based on the number of access lines. Customer trouble reports include both outage-related and other general issues. The compliance level of this standard is high. From 2018 through 2022, not a single reporting telephone corporation incurred chronic failure status. However, this standard merely accounts for the number of reports, and does not set requirements for resolution of these trouble reports.

Proposed change:

- Eliminate the customer trouble reports standard. The standard in its current state is not enforced at the customer level, which makes it less effective. Moreover, it attempts to tackle too many types of issues. Instead, staff recommends focusing on outage-related standards. Please refer to the *POTS Outage Repair Standard*, *VoIP Outage Repair Standard*, and *Wireless Community Isolation Outage Repair Standard* subsections for details.

Answer Time Standard

This service quality standard requires live agents to answer 80% of the customer service calls within 60 seconds. Telephone corporations can use either an IVR or ARU system to prompt customers to speak to a live agent. However, the standard does not limit how many sets of IVR or ARU prompt options the customer must go through prior to speaking with a live agent. More importantly, the standard does not evaluate whether actual solutions were provided to the customers to resolve the issue being reported. To better incent resolution for customers, staff proposes the following changes.

Proposed changes:

- Elaborate the answer time measure to incorporate standards for both answering and resolving customer service calls. Instead of merely assessing whether a live agent responded to a customer inquiry, the resolution of these inquiries is just as important and should also be assessed. Staff recommends renaming this standard to the *Customer Service Standard* since it encompasses both responding and resolving customer inquiries. The *Customer Service Standard* shall apply to POTS, VoIP, and wireless services. See below for details of the response and resolution components of the *Customer Service Standard*:
    - Response component:
        - Maintain the requirement of having live agents answer 80% of the customer service calls within 60 seconds.
        - Add the requirement of having live agents answer 100% of the customer service calls within five minutes, whenever requested by customers.

        - Provide a chat component on the carrier's webpage to reach those who cannot access voice services.
        - Provide a postal mail component for those who cannot access either voice or data services.
    - Resolution component:
        - Billing-related inquiries must be addressed and, if necessary, reconciled by the next billing cycle.
        - Outage-related inquiries are subject to *POTS Outage Repair Standard*, *VoIP Outage Repair Standard*, and *Wireless Community Isolation Outage Repair Standard* respectively.
- For customer inquiries that fail either component of the *Customer Service Standard*, assess a daily fine for each day of noncompliance. Refer to the *Fines* subsection for details

Enforcement Recommendations

GO 133-D aims to ensure telephone corporations provide a uniform minimum standard of service quality in voice services by establishing various service quality measures. However, the enforcement of these standards includes many parameters that adversely affect the GO's original intent. In addition, the GO utilizes a single threshold approach when it comes to setting minimum standards, which undercounts the severity of issues that linger beyond a reasonable length of time. Lastly, if the goal is to ensure all Californians, regardless of locality, have essential voice service at their disposal, then the GO currently lacks the geographical granularity to advance that goal.

Below is a list of enforcement parameter recommendations that staff contends are necessary to establish a uniform minimum standard of service quality for all Californians in the current regulatory environment, and to enable the Commission to advance its ESJ initiatives.

Investment in Lieu of Paying Fines

Decision 16-08-021 introduced the option for telephone corporations to propose to invest twice the amount of the annual fine in their network "provided that the telephone corporation demonstrates that the expenditures are incremental, directed at the service quality deficiencies leading to the fine, and in an amount that is twice the amount of the tabulated fine." Moreover, the Decision concluded that the public interest "requires that telephone corporations subject to penalties be authorized to propose alternative means to expend twice the amount of the fine to improve service quality for customers."

At the public workshop, both AT&T and Frontier reasoned that instead of paying a fine to the general fund, investment in lieu of a fine allows them to reinvest those dollars into infrastructure to improve service quality.[122] AT&T invested $11.8 million for failure to meet the OOS standard in 2017 and 2018, whereas Frontier invested $2.9 million for failure to meet the OOS standard in 2018.[123] Despite their investments, neither telephone corporation has demonstrated sustained improvement in their overall

[122] Joint summary of the September 7, 2023, Workshop Discussing General Order 133-D by Cal Advocates and Cal Broadband (pages 19-20) https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M520/K470/520470723.PDF

[123] Service Quality Outage Analysis (April 2023), pages 15-17 https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M506/K523/506523424.PDF

OOS performance. See Figure 8 for their annual OOS performance from 2018 to 2023.[124] Note that these performance trends are captured using current definition of Adjusted Data, which contain numerous exemptions.

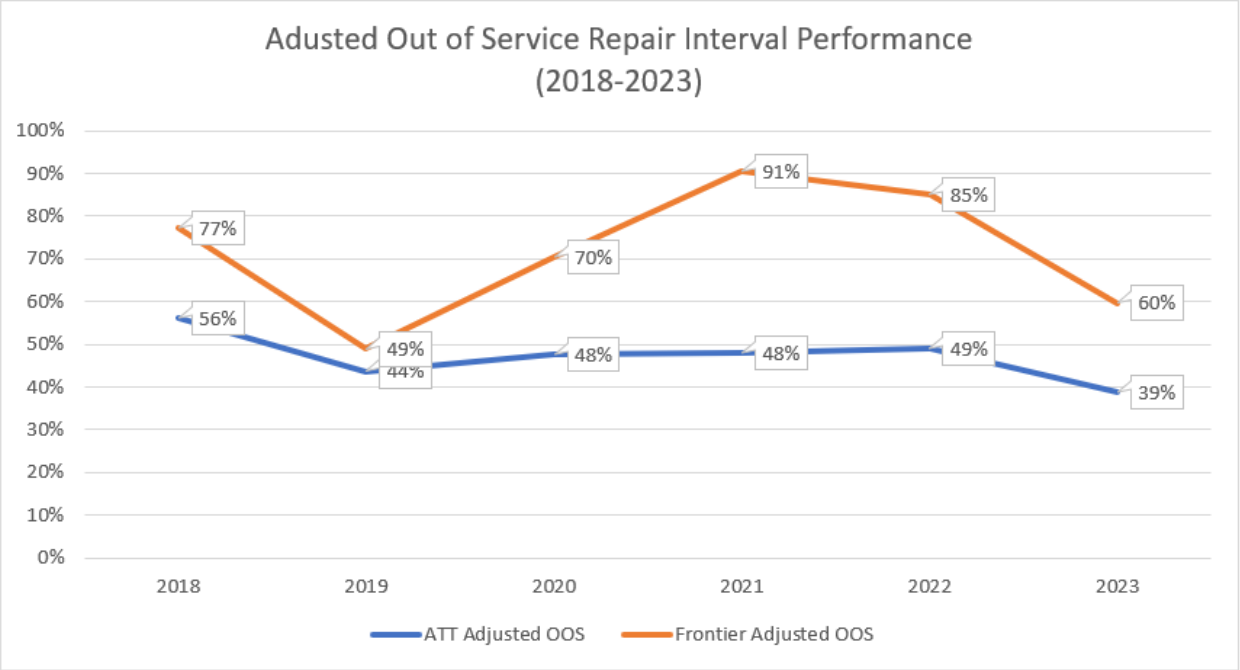

Figure 8: AT&T and Frontier's Adjusted OOS Performance (2018-2023)

The data above demonstrates that AT&T's and Frontier's investments in lieu of fines for OOS have been ineffective; both telephone corporations' investments have failed to improve their OOS performance. As such, the current option of investing twice the annual fine amount is not in the public interest.

If the impetus of this alternative is to encourage investment in projects and infrastructures, then the amount of investment required is either too small, or the investments have been improperly targeted to show improvement in overall statewide OOS metrics. With or without this alternative, investment in projects and infrastructures will naturally take place due to the competitive nature of the industry. In fact, the investment in lieu of fine amounts are rather insignificant. For instance, AT&T invested nearly $8.3 billion in wireless and wireline networks from 2019 to 2021 alone[125] which is over 700 times the amount AT&T spent on its network through the investment in lieu of fine alternative in 2018 and 2019.[126]

[124] Communications Division Service Quality Reports homepage https://www.cpuc.ca.gov/industries-and-topics/internet-and-phone/network-performance-and-public-safety/telecommunications-carriers-service-quality-reports

[125] The Latest on Expanding Connectivity in California - AT&T Connects (May 12, 2022) https://www.attconnects.com/the-latest-on-expanding-connectivity-in-california/

[126] $8.3 billion divided by $11.8 million is roughly 703.

Proposed change:

- Reform the investment in lieu of fine alternative or consider other empirical enforcement mechanisms that have proven track records as the current option has been ineffective in improving statewide OOS performance. Specific reforms contemplated by staff include increasing the base amount for the investment in lieu of fine alternative, requiring that the Commission direct the location and nature of the investment to improve service, or replace the investment option with another proven enforcement mechanism. [127]

The ruling accompanying this proposal will seek comment on changes to the investment in lieu of fine alternative to ensure that telephone corporations are held accountable to comply with service quality standards. If the Commission reforms or replaces the investment in lieu of fine alternative, the corrective action plan reporting requirement should also be changed accordingly. The ruling will also seek comment on this.

Chronic Failure Status

As defined by the Commission, essential services, which include communications services, enable health, safety, and full participation in society for residential households. The concept of chronic failure status, which does not penalize the telephone corporation until it fails to meet the standard for three consecutive months, contradicts the notion of essential services. The chronic failure status creates a situation that allows telephone corporations to fail to meet a standard for two consecutive months without any repercussions as long as it meets the standard in the very next month. This pattern can repeat continuously, and no penalties will be assessed. As indicated in the earlier *GO 133-D Parameters* subsection, there have been cases where telephone corporations were able to take advantage of the loophole provided by the chronic failure status designation.

Proposed change:

- Eliminate chronic failure status and enforce penalties immediately upon failure to meet a standard. If a standard is assessed on a daily basis, then assess the appropriate penalty for each day that the telephone corporation fails to meet the standard. If a standard is assessed on a monthly basis, then assess the appropriate penalty for each month that the telephone corporation fails to meet the standard.

Adjusted Data

The performance of outage-related service measures is based on when an outage ticket is repaired. Despite utilizing a bright line standard such as 24 hours for outages, the results are "adjusted" to account for select exclusions. These exclusions include Sundays, federal holidays, and delays beyond a carrier's control, including but not limited to catastrophic events. Using adjusted results to assess performance is a disservice to Californians and also contradicts the notion of essential services, which enable health, safety, and full participation in society.

Proposed changes:

- Eliminate "adjusted" and "unadjusted" distinctions.
- Limit exemptions to only the following:

[127] Alternatively, if it is found that the investment in lieu of fine alternative cannot be reformed in order to yield meaningfully and measurably increased service quality, the alternative should be eliminated.

- Declared state of emergencies by the Governor of California

Fines

As discussed earlier, telephone corporations have argued that the fines remitted to the Commission due to GO 133-D violations go directly to the general fund, which does not directly contribute to improving service quality.

Indeed, there are other ways to impose monetary fines that are more effective and customer focused. As part of Frontier's corporate restructuring (Frontier Settlement), the telephone corporation promised to provide a customer credit of $5 per day for services that remain out of service for longer than 24 hours.[128] The customer credit increases to $10 per day for customers in tribal lands.[129]

Staff recommends adding a customer credit fine mechanism to the existing fine structure, so monies are not going to the general fund exclusively. The Frontier Settlement has established a framework for customer credit, but community information suggested that current procedures and protocols can make it difficult for affected customers to actually receive these customer credit.[130] As such, staff recommends using the Frontier Settlement's monetary fine framework to assess penalties for failing service quality standards with an added modification that the remittance of customer credit must be automatic.

Proposed changes:

- Add *automatic customer credit* as a fine mechanism.
  - For existing customer credits must apply automatically as either bill credit or direct refund within 30 days from the end of the billing period in which the service standard violation occurred.
  - For prospective customers, checks must be remitted within 30 days from the end of the current billing period.
  - Telephone corporations must maintain performance records of all standards and customer credit transactions at both individual customer level and aggregated summaries.
  - All records are subject to periodic audits by the Commission and further enforcement if out of compliance.
- For POTS outages, use the *POTS Outage Repair Standard* to determine performance and assess penalty in the form of *automatic customer credit*.
  - Assess compliance of this standard at the individual customer level.

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[128] Decision Approving Corporate Restructuring with Conditions – Frontier Settlement (April 2021). https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M379/K131/379131647.PDF

[129] Ibid.

[130] At the public workshop on September 7, 2023, Kori Cordero of Yurok Telecoms shared the following, "*Even with our settlement agreement, we've identified folks that get reconnected, and it's like okay, great, we'll credit you back six months of the bill since you were out but no mention of the ten dollars a day that they are entitled to… so you really have to be very well educated, very persistent, and willing to put in a lot of time to get what you're owed as a consumer. And I just don't think the average consumer can do that.*"
CPUC Workshop on Evaluating Changes to Communications Service Quality Rules (Sept. 7, 2023) – YouTube. https://www.youtube.com/watch?v=mGROesn6Jww

    - For outages that are not repaired within 24 hours, apply a base fine amount of $5 per day as a customer credit.
    - If outages occur in a DAC or a Communications AAC, the base fine amount is $10 per day as a customer credit.
    - Apply multipliers to the base fine amount based on the duration of the outage.
- For VoIP outages, use the *VoIP Outage Repair Standard* to determine performance and assess penalty in the form of *automatic customer credit*.
    - Assess compliance of this standard at the individual customer level.
    - For outages that are not repaired within 24 hours, apply a base fine amount of $5 per day as a customer credit.
    - If outages occur in a DAC or a Communications AAC, the base fine amount is $10 per day as a customer credit.
    - Apply multipliers to the base fine amount based on the duration of the outage.
- For wireless outages, use the *Wireless Community Isolation Outage Repair Standard* to determine performance and assess penalty in the form of *automatic customer credit*.
    - Assess compliance of this standard at the individual customer level. Utilize Cal OES data to identify the impacted users.[131]
    - For outages that are not repaired within 24 hours, apply a base fine amount of $5 per day as a customer credit.
    - If impacted customer's place of primary use[132] is located in a DAC or a Communications AAC, the base fine amount is $10 per day as a customer credit.
    - Apply multipliers to the base fine amount based on the duration of the outage.
- For service orders of basic service, use the *Installation Standard* to determine performance and assess a penalty in the form of *automatic customer credit*.
    - Assess compliance of this standard at the individual customer level.
    - For service orders that are not fulfilled within five business days, apply a base fine amount of $5 day for each day that exceeds five business days as a customer credit.
    - If service order delays occur in a DAC or a Communications AAC, the base fine amount is $10 per day as a customer credit.
- For customer inquiries, use the *Customer Service Standard* to determine performance and assess a penalty in the form of monies to the general fund.
    - Assess compliance of this standard at the company level.
    - Failure to achieve any of the requirements set forth in both the response and resolution components will result in a fine.
    - For each day of noncompliance, a daily fine is assessed.

[131] Cal OES collects data and quantifies the outages by the number impacted users. See Cal OES dashboard for reference. https://public.outage.ca.nga911.com/dashboard

[132] Public Utilities Code 247.1 (c) (6) "Place of primary use" means the street address representative of where the customer's use of the mobile telecommunications service primarily occurs, that must be: (A) The residential street address or the primary business street address of the customer. (B) Within the licensed area of the home service provider. https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=247.1&lawCode=PUC

- The daily fine amount is the equivalent to the interest amount for late surcharge remittances.[133]

See Table 12 for a summary of service quality standards and their respective fine mechanism.

Service Quality Standard Fine Mechanism			
Measure	**Fine Mechanim**	**Multiplier**	**Geographical Filter**
POTS Outage Repair Standard	Automatic Customer Credit	Yes	Yes
VoIP Outage Repair Standard	Automatic Customer Credit	Yes	Yes
Wireless Community Isolation Outage Repair Standard	Automatic Customer Credit	Yes	Yes
Installation Standard	Automatic Customer Credit	No	Yes
Customer Service Standard	Monies to General Fund	No	No

Table 12: Service Quality Standard Fine Mechanism

Other Reporting Requirements

GO 133-D has several reporting requirements for POTS, VoIP, and wireless services. At this time, staff proposes that telephone corporations continue to provide copies of FCC's required reports to the Commission, such as NORS reports and Wireless Coverage Maps. In addition, staff recommends that telephone corporations continue all reporting requirements, including the Major Service Interruption report.

Telephone corporations must continue to adhere to all quarterly and annual voice service measures filing with the Commission. In addition, telephone corporations must inform their customers on how their performance compares to voice service standards established under this GO.

Below is the proposed action for each report:

Proposed action:

- NORS report (FCC) – Keep this requirement. It provides critical information on outages for POTS, VoIP, and wireless services.
- Wireless Coverage Map (FCC) – Keep this requirement. This map must also have a customer-facing interface that has the capability to verify coverage at exact address with equipment requirements.
- Major Service Interruption report (FCC) – Keep this requirement.
- ETC Outage Report requirement (Commission) – Eliminate this requirement. All pertinent information is covered by the other three reporting requirements.
- GO 133-D quarterly reporting – Make necessary format and metadata modifications under staff's discretion to accommodate the proposed changes set forth in this Staff Proposal.
- Community Isolation Outage report (Cal OES) – Make necessary metadata modifications, such as providing details on affected access lines, to accommodate the proposed changes set forth in this Staff Proposal.

[133] Decision Updating the Mechanism for Surcharges to Support Public Purpose Programs (October 2022) https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M497/K868/497868303.PDF

- Annual Customer Notification (new reporting requirement) – Provide an annual report to customers that details their performance from the previous year against voice service standards.

Appendix A

Voice Service Standards Recommendation Summary

Current GO 133-D Standards

Installation Interval

Replaced by Installation Standard.

Installation Commitments

Replaced by Installation Standard.

Customer Trouble Reports

Eliminated to focus on outage-related standards.

Out of Service Repair Intervals

Replaced by POTS Outage Repair Standard, VoIP Outage Repair Standard, and Wireless Community Isolation Outage Repair Standard.

Answer Time

Expanded to incorporate a resolution requirement in addition to response. Renamed to Customer Service Standard.

New Proposed Standards

Installation Standard

Requirement: establish basic service within five business days of when a customer places an installation service order. Applies to GRC ILECs, URF ILECs, and other wireline companies, such as CLECs.

POTS Outage Repair Standard

Requirement: repair both individual and community isolation outage tickets within 24 hours. Applies to GRC ILECs, URF ILECs, and URF CLECs.

VoIP Outage Repair Standard

Requirement: repair both individual and community isolation outage tickets within 24 hours. Applies to GRC ILECs, URF ILECs, and URF CLECs.

Wireless Community Isolation Outage Repair Standard

Requirement: repair community isolation outage tickets within 24 hours. Applies to wireless carriers.

Customer Service Standard

Response requirements:

- Staff live agents to answer 80% of the customer service calls within 60 seconds and 100% of the customer service calls within five minutes.
- Provide a chat component on the homepage for those with no access to voice service.
- Provide a postal mail component for those with no access to voice or internet services.

Resolution requirements:

- Billing-related inquiries to be corrected by the next billing cycle.

- Outage-related inquiries to adhere to these outage-related standards: POTS Outage Repair Standard, VoIP Outage Repair Standard, and Wireless Community Isolation Outage Repair Standard.

Voice Service Enforcement Recommendation Summary

Investment in Lieu of Paying Fines

Reform the investment in lieu of paying fines alternative. Alternatively, if it is found that the investment in lieu of fine alternative cannot be reformed in order to yield meaningfully and measurably increased service quality, the alternative should be eliminated.

Corrective Action Plan

Reform or eliminate this reporting requirement based on the decision on the investment in lieu of paying fines alternative.

Chronic Failure Status

Eliminate the chronic failure status designation. Hold telephone corporations accountable for their failures to achieve standards immediately instead of accumulating three consecutive months of failures.

Adjusted Data

Eliminate the "adjusted" and "unadjusted" distinctions to instill accountability on Sundays, federal holidays, and delays beyond a carrier's control. Lone exemptions are declared state of emergencies.

Fines

Utilize two types of fine mechanism: automatic customer credit; monies to the state's general fund.

Fine Mechanism – Two Types

Monies to the State's General Fund (New Calculation Method)

- For *customer service standard* violations, assess a daily fine amount that is equivalent to the interest amount for late surcharge remittances.

Automatic Customer Credit

- For *installation standard* violations, assess a base fine of $5 per day in automatic customer credit for each day that exceeds the standard.
- For *POTS outage repair standard*, *VoIP outage repair standard*, and *wireless community isolation outage repair standard* violations, assess a base fine of $5 per day in automatic customer credit for each day that exceeds the standard.

Multipliers based on Outage Duration

For *POTS outage repair standard*, *VoIP outage repair standard*, and *wireless community isolation outage repair standard* violations, apply multipliers to the base fine amount based on outage duration.

Geographical Filter

For *installation standard, POTS outage repair standard*, *VoIP outage repair standard*, and *wireless community isolation outage standard* violations, assess a base fine amount of $10 per day in automatic customer credit for each day that exceeds the standard for violations in Environmental and Social Justice communities.

Appendix B

Carrier Types

Carrier of Last Resort (COLR)

A Carrier of Last Resort (COLR) is required to serve upon request all customers within its designated service areas. Pursuant to Decision 96-10-066 and Decision 12-12-038, a carrier seeking to be a COLR needs to file a notice of intent (NOI) with the Commission in order to have access to high-cost fund subsidies. Once designated a COLR, the carrier must get the Commission's approval to opt out of its obligation to serve.

Eligible Telecommunications Carrier (ETC)

An eligible telecommunications carrier (ETC) is a carrier that has been designated by the Commission, pursuant to 47 USC § 214 (e) (2) as eligible to receive federal lifeline and/or high-cost Universal Service support. Designated ETCs must file annual recertification advice letters to continue to be eligible for federal high-cost fund support.

Incumbent Local Exchange Carrier (ILEC)

An incumbent local exchange carrier (ILEC) is a certificated local telephone company such as Pacific Bell Telephone Company (now d/b/a AT&T California) and Verizon California Inc., which used to be the exclusive local telephone service provider in a franchise territory established before the Telecommunications Reform Act of 1996. Refer to Public Utility Code § 234 and § 1001 for details.

Competitive Local Exchange Carrier (CLEC)

A competitive local exchange carrier (CLEC), per Public Utility Code § 234, § 1001, and Decision 95-07-054, provides local telephone services in the service territories formerly reserved for ILECs, in competition with ILECs, and must obtain a Certificate of Public Convenience and Necessity (CPCN) from the Commission.

Uniform Regulatory Framework (URF) Carrier

A utility that is a wireline carrier that has full pricing flexibility over all or substantially all of its rates and charges. An URF carrier includes any ILEC that is regulated through the Commission's URF, as established in Decision 06-08-030, as modified from time to time by the Commission, and includes CLECs and interexchange carriers (IEC), which handles traffic between two telephone exchanges.

General Rate Case Incumbent Local Exchange Carrier (GRC ILEC)

A GRC ILEC is designated a COLR in its franchise territories per D.96-10-066, the decision where the Commission first spelled out what is meant by basic telephone service for purposes of Universal Service funding and updated by D.14-01-036, and is regulated through cost-of-service reviews by the Commission per General Order 96 B. GRC ILECs include U-1016-C Sierra Telephone, U-1019-C Volcano Telephone, U-1014-C Ponderosa Telephone, U-1017-C Siskiyou Telephone, U1004-C Calaveras Telephone, U-1012-C Kerman Telephone, U-1010-C Happy Valley Telephone, U-1009-C Foresthill Telephone, U-1006-C Cal-Ore Telephone, U-1007-C Ducor Telephone, U-1021-C Winterhaven Telephone, U-1011-C Hornitos Telephone, and U-1013-C Pinnacles Telephone.

Uniform Regulatory Framework Incumbent Local Exchange Carrier (URF ILEC)

These are ILECs that are regulated under the uniform regulatory framework (URF). URF ILECs include U-1001-C AT&T California, U-1002-C Frontier California, U-1024-C Citizens Telecommunications, U1015-C Consolidated Communications, and U-1026-C Frontier Communications Southwest.

Uniform Regulatory Framework Competitive Local Exchange Carrier (URF CLEC)

Competitive local exchange carriers (CLECs) operating in territories formerly reserved for the URF ILECs and regulated under the URF. URF CLECs include U-6874-C Time Warner Cable, U-5684-C Cox, U-6878-C Charter, U-6955-C Bright House Networks, U-7002-C Sonic, U-5002- C AT&T Corp, U-6097-C PAETEC, and U-6342-C ACN Communications (2018 only).

Appendix C

U-1015-C Consolidated Communications Out of Service Repair Interval (2018 – 2023 Q2)

U-1015-C Consolidated Adjusted OOS Measure	2018											
	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total # of outage report tickets	0	0	1	2	1	5	2	1	1	1	6	2
Total # of repair tickets restored in ≤ 24hrs	0	0	1	2	1	5	2	1	1	1	4	2
% of repair tickets restored ≤ 24 Hours	n/a	n/a	100%	100%	100%	100%	100%	100%	100%	100%	67%	100%

U-1015-C Consolidated Adjusted OOS Measure	2019											
	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total # of outage report tickets	2	1	1	2	0	2	3	9	0	1	1	3
Total # of repair tickets restored in ≤ 24hrs	2	0	0	1	0	2	2	2	0	1	1	3
% of repair tickets restored ≤ 24 Hours	100%	0%	0%	50%	n/a	100%	67%	22%	n/a	100%	100%	100%

U-1015-C Consolidated Adjusted OOS Measure	2020											
	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total # of outage report tickets	0	0	1	1	4	0	1	4	2	1	2	3
Total # of repair tickets restored in ≤ 24hrs	0	0	1	0	3	0	0	2	1	1	1	1
% of repair tickets restored ≤ 24 Hours	n/a	n/a	100%	0%	100%	n/a	0%	50%	100%	100%	50%	100%

U-1015-C Consolidated Adjusted OOS Measure	2021											
	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total # of outage report tickets	4	3	4	2	1	1	1	3	2	2	2	4
Total # of repair tickets restored in ≤ 24hrs	2	2	1	0	0	1	0	1	2	1	2	3
% of repair tickets restored ≤ 24 Hours	50%	67%	25%	0%	0%	100%	0%	33%	100%	50%	100%	75%

U-1015-C Consolidated Adjusted OOS Measure	2022											
	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total # of outage report tickets	1	1	0	2	1	1	0	0	1	1	2	0
Total # of repair tickets restored in ≤ 24hrs	1	0	0	0	0	1	0	0	1	1	2	0
% of repair tickets restored ≤ 24 Hours	100%	0%	n/a	0%	0%	100%	n/a	n/a	100%	100%	100%	n/a

U-1015-C Consolidated Adjusted OOS Measure	2023											
	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Total # of outage report tickets	9	1	0	7	2	1						
Total # of repair tickets restored in ≤ 24hrs	1	0	0	0	0	1						
% of repair tickets restored ≤ 24 Hours	11%	0%	n/a	0%	0%	100%						

Table 13: U-1015-C Consolidated Communications Out of Service Repair Interval (2018 – 2023 Q2)