

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 23R-0577T

IN THE MATTER OF THE PROPOSED AMENDMENTS TO 4 CODE OF COLORADO REGULATIONS 723-2 MODIFYING THE COMMISSION RULES REGARDING BASIC EMERGENCY SERVICE OUTAGE PREVENTION, RESPONSE, AND REPORTING.

**RECOMMENDED DECISION OF
ADMINISTRATIVE LAW JUDGE
MELODY MIRBABA
ADOPTING RULES**

Mailed Date: June 13, 2024

TABLE OF CONTENTS

I. STATEMENT and SUMMARY	2
A. Statement and Summary	2
II. Procedural History AND BACKGROUND	2
A. Procedural History	2
B. Background	4
III. RELEVANT LAW	6
IV. DISCUSSION, FINDINGS, AND CONCLUSIONS	7
A. Proposed Rules	7
1. Rule 2131 - Definitions	7
a. Public Comments	9
b. Discussion, Findings, and Conclusions	17
2. Rule 2134 - Process for Certification of BESPs	23
a. Public Comments	24
b. Discussion, Findings, and Conclusions	24
3. Rule 2136 - Obligations of BES Providers	25
a. Public Comments	26
b. Discussion, Findings, and Conclusions	27
4. Rule 2143 - Basic Emergency Service Reliability and Outage Response	29

a. Public Comments31

b. Discussion, Findings, and Conclusions.....36

5. Rule 2335 - The Provision of Service During Maintenance or Emergencies.45

a. Discussion, Findings, and Conclusions.....45

6. Other Rule Changes that Comments Suggest45

a. Discussion, Findings, and Conclusions.....46

B. Conclusions46

V. ORDER.....47

A. It Is Ordered That:47

I. STATEMENT AND SUMMARY

A. Statement and Summary

1. This Decision adopts amendments to the Colorado Public Utilities Commission’s (Commission) Rules Regulating Telecommunications Services and Providers of Telecommunications Services, 4 *Code of Colorado Regulations* (CCR) 723-2 (the Rules). Generally, changes amend Rules relating to basic emergency service in Rules 2131, 2134, 2136, 2143 and Rule 2335, 4 CCR 723-2.¹ This Decision also adopts changes throughout the Rules to reflect newly adopted terminology and other Rule changes.

II. PROCEDURAL HISTORY AND BACKGROUND

A. Procedural History²

2. During its weekly meeting held on November 29, 2023, the Commission initiated this Proceeding by issuing a Notice of Proposed Rulemaking (NOPR) to amend the Rules.³

¹ In reaching this Decision, the Administrative Law Judge (ALJ) has considered the entire record in this Proceeding, including all aspects of the proposed Rules, the relevant law, public comments, including those discussed briefly or not at all. Any arguments not specifically addressed have been considered and are rejected. Throughout this Decision, headers, sub headers, and the like are for ease of reference only. This Decision does not discuss minor Rule changes such as renumbering paragraphs, fixing typos, or other non-substantive changes that improve clarity, as unnecessary.

² Only the procedural history necessary to understand this Decision is included.

³ Decision No. C23-0800 (mailed December 5, 2023) (hereinafter cited as NOPR).

With the NOPR, the Commission provided the proposed Rules as Attachments A and B. The NOPR scheduled a remote hearing to receive public comment on the proposed Rules for January 29, 2024, at 11:30 a.m., and referred this Proceeding to an Administrative Law Judge (ALJ), among other matters.⁴

3. On December 6, 2023, the Commission filed the NOPR and Attachments with the Colorado Secretary of State. The NOPR was published in the December 25, 2023 edition of the Colorado Register.

4. The January 29, 2024 public comment hearing was convened as noticed, but for the sole purpose of continuing it to a future hearing date.⁵ During the public comment hearing, the presiding ALJ continued the public comment hearing to February 29, 2024 at 11:30 a.m.⁶

5. The ALJ held the February 29, 2024 public comment hearing as noticed. Members of the public provided comment during the hearing.

6. On April 23, 2024, the ALJ took administrative notice of a filing that the 9-1-1 Advisory Task Force (Task Force) made in Proceeding No. 17M-0276T on March 14, 2023 titled in the Commission's E-Filing System, "Adopted Criteria for Informal Investigations of BES Outages" (Filing Adopting Criteria); invited public comment on the same and potential changes to Rule 2143(k), 4 *Code of Colorado Regulations* (CCR) 723-2; and established a May 1, 2024 deadline by which such public comments must be submitted.⁷ At the same time, the ALJ directed the administratively noticed document, (the Filing Adopting Criteria), to be added to the record in this Proceeding. As a result, the document was added to the record on April 23, 2024.

⁴ NOPR at 8-9.

⁵ See Decision No. R24-0012-I (mailed January 9, 2024).

⁶ Decision No. R24-0068-I (mailed January 30, 2024).

⁷ Decision No. R24-0263-I (mailed April 23, 2024).

7. Throughout the course of this Proceeding, members of the public have submitted written public comments.

B. Background

8. As explained in the NOPR, the Rule changes are intended to (1) clarify the definition of basic emergency service (BES) outage and related reporting requirements for BES outages; (2) establish a start date for the requirement that BES providers (BESPs) update basic information related to their BESP certifications every two years; (3) provide direction to BESPs as to repairs and maintenance to minimize disruption to 9-1-1 service; and (4) update terminology and internal references.⁸

9. In the NOPR, the Commission explained that this Proceeding is primarily intended to clarify Rules adopted through Decision No. R22-0811 in Proceeding No. 22R-0122T, a predecessor rulemaking, (2022 Rulemaking).⁹ That Proceeding covered numerous rule changes relating to BES network reliability; created a tariff-based mechanism to fund BES network improvements; and adopted Rules defining a BES outage.¹⁰ The Commission also explained that after the Rules from the 2022 Rulemaking became effective, Commission staff learned that Colorado's only actively serving BESP, Qwest Corporation, doing business as CenturyLink QC (CenturyLink), construed the Commission's definition of BES outage under the Commission's Rules differently than intended, which extends to CenturyLink's construction of other Rules that rely on the definition of BES outage (such as reporting provisions).¹¹ For example, CenturyLink argued in outage investigations that when it fails to deliver a 9-1-1 call to the Public Safety

⁸ NOPR at 1.

⁹ *Id.* at 2.

¹⁰ *See id.*, citing Decision No. C22-0174, at ¶¶ 11-15 (mailed March 21, 2022) in Proceeding No. 22R-0122T (hereinafter Decision No. C22-0174).

¹¹ NOPR at 3.

Answering Point (PSAP) originally intended to receive the call based on the caller's location, as long as it delivers the call to an alternate PSAP, no BES outage has occurred.¹² In addition, on numerous occasions, CenturyLink argued in investigations that outages in facilities that serve customers other than PSAPs are originating service provider (OSP) outages, not BES outages, even if those outages prevent a PSAP from receiving 9-1-1 calls.¹³

10. The Commission noted that if a PSAP is unable to receive 9-1-1 calls or associated location information, it is not receiving the BES it purchased under the tariff.¹⁴ The Commission explained that while rerouting calls to an alternate PSAP is a desirable and critical mitigation strategy to lessen the impact of an outage on the public, such rerouting does not mean that the outage did not occur.¹⁵ The Commission elaborated that governing bodies and PSAPs purchase a service which includes routing 9-1-1 calls originating in their service areas to the appropriate PSAP; when that is not possible, the service does not function as intended.¹⁶ The Commission reiterated that a BES outage still occurs if 9-1-1 calls cannot be delivered to their intended PSAP due to a failure in the BES, even when those calls were successfully rerouted to an alternate PSAP.¹⁷

11. Rather than proceed to enforcement action, the Commission opened this Proceeding out of an abundance of caution to ensure that Rules related to BES outages include language that match the Commission's stated understanding in Decision No. C22-0174 in the 2022 Rulemaking.¹⁸ The Commission specifically noted that it intends for this Rulemaking to eliminate

¹² *Id.*

¹³ *Id.*

¹⁴ *Id.*, citing Decision No. C22-0174, ¶ 13.

¹⁵ *Id.* at 3-4.

¹⁶ *Id.* at 4.

¹⁷ *Id.*

¹⁸ *Id.*

potential ambiguity in the relevant Rules before it takes enforcement action, but this does not mean that the Commission shies away from enforcing the relevant Rules.¹⁹

III. RELEVANT LAW

12. Under § 40-2-108, C.R.S., the Commission has statutory authority to promulgate rules that are necessary for the administration and enforcement of Title 40, Colorado Revised Statutes. The Commission has specific regulatory authority over basic emergency service per § 40-15-201(2), C.R.S.; such service is subject to Commission regulation under Part 2, Article 15, Title 40, Colorado Revised Statutes.²⁰ Such regulation includes requiring basic emergency service providers to obtain from the Commission a certificate of public convenience and necessity for such operation, to which the Commission may attach such terms and conditions as it decides the public convenience and necessity may require.²¹ In addition, per § 40-2-131(1), C.R.S., by September 15 each year, the Commission must publish a “state of 9-1-1” report, that it must submit to the General Assembly. That report must provide an overall understanding of the state of 9-1-1 service in Colorado, and must minimally address: the Commission’s actions relating to 9-1-1 service over the last year and plans for the next year; the current statewide structure, technology, and general operations of 9-1-1 service in Colorado; 9-1-1 network reliability and resiliency; identified gaps, vulnerabilities, and needs relating to 9-1-1 service in the state; the impact on involvement of the state in federal activities and national trends affecting 9-1-1 service in Colorado; the state’s

¹⁹ *Id.*

²⁰ § 40-15-201(2), C.R.S.

²¹ § 40-15-202(1) to (3), C.R.S. The Commission may also refrain from regulating those otherwise subject to its regulation under Part 2, Article 15, Title 40, Colorado Revised Statutes, per § 40-15-203, C.R.S., and may reclassify services and products otherwise regulated under Part 2 after finding there is effective competition in the relevant market and that regulation should be under Part 3, Article 15, Title 40 (per § 40-15-207, C.R.S.). The Commission’s existing and proposed Rules plainly indicate that the Commission has neither decided to refrain from regulating BES and BESP, nor determined there is effective competition in that market such that regulation under Part 3 applies. Indeed, given that the state has only one active BESP, it is unsurprising that the Commission has not determined that there is effective competition.

planning for transition to, and implementation of next generation 9-1-1 (including a projected timeline); and a discussion of 9-1-1 funding and fiscal outlook.²²

13. Based on the foregoing authorities, the Commission has authority to promulgate rules as necessary to implement its regulatory authority over basic emergency service under § 40-15-201, C.R.S., and as necessary to enable it to provide the state of 9-1-1 report as required by § 40-2-131, C.R.S. For these reasons and authorities, and based on the nature of the proposed Rules, the ALJ concludes that the Commission has authority to promulgate the Rules that this Decision adopts.

14. When exercising any power granted to it, the Commission must give the public interest “first and paramount consideration.”²³

15. In assessing the proposed Rules, the ALJ is particularly mindful of the Rule’s impact on the public interest. Indeed, given that the Rules involve regulating a service that has a direct impact on the public health, safety, and welfare, the public interest truly must be first and paramount in each of the promulgated Rules.

IV. DISCUSSION, FINDINGS, AND CONCLUSIONS

A. Proposed Rules

1. Rule 2131 - Definitions

16. As relevant here, the NOPR seeks to amend proposed Rule 2131(i) as follows, ““basic emergency service”” (BES) means the aggregation and transportation of a 9-1-1 call directly to an agreed-upon demarcation point with a governing body for delivery to the primary designated PSAP for that call, regardless of the technology used to provide the service.”²⁴

²² § 40-2-131(1)(a) to (g), C.R.S.

²³ *Pub. Serv. Co. of Colo. v. Pub. Utilis. Comm’n*, 350 P.2d 543, 549 (Colo. 1960) *cert. denied*, 364 U.S. 820 (1960).

²⁴ Attachment A to NOPR at 2.

17. The NOPR proposes the following changes to Rule 2131(l):
- (l) “Basic emergency service outage” or “BES outage” means a failure of basic emergency service that prevents or would prevent 9-1-1 calls, ANI, or location information from being delivered from the demarcation point between the OSP or IASP and the BESP to the demarcation point between the BESP and the primary designated ~~governing body or PSAP~~; resulting in an inability to deliver 9-1-1 calls or location information to the demarcation point. A BES outage includes:
- (I) any event or incident on the BESP’s side of the demarcation point that results in or requires the BESP to reroute 9-1-1 calls to the demarcation point for an alternate PSAP rather than the primary designated PSAP; and
- (II) any situation in which a PSAP is unable to receive 9-1-1 calls or location information as the result of an event or incident on the BESP’s side of the demarcation point, even if the facilities involved in the event or incident also provide OSP connectivity.²⁵
18. In addition, proposed Rule 2131(o) suggests the following changes:
- (o) “Demarcation point” means a physical point of interconnection where the responsibility for a portion of 9-1-1 service changes from one party to another. It includes the point of interconnection between the BESP and the OSP, IASP, or other BESP for the purpose of selectively routing and transporting 9-1-1 calls directly to a demarcation point with a governing body or PSAP; ~~and it includes the point of interconnection mutually agreed upon in writing by the BESP and each governing body or PSAP with primary responsibility for dispatching first responders to the callers’ locations~~; between the BESP and the primary designated PSAP. The demarcation point between the BESP and the primary designated PSAP may be at a locally provided network or other location physically separated from the PSAP, as agreed upon in writing between the BESP and the governing body.²⁶
19. Finally, proposed Rule 2131(bb) adds a new definition of a primary designated PSAP to mean, “the PSAP designated to the BESP as the primary or first PSAP meant to receive a call for a specific geographic area. This designation is determined by the governing body with jurisdictional authority for the geographic area from which the call originates.”²⁷

²⁵ *Id.*

²⁶ *Id.* at 3.

²⁷ *Id.* at 4.

20. The NOPR explains that the changes to the definitions of BES and demarcation point are necessary to incorporate the new “primary designated PSAP” terminology.²⁸ The Commission explained that changes to the definition of BES outage are intended clarify that an outage has still occurred even if 9-1-1 calls are rerouted to an alternate PSAP, and that an outage has occurred any time a PSAP is unable to receive 9-1-1 calls due to an event or incident on the BESPs’ side of the demarcation point, even if the facilities involved in the event or incident also provide OSP connectivity.²⁹ In addition, the NOPR explains that changes to the definitions of BES, BES outage, and demarcation point are intended to accommodate situations where the demarcation point does not exist at the PSAP itself, but exist at a hosted customer premise equipment site or at a locally provided network that is used to deliver 9-1-1 calls to the PSAP.³⁰

a. Public Comments

21. CenturyLink argues that proposed Rule 2131(i) would exclude from the definition of BES every 9-1-1 call not delivered to a primary PSAP, including those delivered to an alternate PSAP.³¹ CenturyLink opines that this fundamentally mischaracterizes the nature of basic emergency service.³² It explains that calls are rerouted to an alternate PSAP for numerous reasons, including network issues, high call volumes, or when a primary PSAP experiences technical or other internal issues.³³ CenturyLink adds that where a 9-1-1 call is rerouted from the primary PSAP (regardless of reason), the system is designed to deliver the call to the designated alternate PSAP, consistent with contingency planning.³⁴ It also argues that the proposed BES definition suggests

²⁸ NOPR at 5.

²⁹ *Id.*

³⁰ *Id.* at 5-6.

³¹ CenturyLink’s 2/12/24 Comments at 5.

³² *Id.*

³³ CenturyLink’s 2/12/24 Comments at 5. *Id.*

³⁴ *Id.* at 5-6.

that any 9-1-1 call routed to an alternate PSAP would be classified as a network outage, which, for the same reasons discussed above, would be improper.³⁵ In short, CenturyLink submits that the proposed change to the BES definition would improperly include occurrences that are not, in fact, BES outages, and would result in triggering investigations of non-BES outage events.³⁶

22. CenturyLink elaborates that a BES outage requires reporting, full investigation, and remediation, which is appropriate in the case of a “true outage,” that is, a network failure.³⁷ It suggests that putting the same administrative effort into the relatively few cases where 9-1-1 calls are rerouted to an alternate PSAP is both unnecessary and an inefficient use of resources, and that the response should be communication and follow-up to ensure that both the BESP and the involved PSAPs are aware of the situation and that there are not more serious network issues.³⁸ It already engages in this communication with affected PSAPs, and notifies the Commission of the same. CenturyLink submits that it has no plans to alter these practices, and that the suggested Rule changes will not improve its communications on these issues or incent it to “work harder” to provide 9-1-1 service.³⁹

23. The Colorado Council of Authorities (CCOA) objects to proposed Rule 2131(i) because it conflicts with the statutory definition of BES in § 29-11-101(7), C.R.S., which permits a point of interconnection or demarcation point with a governing body or PSAP.⁴⁰ It submits that it is against the public interest to narrow the definition of BES as proposed; that the Commission cannot regulate the portion of the 9-1-1 call flow beyond the BES network; and that the

³⁵ *Id.* at 6.

³⁶ CenturyLink’s 5/1/24 Comments at 2.

³⁷ CenturyLink’s 2/21/24 Comments at 3.

³⁸ *Id.*

³⁹ *Id.* at 3-4.

⁴⁰ CCOA’s 2/12/24 Comments at 13.

Commission should not dictate where any 9-1-1 authority or PSAP chooses to assign its demarcation points.⁴¹ It suggests that the Commission decline to amend the definition of BES.

24. As relevant to proposed Rules 2131(i), (l)(II), (o) and (bb), the Boulder Regional Emergency Telephone Service Authority (BRETSA) submits that the current Rules clearly require the BESP to deliver 9-1-1 calls with location information to the primary PSAP, and that rather than dismissing CenturyLink's ludicrous and specious Rule interpretation and "actually" enforcing the rules, the Commission has proposed rules that it characterizes as unnecessarily complex and ambiguous.⁴² In support, BRETSA explains that BES is simply the routing and transporting of 9-1-1 calls to the PSAP which serves the caller's location to the PSAP who can dispatch first responders to the caller's location.⁴³ It states that when the BESP cannot deliver a 9-1-1 call to the PSAP serving the caller's location, or "the PSAP is not receiving calls," this is a BES outage and the BESP is in violation of the Commission's Rules; the BESP is required to mitigate the outage by delivering 9-1-1 calls to alternate PSAPs; and the BSEP is required to provide the primary PSAP bill credits for outages meeting or exceeding a specified duration.⁴⁴ BRETSA argues that delivering a 9-1-1 call to an alternate PSAP due to a BES outage does not cure the outage or restore service to the primary PSAP, but merely mitigates the harm resulting from the outage.⁴⁵ It explains that in the majority of cases, the alternate PSAP cannot dispatch the needed first responders to the caller's location, which puts life, limb and property at greater risk.⁴⁶ In short, BRETSA argues that

⁴¹ *Id.*

⁴² BRETSA's 2/21/24 Comments at 7. The above comments appear just below the header "B. Rule 2131(i), (l)(II), (o) and (bb)" but do not directly reference those Rules. *Id.* As such, to the extent necessary, the ALJ construes the comments as applying to the referenced Rules.

⁴³ *Id.*

⁴⁴ *Id.* at 8, quoting CenturyLink's Colo. PUC No. 25 (Tariff), Section 9.2.5I.1 (Section 9, Original Page 66).

⁴⁵ *Id.*

⁴⁶ *Id.*

delivering calls to the alternate PSAP is not the same as delivering such calls to the primary PSAP.⁴⁷

25. Notwithstanding the above comments, BRETSA supports some aspects of proposed Rule 2131(i), and primarily suggests changes that would replace or eliminate references to the governing body with references to the primary PSAP.⁴⁸

26. As to proposed Rule 2131(l), CenturyLink disagrees that the definition of BES outage should include situations where 9-1-1 calls are rerouted to a designated alternate PSAP, because such a definition is overly broad and ignores basic system design that ensures that 9-1-1 calls that cannot be delivered to a primary PSAP are delivered to a secondary PSAP using ALI/ANI.⁴⁹ CenturyLink adds that all modern BES networks are designed to ensure call delivery to an alternate PSAP when such calls cannot be delivered to the primary PSAP.⁵⁰ It argues that, consistent with the Commission's statements in the NOPR, a BES outage should be defined by a failure in the BES network, and that where a 9-1-1 call is delivered to an alternate PSAP, the BES network, by definition, has not failed.⁵¹

27. CenturyLink argues that proposed Rule 2131(l)(II) creates ambiguity by blurring the lines between OSP and BESP service by using language referencing "events or incidents" relating to OSP connectivity.⁵² It argues that the Commission has no statutory authority over OSP service, and that OSP service is not part of the BES system.⁵³ CenturyLink explains that although

⁴⁷ *Id.*

⁴⁸ Attachment 1 to BRETSA's 2/12/24 Comments at 2.

⁴⁹ CenturyLink's 2/12/24 Comments at 2.

⁵⁰ CenturyLink's 2/21/24 Comments at 6.

⁵¹ *Id.* at 5.

⁵² CenturyLink's 2/12/24 Comments at 6.

⁵³ *Id.*

it is both an OSP and BESP, the Commission's authority over it is limited to service it provides as a BESP, which does not reach its OSP service.⁵⁴

28. As relevant to proposed Rule 2131(l), the Montrose Emergency Telephone Service Authority, the Ouray County Emergency Telephone Service Authority, and the San Miguel Emergency Telephone Service Authority (collectively, the West Region Authorities) submit that when an event includes a BES outage in any manner or coincides with a PSAP overflow or alternate routing condition, the BES outage rules must apply.⁵⁵ The West Region Authorities acknowledge that apparent BES outages may sometimes only be OSP outages, or a combination of BES and OSP outages in the same event, and that BES call overflow and alternate routing events due to a PSAP condition and respective BESP notifications to the PSAP and alternate PSAP are not BES outages.⁵⁶ It submits that Rule changes are necessary because recent Commission outage investigation reports indicate a clear difference in stakeholders' interpretation of existing Commission Rules as to the meaning of BES outage and responses.⁵⁷

29. The Adams County E-911 Emergency Telephone Service Authority, the Arapahoe County 911 Authority, and the Jefferson County Emergency Communications Authority (collectively, the AAJ Authorities) support proposed Rule 2131(l),⁵⁸ and generally support the proposed Rules, if the Commission believes the changes are necessary to clarify BESP's obligations.⁵⁹

30. As context, the AAJ Authorities explain that they classify BES outages into three broad categories, all of which are covered by proposed Rule 2131(l). Specifically, Class One

⁵⁴ *Id.*

⁵⁵ See West Region Authorities' 2/13/24 Comments at 2.

⁵⁶ *Id.*

⁵⁷ *Id.* at 1.

⁵⁸ See AAJ Authorities' 1/11/24 Comments at 2.

⁵⁹ AAJ Authorities' 2/12/24 Comments at 1.

Outages occur when a 9-1-1 call is not received by the primary PSAP and the BESP is unable to reroute it to an alternate PSAP; these outages are likely the result of a BESP network failure.⁶⁰ Class Two Outages occur when a 9-1-1 call is not received by the primary PSAP but the BESP reroutes the call to an alternate PSAP, and the failure to deliver the call was not caused by the PSAP.⁶¹ Finally, Class Three Outages occur when a 9-1-1 call is not received by the primary PSAP but the BESP reroutes it an alternate PSAP, and the call was not delivered to the primary PSAP based on an issue with the primary PSAP (*e.g.*, issues with high call volume to primary PSAP).⁶² The AAJ Authorities submit that BES outages that involve a BES network failure (*i.e.*, Class One and Two Outages) are critical events that affect emergency response and require immediate notifications and reporting, with investigations as appropriate.⁶³ Where an outage is not caused by a BESP's network issue, but by an issue with the primary PSAP (*i.e.*, Class Three Outages), it may be appropriate to only require notice to the PSAP, alternative PSAP, and governing bodies, without requiring a formal report and investigation.⁶⁴ In short, the AAJ Authorities submit that not all outages should require the same response or treatment under the Rules.⁶⁵

31. CCOA objects to proposed Rule 2131(l) (BES outage definition). In support, CCOA relies on the Larimer Emergency Telephone Authority's (LETA) as an example of where the suggested changes could create problems.⁶⁶ LETA is a governing body or 9-1-1 authority responsible for designating the points to receive 9-1-1 calls within its jurisdiction, which encompasses Larimer and Jackson Counties.⁶⁷ LETA oversees the following six PSAPs: Colorado

⁶⁰ AAJ Authorities' 1/11/24 Comments at 2.

⁶¹ *Id.*

⁶² *Id.*

⁶³ *See* AAJ Authorities' 2/12/24 Comments at 2.

⁶⁴ *See id.*

⁶⁵ AAJ Authorities' 1/11/24 Comments at 2.

⁶⁶ CCOA's 2/12/24 Comments at 9.

⁶⁷ *Id.*

State University, Estes Park Police Department, Fort Collins Police Department, Larimer County Sheriff's Office, Loveland Police Department, and Jackson County Sheriff's Office.⁶⁸ LETA connects the first five PSAPs above through its own internet protocol (IP) network, and in so doing, regionalizes its PSAPs based on technology.⁶⁹ It explains that LETA's routing to a PSAP may vary based on 9-1-1 call volume, whether a PSAP evacuated or abandoned its location, and other variables. CCOA also states that other governing bodies have connected their PSAPs through their own IP networks (such as Fremont County E911 Authority (Fremont) and Pitkin County Regional Telephone Service Authority (Pitkin)).⁷⁰ With these examples in mind, CCOA argues that the Commission should not define a BES outage to include circumstances where a 9-1-1 call fails to route from LETA's demarcation point to a PSAP, as the BESP has no role or visibility into LETA's network after it hands off responsibility for 9-1-1 calls to LETA.⁷¹

32. BRETSA suggests Rule 2131(l) be amended to define a BES outage as "a failure of a BESP to deliver to the primary PSAP 9-1-1 calls including ALI and location information received from OSP, IASP, or other BESP," and suggests other minor changes to proposed Rule 2131(l)(I).⁷²

33. CenturyLink argues that the definition of proposed Rule 2131(o) does not accurately reflect the meaning of demarcation point within general industry understanding, resulting in confusion, not clarification.⁷³

⁶⁸ *Id.* at 9-10.

⁶⁹ *Id.* at 10.

⁷⁰ *Id.*

⁷¹ *Id.* at 13.

⁷² Attachment 1 to BRETSA's 2/12/24 Comments at 2.

⁷³ CenturyLink's 2/12/24 Comments at 6-7.

34. CCOA objects to proposed Rule 2131(o) because it removes the phrase “with a governing body,” which it believes is essential language.⁷⁴ Without this language, the meaning of “demarcation” would not include many demarcation points, such as LETA’s, Fremont’s, and Pitkin’s.⁷⁵ It explains that the proposed language does not reflect the reality that in some cases, the demarcation point does not exist at the PSAP itself, but at a hosted customer premise equipment site or a locally provided network that is then used to deliver the call to the PSAP.⁷⁶ CCOA agrees with CenturyLink that proposed changes to the definition of demarcation point will not clarify the meaning of the term, but will cause confusion.⁷⁷

35. BRETSA suggests changes to the definition of demarcation point in Rule 2131(o) to indicate that the demarcation point between the BESP and primary PSAP must be at the PSAP premises or such other location, including a point of interconnection with a customer provided ESInet, among other changes.⁷⁸

36. While CenturyLink does not object to the definition of “primary designated PSAP” in proposed Rule 2131(bb), it argues that the Rule should not be adopted because there is no need to define such a commonly used and understood term.⁷⁹

37. CCOA submits that there is no need to adopt proposed Rule 2131(bb) because Rule 2137(a)(III) clearly and unambiguously requires the BESP to “automatically route 9-1-1 calls to one or more alternate PSAP, in the event of a call overflow, outage, or PSAP abandonment.”⁸⁰ It adds that the proposed definition would only create confusion.

⁷⁴ CCOA’s 2/12/24 Comments at 12.

⁷⁵ *Id.* at 12-13.

⁷⁶ *Id.* at 13, fn. 12.

⁷⁷ CCOA’s 2/21/24 Comments at 4.

⁷⁸ Attachment 1 to BRETSA’s 2/12/24 Comments at 3.

⁷⁹ CenturyLink’s 2/12/24 Comments at 7.

⁸⁰ CCOA’s 2/12/24 Comments at 13-14, quoting Rule 2137(a)(III), 4 CCR 723-2. *See* CCOA’s 2/21/24 Comments at 4.

38. BRETSA suggests changes to proposed Rule 2131(bb) that would eliminate the word “designated” and define “primary PSAP” as the PSAP serving the caller’s location as defined by the PSAP or “authoritative GIS data” and to which the calls originating within the PSAP service boundaries will be directly routed by the IP selective router or emergency call routing function, among other changes.⁸¹

39. BRETSA suggests that the Commission add a definition to Rule 2131 of “alternate PSAP” to mean “a PSAP or PSAPs designated by a primary PSAP to receive 9-1-1 calls placed within the geographic area served by the primary PSAP when the BESP is unable to deliver the 9-1-1 calls to the primary PSAP or the primary PSAP is unable to receive and process 9-1-1 calls.”⁸²

40. Other than renumbering Rule 2131(dd), the NOPR suggests no changes to this Rule. Even so, BRETSA also suggests that Rule 2131(dd) be amended as follows “‘selective routing’ means the routing of a 9-1-1 call to the demarcation point with a ~~governing body or~~ primary PSAP based upon the location information other factors as agreed upon by the governing body or PSAP.”⁸³

b. Discussion, Findings, and Conclusions

41. Many of CenturyLink’s objections to the definition of BES outage in proposed Rule 2131(l) essentially turn on the definition of BES in current Rule 2131(i), which mimics the statutory definition in § 29-11-101(7), C.R.S. Neither Rule 2131(i) nor § 29-11-101(7), C.R.S., limit BES to the aggregation and transportation of a 9-1-1 call to the PSAP primarily responsible for the 9-1-1 call based on the caller’s location. As relevant here, both Rule 2131(i) and § 29-11-

⁸¹ Attachment 1 to BRETSA’s 2/12/24 Comments at 4.

⁸² *Id.* at 1.

⁸³ *Id.* at 4.

101(7), C.R.S., define BES as the aggregation and transportation of a 9-1-1 call directly to a point of interconnection with a governing body or PSAP, regardless of the technology used to provide the service. CenturyLink argues that if it delivers a 9-1-1 call to an alternate PSAP, it has provided BES, and there has been no BES outage. While this is not an unreasonable reading of Rule 2131(i) and § 29-11-101(7), C.R.S., CenturyLink fails to recognize that there are real consequences to the public's health and safety when 9-1-1 calls are not delivered to the point of interconnection with the PSAP or governing body primarily responsible for the 9-1-1 call based on the caller's location. Indeed, as comments demonstrate, this inevitably delays dispatching first responders and first responders' arrival at callers' locations, thereby delaying emergency assistance to the public. Similarly, in such situations, when a BESP instead delivers a 9-1-1 call to the point of interconnection with an alternate PSAP or governing body (who are not primarily responsible for the 9-1-1 call based on the caller's location), this amounts to BES that negatively impacts the public health, welfare, and safety, and as a result, requires Commission oversight and intervention. That said, the ALJ finds that different Rule changes than those proposed in the NOPR will better address these issues, many concerns that commenters raise, and avoid potential conflicts with the statutory definition of BES under § 29-11-101(7), C.R.S.

42. For the reasons discussed, the ALJ does not adopt proposed changes to the definition of BES (proposed Rule 2131(i)). The ALJ finds that the current definition of BES more accurately tracks with the definition of BES in § 29-11-101(7), C.R.S., and as such, should remain untouched.⁸⁴ Similarly, the ALJ will delete the definition of BES outage (Rule 2131(l)) from the Rules and does not adopt a new definition of these terms. While the current version of the Rule

⁸⁴ The ALJ agrees with CCOA that eliminating references to governing body in the definition of BES is inconsistent with § 29-11-101(7), C.R.S.

tracks with the statutory definition of BES, it does not help the Commission address the situation discussed above. Proposed Rule 2131(l)'s definition of BES outage assumes that failure to deliver calls to the point of interconnection with the PSAP or governing body primarily responsible for the 9-1-1 call based on the caller's location is a BES outage, even when calls are delivered to an alternate PSAP. As noted, this does not track with the definition of BES in § 29-11-101(7), C.R.S. The ALJ finds that the public interest is better served by replacing the definition of BES outage with terminology and language that more accurately addresses the underlying issues while maintaining consistency with the statutory definition of BES. For the reasons discussed, ALJ adopts a definition of "PSAP service disruption" as Rule 2131(cc), as follows:

(cc) "PSAP service disruption" means any situation in which a BESP is unable to deliver 9-1-1 calls, ANI, or location information to the primary demarcation point due to an event or incident inside the BES network or on the BESP's side of the demarcation point. A PSAP service disruption includes, but is not limited to:

- (I) any event or incident that occurs inside the BES network that results in or requires the BESP to reroute 9-1-1 calls to the demarcation point for an alternate PSAP or the governing body for an alternate PSAP; or
- (II) any situation in which a PSAP is unable to receive 9-1-1 calls or location information as the result of an event or incident that occurs inside the BES network, even if the facilities involved in the event or incident also provide OSP connectivity.⁸⁵

43. This definition avoids conflating BES concepts, which may have contributed to differing interpretations of prior Rules and statutes relating to BES. For example, the definition contemplates that 9-1-1 calls are delivered to demarcation points (*i.e.*, points of interconnection where responsibility for a portion of 9-1-1 service change) and does not assume that any

⁸⁵ Where this Decision quotes adopted Rule language, changes are shown as compared to the existing Rule by striking through deleted language and underlining added language. If there is no existing Rule, the adopted language is entirely underlined to reflect the new Rule.

circumstance where calls are not delivered to the primary demarcation point is a BES failure as that term is defined by § 29-11-101(7), C.R.S. The definition captures situations in which the BESP routes calls to a demarcation point for an alternate PSAP or governing body because it is unable to deliver 9-1-1 calls to the primary demarcation point due to an issue inside the BES network or on the BESP's side of the demarcation point. This is necessary because when delivery to the primary demarcation point fails, the PSAP primarily responsible for responding to the call based on the caller's location does not receive the 9-1-1 call. This definition directly tackles a primary issue that the Commission intended to address through this Proceeding (*i.e.*, issues surrounding delivery to a demarcation point for an alternate PSAP rather than the demarcation point for the caller's location). The definition, combined with other Rule changes will enable the Commission to determine what action, if any, can be taken to avoid or mitigate these issues, thereby safeguarding the public interest from delays in receiving emergency assistance.

44. What is more, because the definition sets the bar at delivery to a primary demarcation point, this definition also captures situations in which the BESP fails to deliver calls to the primary demarcation point *and* to a demarcation point for an alternate PSAP or governing body, which would be a particularly critical disruption. By specifically referencing disruptions caused by events or incidents inside the BES network or on the BESP's side of the demarcation point, the definition excludes situations where a BESP does not deliver calls to a primary demarcation point due to issues on the PSAP's or governing body's side of the demarcation point (*e.g.*, overflow situations).

45. The above definition, combined with the below adopted definitions of primary demarcation point, demarcation point, and alternate PSAP address most concerns expressed through comments, and issues surrounding CenturyLink's interpretation of existing Rules

discussed above. For example, these changes contemplate LETA's operational structure and address CCOA's concerns that the Rules should not dictate where a governing body chooses to establish its demarcation points. In addition, the language clarifies that when a service disruption occurs due to an event or incident that occurred inside the BES network or on the BESP's side of the demarcation point that may have also involved facilities that provide OSP connectivity, this is still a service disruption under Commission Rules. This recognizes that while BESPs have discretion to use facilities for BES that are also used for OSP connectivity, doing so has no impact on whether a service disruption subject to the Commission's regulation has occurred. It also squarely addresses misguided positions that CenturyLink has taken on this issue in prior investigations, as discussed in the NOPR. What is more, although the above definition references OSP connectivity, it does not contemplate or attempt to regulate OSP connectivity and services.

46. The ALJ does not adopt BRETSA's suggestions for Rule 2131(l) as moot given that the ALJ eliminates the current definition of BES outage and does not adopt a new one. Even so, its suggestions would add unnecessary or redundant requirements.

47. As noted, the above changes necessitate other Rule changes. To ensure clarity, the ALJ adopts the following definition of "Alternate PSAP" as Rule 2131(g):

- (g) "Alternate PSAP" means a PSAP or PSAPs designated to receive 9-1-1 calls when the BESP is unable to deliver those calls to the primary demarcation point, or at the request of the PSAP that is normally responsible for receiving calls in that geographic area or at the request of its governing body.

48. This definition is consistent with BRETSA's suggested definition of alternate PSAP; incorporates the definition of "primary demarcation point" (below); and ensures that an entity is still an alternate PSAP even when it receives calls because the responsible PSAP or

governing body requests that calls be delivered to the alternate PSAP. This captures potential PSAP overflow situations.

49. For the same reasons discussed above, and to ensure clarity, rather than defining “primary designated PSAP” as suggested in proposed Rule 2131(bb), the ALJ instead adopts the following definition of “primary demarcation point” as Rule 2131(bb):

(bb) “Primary demarcation point” means the demarcation point designated to the BESP as the primary or first location for delivery of 9-1-1 calls, ANI, and location information for a specific geographic area. This designation is determined by the governing body or PSAP with jurisdictional authority for the geographic area from which the call originates. The physical location of a primary demarcation point may be at a PSAP, at a point of interconnection with a governing body’s local network, or at any other location designated by the governing body or PSAP for delivery of 9-1-1 calls to a PSAP.

50. This definition, combined with the adopted definition of PSAP service disruption, helps address the significant issue discussed above, where first responders are delayed because the BESP is unable to deliver the call to the PSAP primarily responsible for responding to the call based on the caller’s location, but delivers the call a demarcation point for an alternate PSAP or governing body. This definition also further addresses CCOA’s and LETA’s concerns relating to demarcation points. Because proposed Rule 2131(bb) is not adopted, suggested changes to that proposed Rule are rejected as moot. The adopted definition of primary demarcation point eliminates the need to amend the definition of demarcation point in proposed Rule 2131(o). However, the ALJ finds that the definition of demarcation point should be modified to simplify, clarify, and align it with the definition of primary demarcation point.⁸⁶ As such, the ALJ does not adopt proposed Rule 2131(o) and instead adopts the following language for Rule 2131(o):

⁸⁶ While the adopted definition of demarcation point is more straight-forward, these changes are not intended to imply that a demarcation point does not cover points of interconnection previously referenced in the definition. The adopted definition is consistent with the National Emergency Number Association’s definition of that term, found at: https://kb.nena.org/wiki/Demarcation_Point.

- (o) “Demarcation point” means a physical point of interconnection where the responsibility for a portion of 9-1-1 service changes from one party to another. ~~It includes the point of interconnection between BESP and the OSP, IASP, or other BESP for the purpose of selectively routing and transporting 9-1-1 calls directly to a demarcation point with a governing body or PSAP. It includes the point of interconnection mutually agreed upon in writing by the BESP and each governing body or PSAP with primary responsibility for dispatching first responders to the callers’ locations.~~

51. The ALJ rejects BRETSA’s suggestion to amend Rule 2131(dd) to remove the reference to “governing body.” Doing so would exacerbate CCOA’s concerns discussed above. Unless specifically accepted through the adopted changes, the ALJ rejects other proposed changes to Rule 2131.

52. The adopted changes to Rule 2131 require changes throughout the Rules to eliminate now obsolete terminology (*e.g.*, BES outage) and reflect new terminology (*i.e.*, PSAP service disruption, alternate PSAP, and primary demarcation point.). As such, the ALJ adopts changes throughout the Rules to reflect these changes.⁸⁷ Because these minor terminology changes are highlighted in redlined format in Attachment A to this Decision and merely align terminology with the adopted changes, this Decision does not outline, discuss, or analyze such changes, as unnecessary.

2. Rule 2134 - Process for Certification of BESPs

53. Proposed Rule 2134(e) deletes language that triggers a BESP to update information ordinarily provided in an application for a certificate of public convenience and necessity (CPCN) starting two years after such an application and CPCN are granted and replaces it with language triggering such updates to start by March 30, 2025.⁸⁸ The NOPR does not seek to modify current

⁸⁷ Given that such changes align the Rules with adopted Rule terminology, the ALJ finds that the changes are consistent with the subject-matter in the NOPR, and as such, may be adopted without running afoul of § 24-4-103, C.R.S. *See* § 24-4-103(4)(c), C.R.S.

⁸⁸ Attachment A to NOPR at 4.

language requiring such updates every two years thereafter.⁸⁹ The Commission proposes these changes because the existing language fails to clearly account for the reality that the state's only active BESP has been providing BES since before the Commission instituted a requirement that BESPs obtain a CPCN from the Commission.⁹⁰

a. Public Comments

54. While CenturyLink does not oppose “the concept behind” proposed Rule 2134(e), it submits that based on its experience, there is not enough of a change over a two-year period to justify a two-year filing frequency.⁹¹ It suggests that the Rule be modified to establish a longer period between updates, such as 5 or 10 years, with the option of interim filings if necessary.⁹²

55. CCOA states that CenturyLink has not yet filed an update under existing Rule 2134(e), and that CenturyLink should be required to file the first update, then follow up with updates every two years.⁹³ This aligns with the requirements in proposed Rule 2134(e). CCOA objects to CenturyLink's suggestion that the Rule be modified to allow for longer gaps between updates.⁹⁴ It explains that to allow for stakeholders' continual reliability and resiliency assessment of the BES network, CenturyLink should be required to provide and keep current basic information about the BES network.⁹⁵

b. Discussion, Findings, and Conclusions

56. The ALJ finds unpersuasive CenturyLink's argument that there are not enough changes in a two-year period to justify updates every two years. Indeed, if that is the case,

⁸⁹ *Id.*

⁹⁰ NOPR at 6.

⁹¹ CenturyLink's 2/12/24 Comments at 7.

⁹² *Id.*

⁹³ CCOA's 2/21/24 Comments at 4.

⁹⁴ *Id.*

⁹⁵ *Id.*

CenturyLink's two-year updates will require minimal effort. That minimal effort is far outweighed by the Commission's interest in ensuring that it has updated information relevant to its ability to continually assess the BES network's reliability and resilience. For these reasons and those in the NOPR, the ALJ adopts Rule 2134(e) as proposed in the NOPR.

3. Rule 2136 - Obligations of BES Providers

57. The NOPR corrects a typographical error in Rule 2136(a) and adds Rule 2136(l) to impose requirements on BESP's to notify potentially affected PSAP's of repair or maintenance that may impact BES to a primary designated PSAP. The NOPR suggests the following language for new Rule 2136(l):

- (l) If the BESP is aware of repairs or maintenance being conducted or to be conducted that have the potential to impact BES to a primary designated PSAP, the BESP shall notify that PSAP of the potential of a BES outage at least 24 hours prior to work commencing or as soon as possible. This notification shall be provided by voice call to the PSAP, if possible, and to the contact maintained for the PSAP as described in paragraph 2143(c). When scheduling routine maintenance or repairs, the BESP should schedule such repairs at a time likely to cause the least impact to the affected PSAP(s). Wherever practicable, maintenance of the BES network shall be performed with no scheduled downtime. The BESP shall employ best efforts to ensure that planned events for routine maintenance are scheduled and communicated to avoid impacts to BES customers' 9-1-1 operations. Conduct of emergency or unscheduled repairs in order to restore BES should not be delayed in order to make PSAP notifications.⁹⁶

58. The Commission proposes these changes to give PSAP's and governing bodies the opportunity to prepare for and mitigate a planned outage, given the critical nature of BES.⁹⁷

⁹⁶ Attachment A to NOPR at 6.

⁹⁷ NOPR at 6.

a. Public Comments

59. The NOPR does not propose changes to Rule 2136(b). Nonetheless, BRETSA suggests minor changes to Rule 2136(b) to include references to the OSP or ISAP and eliminate a reference to the governing body.⁹⁸ Likewise, it suggests changes to Rule 2136(d) to add “or PSAP” after both references to “the governing body.”⁹⁹ And, while the NOPR does not propose changes to Rule 2136(h), BRETSA suggests extensive changes to the Rule, such as requiring BESP to provide satellite communication devices to PSAPs, credit for hardware costs for communication devices relating to an outage, and technicians; establish stores of spare parts and equipment that may be needed to restore service; and dispatch technicians within 15 minutes of learning of an outage (among other suggestions).¹⁰⁰

60. CCOA objects to proposed Rule 2136(l) as including definitions from proposed Rule 2131 that it believes are unnecessary and asserts that the proposed Rule is redundant because Rule 2335(d) already addresses service during maintenance or emergencies.¹⁰¹

61. BRETSA suggests that proposed Rule 2136(l) be completely replaced with language that would impose additional requirements and definitions, such as requiring the BESP to schedule planned maintenance “in cooperation with all affected PSAPs,” and confirm that an alternate network path is operational when such a network will allow continuity of service, among other suggestions.¹⁰²

⁹⁸ Attachment 1 to BRETSA’s 2/12/24 Comments at 5.

⁹⁹ *Id.*

¹⁰⁰ *Id.* at 6.

¹⁰¹ CCOA’s 2/12/24 Comments at 14. CCOA references Rule 2136(k) rather than proposed Rule 2136(l). *Id.* But based on the substance of CCOA’s comments and Rule 2136(k), the ALJ construes these comments as applying to proposed Rule 2136(l). Indeed, the NOPR does not propose changes to Rule 2136(k), and Rule 2136(k) is unrelated to any new definitions proposed in Rule 2131 or maintenance and repair efforts. *See id.* *See generally*, NOPR.

¹⁰² Attachment 1 to BRETSA’s 2/12/24 Comments at 7.

62. CenturyLink urges the Commission to reject BRETSA's extensive suggested changes to Rule 2136, arguing that if there is interest in pursuing BRETSA's proposed changes, the draft Rules should be reviewed in workshop session with interested stakeholders to allow for adequate discussion and meaningful input.¹⁰³

b. Discussion, Findings, and Conclusions

63. The ALJ accepts BRETSA's suggestion that Rule 2136(d) be amended to add "or PSAP" after each reference to "governing body," and adopts this change. This change accounts for circumstances in which a PSAP may be designated to receive monthly bills for the BESP's tariffed services. The ALJ also adopts the NOPR's typographical correction to Rule 2136(a) and modifies Rule 2136(b) to address another typographical error (from request to requestor).

64. For the reasons discussed below, the ALJ rejects the majority of BRETSA's remaining Rule changes. Many of BRETSA's proposed changes to Rule 2136(h) may be outside the scope of BES regulation. For example, BRETSA would require BESPs to provide PSAPs connectivity other than delivery of 9-1-1 calls, which is not BES. In addition, many of its suggestions are likely to result in unintended consequences, such as increased rates resulting from requiring BESPs to provide PSAPs with satellite phones and technicians. The ALJ also questions the enforceability of some of BRETSA's proposed changes to Rule 2136(h) and (l). BRETSA's proposed changes to Rule 2136(l) are unnecessarily complicated, would impose needless requirements, and are not supported by the record. For example, BRETSA's suggestion that Rule 2136(l) require the BESP to notify alternate PSAPs of a planned disruption does not consider that the PSAP with primary responsibility in the geographic area is best suited to communicate and work with its alternate PSAPs, as a part of its contingency mitigation efforts for a planned

¹⁰³ CenturyLink's 2/21/24 Comments at 6.

disruption. As such, requiring the BESP to communicate with the alternate PSAP is unnecessary. As to BRETSA's suggestion that Rule 2136(l) be amended to require a BESP to confirm that an alternate network path is operational before beginning maintenance, the record does not establish whether this is feasible. For example, it is unclear whether BESP can determine that an alternate network path is operational before beginning maintenance without taking down the primary network path to test whether the alternate one is functioning. Moreover, the adopted definitions in Rule 2131 resolve many of the issues that BRETSA's proposed changes to Rule 2136(l) seek to address. And the language adopted below better addresses many of the remaining issues raised through BRETSA's suggested modifications.

65. The ALJ rejects CCOA's assertion that proposed Rule 2136(l) is redundant of Rule 2335(d).¹⁰⁴ While there may be some overlap, proposed Rule 2136(l) takes a far more targeted approach to minimizing impacts on BES due to planned maintenance than Rule 2335(d), which more broadly applies to switched access service and basic service providers (in addition to BESP).¹⁰⁵ Since such providers are not BESP, Rule 2335(d) cannot impose heightened requirements *solely* applicable to BESP, who are best suited to minimize negative impacts on BES due to planned maintenance. Proposed Rule 2136(l) does just this. Indeed, proposed Rule 2136(l) imposes reasonable requirements beyond those in Rule 2335(d) to better minimize avoidable negative impacts to BES. Given the particularly critical impact of BES on the public's health, safety, and welfare, such requirements are necessary to serve the public interest and should be adopted. For these reasons, the ALJ rejects suggestions that the Rule should not be adopted and

¹⁰⁴ CCOA's argument that proposed Rule 2136(l) seeks to incorporate unnecessary definitions from proposed Rule 2131 are moot given the adopted changes to that Rule.

¹⁰⁵ See Rule 2330 (Rules 2330 to 2359 apply to BESP, and switched access service and basic service providers).

adopts the Rule with minor modifications to align it with other Rule changes and clarify that the requirements are in addition to those in Rule 2335(d).

66. For the reasons discussed, the ALJ adopts the following language for Rule 2136(l):

- (l) These requirements are in addition to those in paragraph 2335(d). If the BESP is aware of repairs or maintenance being conducted or to be conducted that have the potential to impact service to a primary demarcation point, ~~BES to a primary designated PSAP,~~ the BESP shall notify the associated ~~that~~ PSAP(s) of the potential of a PSAP service disruption ~~BES outage~~ at least 24 hours prior to work commencing or as soon as possible. This notification shall be provided by voice call to the PSAP, if possible, and to the contact maintained for the PSAP as described in rule 2143(c). When scheduling routine maintenance or repairs, the BESP should schedule such repairs at a time likely to cause the least impact to the affected PSAP(s). Wherever practicable, maintenance of the BES network shall be performed with no scheduled downtime. The BESP shall employ best efforts to ensure that planned events for routine maintenance are scheduled and communicated to avoid impacts to each affected PSAP's ~~BES customers'~~ 9-1-1 operations. Conduct of emergency or unscheduled repairs in order to restore service to a PSAP ~~BES~~ should not be delayed in order to make PSAP notifications.

4. Rule 2143 - Basic Emergency Service Reliability and Outage Response

67. Proposed Rule 2143(c) makes minor modifications such as removing unnecessary language.¹⁰⁶ The NOPR proposes the following changes to Rule 2143(j):¹⁰⁷

- (II) If the BES outage exceeds or is anticipated to exceed 15 minutes from the time a BESP becomes aware of the outage, the BESP shall implement the appropriate contingency plan as established in paragraph (e) or provide temporary solutions so that 9-1-1 calls can be answered until BES is restored. The BESP shall coordinate any alternate solutions with the contact(s) provided in accordance with paragraph (c) for the affected governing body or PSAP. All 9-1-1 calls shall be delivered to the primary designated PSAP, if possible, or to an alternate PSAP if the delivery to the primary designated PSAP is not possible.
- (III) If a ~~disruption of~~ BES outage exceeds 30 minutes in duration, the responsible BESP shall inform the Commission within two hours of the time that the BESP becomes aware of the outage. Such notification shall be made

¹⁰⁶ Attachment A to NOPR at 6.

¹⁰⁷ Though not noted above, the NOPR also proposes a minor change to Rule 2143(j)(I) to add “of this rule” to clarify an internal reference. *Id.* at 7.

~~through an outage reporting form, available on the Commission's website, in a manner prescribed by the Commission, outlining the nature and extent of the outage and actions taken to restore service and any interim measures taken to mitigate the outage prior to resolution. The BESP shall report BES outages as required by this rule even if 9-1-1 calls have been rerouted to an alternate PSAP or other destination, with or without location information. The BESP shall notify the Commission of restoration of service by the beginning of the next business day. This notification shall be followed within 30 days of such outage by a report to the Commission. The report shall follow Commission reporting format and guidelines and shall include a statement of whether call back numbers for 9-1-1 calls, which could not be connected, were provided to the PSAP pursuant to subparagraph 2143(j)(V). Commission staff may request an update regarding an ongoing outage at any time.~~

- (IV) ~~The BESP shall notify the Commission through the outage reporting form of restoration of BES by the beginning of the next business day following the restoration of service. All 9-1-1 calls received by the BESP shall be routed to the PSAP with primary responsibility for dispatching first responders to the caller's location, or in accordance with the alternate solutions described in paragraph (j)(II) of this rule, or, if unavailable, to another PSAP if possible.~~
- (V) ~~For all BES outages, the BESP shall submit a final report to the Commission through the outage reporting form within 30 days of the restoration of service. The report shall include a statement of whether call back numbers for 9-1-1 calls, which could not be connected due to the BES outage, were provided to the PSAP pursuant to subparagraph (j)(VI) of this rule. Following the restoration of BES, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the outage. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information.~~
- (VI) ~~Following the restoration of BES, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the outage. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information. In the event of a BES outage of more than four hours duration, or 12 hours in duration if the outage is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the duration of the outage in hours to the total number of hours~~

~~in the billing cycle. The credit shall be provided within no more than two billing cycles.~~

- (VII) In the event of a BES outage of more than four hours duration, or 12 hours in duration if the outage is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the duration of the outage in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles to the governing body or PSAP that normally receives the bill. If, as the result of a formal complaint proceeding or other proceeding, the Commission finds that a BESP has failed to provide a credit required under this paragraph, the Commission may order the amount of the credit to be doubled. Additionally, civil penalties may be assessed as described in rules 2009 through 2011.¹⁰⁸

68. Most of the above proposed changes merely move existing language into different subparagraphs.¹⁰⁹ In the NOPR, the Commission explained that the minor changes to Rule 2143 clarify that the Commission's outage notifications and reporting requirements apply even when 9-1-1 calls were successfully routed to an alternate PSAP.¹¹⁰

a. Public Comments

69. BRETSA suggests that proposed Rule 2143(c) be amended to delete the reference to "governing body."¹¹¹ Although the NOPR does not suggest changes to Rule 2143(d), BRETSA suggests significant changes such as requiring the BESP to provide satellite communication devices to governing bodies or PSAPs who are served by unprotected central offices and isolated with no means of communicating with the BESP, or to reimburse them for the same.¹¹²

¹⁰⁸ *Id.* at 7-8.

¹⁰⁹ The ALJ notes that Attachment A to the NOPR does not redline proposed changes in the same manner as this Decision. Specifically, where the NOPR seeks to move existing language into different subparagraphs, this Decision highlights that by striking through language where it currently exists and underlining it where the NOPR suggests it be moved. Attachment A to the NOPR does not strike through or underline existing language that is moved to new subparagraphs in all instances where this is proposed. This may result in this Decision's references to the NOPR's proposed changes appearing to highlight more changes than those in Attachment A to the NOPR. This is not the case. Attachment A to the NOPR highlights suggested language changes, and thus, continues to provide proper notice of the proposed Rules.

¹¹⁰ NOPR at 7.

¹¹¹ Attachment 1 to BRETSA's 2/12/24 Comments at 7.

¹¹² *Id.* at 7-8.

70. Similarly, while the NOPR does not suggest changes to Rule 2143(g), BRETSA suggests that it be completely replaced with language that requires the BESP to provide its technicians and subcontractors who repair or maintain service with satellite communication devices.¹¹³

71. BRETSA suggests deleting “governing body” from proposed Rule 2143(j)(I), (II), and (VI) and that Rule 2143(j)(I) require the BESP to provide notice of confirmed and potential outages to a primary PSAP and an alternate PSAP.¹¹⁴ It also suggests deleting “designated” from proposed Rule 2143(j)(II).¹¹⁵

72. As to proposed Rule 2143(j)(I), the AAJ Authorities explain that the BESP should notify designated persons promptly of an outage, and while the proposed Rule requires this, it only requires the BESP to notify contacts provided to it per proposed Rule 2143(c). They suggest that Rule 2143(j)(I) be amended to require notice to a broader group, namely the primary PSAP, the alternate PSAP, the governing body, and others that the PSAP or governing body wish to receive notice.¹¹⁶

73. CenturyLink submits that the suggested added sentence at the end of proposed Rule 2143(j)(II) is redundant because the Rule already states the requirement for contingency planning, and therefore should be rejected as unnecessary.¹¹⁷

74. CenturyLink does not object to the structural changes in proposed Rule 2143(j)(III) to (V) but does object to the substantive changes in proposed Rule 2143(j)(III) for many of the same reasons already discussed.¹¹⁸ For example, it asserts that the changes equate every rerouted

¹¹³ *Id.* at 8.

¹¹⁴ *Id.* at 9.

¹¹⁵ *Id.*

¹¹⁶ AAJ Authorities’ 1/11/24 Comments at 2-3.

¹¹⁷ CenturyLink’s 2/12/24 Comments at 8.

¹¹⁸ *Id.*

9-1-1 call to an outage and that such occurrences are not outages.¹¹⁹ It argues that the proposed changes would impose new and unnecessary reporting requirements that add burdens without improving system efficiency or operation.¹²⁰

75. Responding to CenturyLink’s comments on proposed Rule 2143(j)(III), BRETSA points out that CenturyLink’s own tariff defines the inability of a PSAP to receive a 9-1-1 call as a “Severity Level 1 Network Failure.”¹²¹ Contrary to CenturyLink’s assertion, BRETSA submits that proposed Rule 2143(j)(III) does not state that every rerouted 9-1-1 call is an outage.¹²² It submits that CenturyLink’s suggestion that the proposed changes would result in new reporting is incorrect because the existing Rules already require this.¹²³

76. CCOA urges the Commission to retain the following language in existing Rule 2143(j)(IV) “[a] 9-1-1 calls received by the BESP shall be routed to the PSAP with primary responsibility for dispatching first responders to the caller’s location, or in accordance with the alternate solutions described in paragraph (j)(II) of this rule, or, if unavailable to another PSAP if possible.”¹²⁴ While the NOPR suggests that language be deleted, it also proposes to add similar language to proposed Rule 2143(j)(II).¹²⁵ It is unclear from CCOA’s comments whether it objects to this language.

77. BRETSA suggests minor non-substantive changes to proposed Rule 2143(j)(IV).¹²⁶

¹¹⁹ *Id.*

¹²⁰ *Id.*

¹²¹ BRETSA’s 2/21/24 Comments at 10, citing Tariff, Section 9.2.5.I.1, Section 9, Original Page 66.

¹²² *See id.* at 11.

¹²³ *Id.* at 11-12. BRETSA characterizes CenturyLink’s comments as “fiction,” “silly,” and “unserious.” *Id.* at 11-12. This type of hyperbole is unhelpful.

¹²⁴ CCOA’s 2/21/24 Comments at 4.

¹²⁵ Attachment A to NOPR at 7.

¹²⁶ Attachment 1 to BRETSA’s 2/12/24 Comments at 9.

78. As to proposed Rule 2143(j)(V), while the AAJ Authorities agree that it is important for BESP's to provide information about outages, it may not be necessary for BESP's to provide such information (and reports) as to each class of outage (described earlier), such as Class Three Outages.¹²⁷ The AAJ Authorities support continued reporting as required in proposed Rule 2143(j)(V) for all Class One outages.¹²⁸

79. BRETSA suggests numerous changes to proposed Rule 2143(j)(VII), including changes relating to bill credits for outages resulting from a fiber cut due to planned construction and changes explicitly authorizing the Commission to initiate a show cause proceeding to address failures to provide bill credits.¹²⁹

80. The NOPR does not propose changes to Rule 2143(k)(I) and (II), which governs informal investigations into outages. But, based on Commission staff's informal comments interpreting this Rule, BRETSA suggests significant changes to the Rule. Among those, BRETSA suggests that Rule 2143(k)(I)(A) require BESP's to provide a written response to questions when the Task Force, the Commission, or the affected governing body or PSAP have not requested a meeting, and that when a meeting is requested, BESP's answer the questions at the meeting and not be required to provide a written response.¹³⁰ Although somewhat unclear, it appears that BRETSA also suggests that Rule 2143(k)(I)(A) be amended so that meetings with BESP's may be cancelled when BESP's voluntarily provide answers to questions on the Commission's standardized form, if the PSAP, governing body, Task Force or the Commission find the answers sufficient.¹³¹ BRETSA also suggests that Rule 2143(k)(I)(B) be modified to allow the governing body, PSAP, Task Force

¹²⁷ AAJ Authorities' 1/11/24 Comments at 3-4. *See supra*, ¶ 30.

¹²⁸ *Id.* at 3.

¹²⁹ Attachment 1 to BRETSA's 2/12/24 Comments at 9-10.

¹³⁰ *Id.* at 4.

¹³¹ *Id.*

and Commission to issue additional written questions or request a meeting, if any of them determine that the BESP's written responses are insufficient, and that the same entities may pose additional questions at or after a meeting if any of them determine that the BESP's responses provided at a meeting are insufficient, to which the BESP may respond in writing, during the same or another meeting.¹³² BRESTA suggests numerous changes to subparagraphs (k)(I), (II), and (III) such as allowing for meetings with BESP's any time before the Commission closes an informal investigation; requiring communication to be in writing; and requiring investigations to be remain open longer than sixty days under numerous identified circumstances.¹³³

81. BRESTA interprets the AAJ Authorities' description of its classification of different outage types as a suggestion to incorporate that classification system into Rule 2143(k), and objects to the same.¹³⁴

82. CenturyLink urges the Commission to reject BRESTA's extensive suggested changes to Rule 2143, arguing that if there is interest in pursuing BRESTA's proposed changes, the draft Rules should be reviewed in a separate workshop session with interested stakeholders to allow for adequate discussion and meaningful input.¹³⁵

83. It suggests that Rule 2143(k) be modified to make investigations discretionary rather than mandatory by changing "shall" in the first sentence of the Rule to "may."¹³⁶ In support, CenturyLink states that there have been almost 50 mandatory investigations since this Rule was adopted, and that in dozens of those investigations, there were only a few BES network failures.¹³⁷ It asserts that investigations can be resource intensive and that requiring an investigation in every

¹³² BRESTA's 2/27/24 Comments at 4-5.

¹³³ BRESTA's 5/1/24 Comments at 5.

¹³⁴ *Id.* at 3-4.

¹³⁵ CenturyLink's 2/21/24 Comments at 6.

¹³⁶ CenturyLink's 5/1/24 Comments at 2-3; CenturyLink's 2/12/24 Comments at 9-10.

¹³⁷ CenturyLink's 2/12/24 Comments at 10.

instance where a 9-1-1 call is rerouted is a poor use of resources.¹³⁸ CenturyLink also highlights that because the Rule uses the word “apparent” in the describing the type of BES outage that must be investigated, the Rule may result in mandatory investigations into incidents that are not BES outages.¹³⁹

84. CCOA objects to CenturyLink’s suggestion to modify Rule 2143(k) to make investigations discretionary rather than mandatory, pointing out that CenturyLink made a similar argument in a 2022 rulemaking proceeding that was rejected.¹⁴⁰ CCOA explains that contrary to CenturyLink’s suggestion, outage investigations are not required in every instance where a 9-1-1 call is rerouted because Rule 2143(k) triggers an investigation of outages (or apparent ones) only when they meet the Task Force’s established criteria.¹⁴¹ CCOA argues that the BESP must be held accountable if it fails to provide the agreed-upon BES for the agreed-upon price.¹⁴²

b. Discussion, Findings, and Conclusions

85. The ALJ adopts proposed Rule 2143(c) with minor changes to align the Rule with adopted terminology changes. The ALJ rejects BRETSA’s proposed changes to Rule 2143(d) for the same reasons the ALJ rejected BRETSA’s similar changes to other Rules.¹⁴³ The ALJ rejects BRETSA’s proposed changes to Rule 2143(g) because it is both unnecessary and inappropriate to dictate the way that BESP’s must communicate with their own technicians. Such changes also raise enforceability issues.

86. The ALJ rejects suggestions to delete “governing body” from proposed Rule 2143(j) to account for different approaches in how PSAPs and governing bodies interact and

¹³⁸ *Id.*

¹³⁹ CenturyLink’s 5/1/24 Comments at 3.

¹⁴⁰ CCOA’s 2/21/24 Comments at 5, citing Decision No. R22-0811, ¶¶ 16-23 in Proceeding No. 22R-0122T.

¹⁴¹ *See id.*

¹⁴² *Id.* at 5-7.

¹⁴³ *See supra*, ¶ 64.

function, as explained in comments (*e.g.*, LETA). BRETSA's changes to Rule 2143(j)(I) would increase the volume of notices that BESP's provide to PSAP's by requiring notices to alternate PSAP's. The ALJ is concerned that increasing the volume of notices may dilute their effectiveness. And, as already discussed, the PSAP for the primary demarcation point is best suited and expected to communicate with its alternate PSAP's when it is notified of an outage or possible outage as a part of its mitigation efforts. As such, the ALJ rejects BRETSA's and the AAJ Authorities' proposed changes to Rule 2143(j)(I). Similarly, the ALJ does not adopt BRETSA's changes to Rule 2143(j)(VII) relating to outages due to fiber cuts. Such requirements would be difficult to enforce.

87. The ALJ rejects BRETSA's changes to Rule 2143(j)(VII) relating to initiating a show cause proceeding for a BESP's failure to provide required bill credits. This change is unnecessary because the proposed language already contemplates a show cause proceeding since it references "other proceeding."

88. Rule 2143(j)(VIII)'s changes to allow the Commission to double the bill credit when the Commission finds that a BESP failed to provide a bill credit as required seeks to accomplish two goals: ensure that BESP's timely provide bill credits to reflect poorer quality BES, and, notably, to motivate BESP's to resolve service disruptions as quickly as possible to maintain higher quality BES. Both goals directly speak to the Commission's compelling interest to protect the public health, welfare, and safety. Should this Rule change not prove effective in motivating BESP's to resolve PSAP service disruptions as quickly as possible, the Commission may wish to consider amending the Rules to incorporate minimum response times for BESP's to dispatch technicians to address service disruptions.

89. To the extent that the AAJ Authorities suggest that their outage classification system be incorporated into the Rules, the ALJ rejects this suggestion because it would overly complicate the Rules and may create confusion or uncertainty. The ALJ finds that the public interest is best served by maintaining reporting requirements for PSAP service disruptions even when the BESP delivers 9-1-1 calls to an alternate PSAP. As discussed, delivering 9-1-1 calls to alternate PSAPs delays emergency assistance to the public. This negatively impacts the public health, safety, and welfare, and thus, amounts to a significant and compelling state interest to regulate BES. That interest far outweighs any burden that BESP experience due to the Rule's reporting provisions. To be sure, BESP's reporting on PSAP service disruptions even where calls are delivered to an alternate PSAP will help the Commission better understand why these situations arise, and what, if anything, can be done to avoid them in the future. What is more, this also ensures that PSAPs and governing bodies are made aware of such disruptions, which better positions them to take steps to mitigate impacts on their ability to provide emergency support for the public. This serves the public interest, which must be first and paramount.¹⁴⁴

90. The ALJ adopts changes to Rule 2143(j) that address some comments' concerns, incorporate changes from Rule 2131, and otherwise reorganize existing language to improve clarity and readability. In addition, the ALJ deletes "potential BES outage," and replaces it with "possible PSAP service disruption" in Rule 2143(j) to align the Rule with other changes, improve clarity and address comments criticizing the Rule's use of "potential." The adopted Rule's use of "possible" in reference to reportable PSAP service disruptions is intended to capture situations in which a PSAP experiences a service disruption, but the PSAP, governing body, or the BESP lack certainty as to whether the disruption was the result of an incident in the BES network or on the

¹⁴⁴ *Pub. Serv. Co. of Colo.*, 350 P.2d at 549.

BESP's side of the demarcation point.¹⁴⁵ Either way, the Rule's requirements are triggered when there is a disruption, not when there is potential for a disruption to occur. Providing notice of a service disruption cues the impacted PSAPs and governing bodies to take steps to mitigate the disruption's impact on providing the public emergency assistance, and enables the Commission to investigate that disruption to determine whether future preventative efforts are needed. This is why the Rule must trigger the notice and reporting provisions when there is both a confirmed or possible PSAP service disruption.

91. For the reasons discussed, the ALJ adopts the following language for Rule 2143(j):

- (j) In the event of a confirmed or ~~potential BES outage~~ possible PSAP service disruption, the following shall occur.
- (I) The BESP shall notify each affected governing body or PSAP via the contacts previously provided in accordance with paragraph (c) of this rule. Such notifications shall be made as soon as is practical, and shall include a trouble ticket number, the nature and extent of the ~~BES outage~~ confirmed or possible PSAP service disruption, if known, and the actions being taken to correct the ~~outage~~ disruption. If applicable, the notice shall include interim measures being taken to route 9-1-1 calls to alternate PSAPs or other locations. If known, the notification shall also include an estimated time of repair.
- (II) If the ~~BES outage~~ confirmed or possible PSAP service disruption exceeds or is anticipated to exceed 15 minutes from the time a BESP becomes aware of the ~~outage~~ disruption, the BESP shall implement the appropriate contingency plan as established in paragraph (e) or provide temporary solutions so that 9-1-1 calls can be answered until the disruption is resolved ~~BES is restored~~. The BESP shall coordinate any alternate solutions with the contact(s) provided in accordance with paragraph (c) for the affected governing body or PSAP. In the event of a confirmed or possible PSAP service disruption, the BESP must deliver all 9-1-1 calls to an alternate PSAP, if possible, until the disruption is resolved.

¹⁴⁵ Put differently, when a service disruption occurs, it may not be immediately known whether that disruption meets the definition of PSAP service disruption. For example, service could be disrupted due a fiber cut on the BESP's side of the demarcation point, or due to PSAP equipment failure, but the cause may not be immediately apparent.

- (III) If a confirmed or possible PSAP service disruption of BES exceeds 30 minutes in duration, the responsible BESP shall inform the Commission within two hours of the time that the BESP becomes aware of the disruption outage. Such notification shall be made through a service disruption reporting form, available on the Commission's website, in a manner prescribed by the Commission, outlining the nature and extent of the outage and actions taken to restore service and any interim measures taken to mitigate the outage prior to resolution. The BESP shall notify the Commission of restoration of service by the beginning of the next business day. This notification shall be followed within 30 days of such outage by a report to the Commission. The report shall follow Commission reporting format and guidelines and shall include a statement of whether call back numbers for 9-1-1 calls, which could not be connected, were provided to the PSAP pursuant to subparagraph 2143(j)(V). Commission staff may request an update regarding an ongoing outage at any time.
- (IV) In addition to the notification to Commission staff required by subparagraph (III), the BESP shall also copy Commission staff on all email notifications provided to Colorado PSAPs regarding confirmed or possible PSAP service disruptions at an email address designated for this purpose. All 9-1-1 calls received by the BESP shall be routed to the PSAP with primary responsibility for dispatching first responders to the caller's location, or in accordance with the alternate solutions described in paragraph (j)(II) of this rule, or, if unavailable, to another PSAP if possible.
- (V) The BESP shall notify the Commission of restoration of service by the beginning of the next business day following service restoration. Following the restoration of BES, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the outage. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information.
- (VI) The BESP shall submit a final report to the Commission through the service disruption reporting form within 30 days of the restoration of service. The report shall include a statement as to whether call back numbers for 9-1-1 calls which could not be connected due to the confirmed or possible PSAP service disruption were provided to the PSAP as required by subparagraph 2143(j)(VII). In the event of a BES outage of more than four hours duration, or 12 hours in duration if the outage is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the duration of the outage in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles.

- (VII) Following the restoration of PSAP service, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the disruption. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information. The BESP must provide this information to the governing body or PSAP without requiring a request from the governing body or PSAP.
- (VIII) In the event of a confirmed PSAP service disruption of more than four hours duration, or 12 hours in duration if the disruption is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the full duration of the disruption in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles to the governing body or PSAP that normally receives the bill. If, as the result of a formal complaint proceeding or other proceeding, the Commission finds that a BESP has failed to provide a credit required under this paragraph, the Commission may order the amount of the credit to be doubled. The BESP must provide billing credits required under this rule automatically, without requiring a request from the governing body or PSAP. Additionally, civil penalties may be assessed as described in rules 2009 through 2011.

92. The ALJ agrees with comments that Rule 2143(k) should be modified, though primarily for different reasons than comments suggest. Rule 2143(k) mandates that the Commission commence an informal investigation of apparent BES outages that meet the criteria that the Task Force establishes, but the Task Force's criteria are not included in the Rule. The ALJ finds that to improve transparency and ensure that the adopted criteria are clearly identified consistent with the Administrative Procedures Act, Rule 2143(k) should be amended to include the Task Force's criteria, except as noted below.¹⁴⁶ The Task Force identified the following criteria to trigger a mandatory investigation: multiple PSAPs are affected; the details of the outage are unclear from the report; the outage lasted longer than four hours; there was an unusual pattern of impact; there was an apparent failure to notify the PSAP in a timely manner; there were repeated

¹⁴⁶ Existing Rule 2143(k) may essentially incorporate the Task Force's criteria by reference, which could run afoul of the requirements in § 24-4-103(12.5), C.R.S., for rules to incorporate standards by reference.

outages of a similar nature or in the same area over a short period of time; at the request of one or more affected PSAP or governing body; or when there was a potential or apparent violation of any Commission rule.¹⁴⁷ The ALJ does not adopt criteria requiring investigations when there is an unusual pattern of impact due to vagueness concerns. With this change, and other minor changes to improve clarity and avoid ambiguous language, the ALJ adopts changes to Rule 2143(k) to identify the referenced criteria. As modified, the ALJ finds that the criteria set reasonable limits on when an investigation must occur. These limits dispel arguments that the Commission must investigate any service disruption. The ALJ does not adopt changes to make investigations discretionary because the adopted criteria already limit the circumstances under which an investigation is needed, and doing so would create needless uncertainty as to the circumstances under which the Commission will investigate.

93. For the reasons discussed, the ALJ rejects BRETSA's modifications to Rule 2143(k). Its modifications introduce unnecessary requirements and formalities that would needlessly complicate investigations (*e.g.*, numerous suggested meeting requirements); creates inefficiencies; and may require BESP's and other investigation participants to unnecessarily expend additional resources. BRETSA's modifications would also limit Commission staff's discretion in multiple ways, by, for example, providing PSAP's and governing bodies authority to make findings that impact steps in the investigation or requiring that investigations remain open longer than the Rule's default 60-day period.¹⁴⁸ Such requirements are unnecessary because the Rule already contemplates staff coordinating with the impacted PSAP or governing body and allowing staff to keep an investigation open longer than 60 days when reasonable under the circumstances.

¹⁴⁷ See Filing Adopting Criteria.

¹⁴⁸ BRETSA's 5/1/24 Comments at 5.

94. For the same reasons discussed above, the ALJ replaces “apparent” with “possible” in Rule 2143(k), which addresses CenturyLink’s comments on this.¹⁴⁹ The ALJ also adopts changes to reflect newly adopted terminology.

95. For the reasons discussed, the ALJ adopts the following language for Rule 2143(k):¹⁵⁰

(k) Commission staff shall commence an informal investigation regarding each confirmed or possible PSAP service disruption ~~apparent basic emergency service outage~~ meeting the below criteria, established by the 9-1-1 Advisory Task Force despite the dispute resolution process ~~set forth~~ in the BESP’s tariff, if any. The 9-1-1 Advisory Task Force may participate in the investigation.

(I) Informal investigations are required when the service disruption meets any of the following criteria:

(A) multiple PSAPs are affected;

(B) the details of the service disruption, such as the cause, the beginning and end times, and the implemented mitigation strategies are unclear from the information available to Commission staff;

(C) the service disruption lasted longer than four hours;

(D) there was an apparent failure to notify the PSAP as required by subparagraph 2143(j)(I);

(E) there were repeated service disruptions of a similar nature or in the same area within a 30-day period;

(F) at the request of one or more affected PSAP or governing body; or

(G) when there was a possible violation of a Commission rule.

(II) Each informal investigation under this paragraph will ~~should~~ be handled as follows.

(A) Commission staff shall refer an informal investigation form to the BESP for its written response on a standardized form developed by

¹⁴⁹ Indeed, when a disruption occurs, it may not be immediately known whether it was caused by an issue inside the BES network or on the BESP’s side of the demarcation point or the PSAP’s. An investigation determines which is the case, which enables the Commission to determine whether the disruption is a PSAP service disruption that may require future preventative efforts.

¹⁵⁰ As comments demonstrate, these changes are consistent with the subject-matter in the NOPR, and as such, may be adopted without running afoul of § 24-4-103, C.R.S. *See* § 24-4-103(4)(c), C.R.S.

Commission staff for that purpose. This form shall include questions developed by and solicited from the affected governing body or PSAP and the 9-1-1 Advisory Task Force. The BESP shall respond in writing with complete responses within thirty days, or such lesser or greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. If requested, the response shall include: (1) the NOC call log entries; and (2) copies of e-mails and transcripts or recordings of phone calls between the NOC and other parties related to the outage confirmed or possible PSAP service disruption.

(B) [Omitted as unaffected]

(C) [Omitted as unaffected]

- (III) During the pendency of an informal investigation, communications regarding the investigation between Commission staff and any participant in the investigation shall be in writing and copied to the BESP, Commission staff, the affected governing body or PSAP, and the Chair of the 9-1-1 Advisory Task Force or his or her designee. Commission staff shall maintain a complete file related to each informal investigation, including all communications and recordings, and access to and use of the file is subject to applicable Commission rules regarding information claimed to be confidential or highly confidential.
- (~~IV~~) Commission staff will document in a report the closure of each informal investigation within sixty days of the outage confirmed or possible PSAP service disruption, or such greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. The report should include whether the outage incident was a ~~BES outage~~ PSAP service disruption as defined in paragraph 2131(cc), whether the BESP handled the ~~BES outage~~ PSAP service disruption in a timely manner with the appropriate personnel, and whether the BESP has taken or committed to taking corrective action to prevent or mitigate a similar outage disruption from occurring in the future, specifying the corrective action and the timeframe, if applicable. The report shall also document any non-compliance with Commission rules or the BESP's tariff, including the BESP's service quality plan. Within 14 days, the 9-1-1 Advisory Task Force, the affected governing body or PSAP, or the BESP may submit to Commission staff written comments, which Commission staff shall append to the report and preserve in the informal investigation file.
- (IV) At any time, Commission staff, the 9-1-1 Advisory Task Force, or the affected governing body or PSAP may commence a proceeding before the

Commission, at which time the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report. If the affected governing body or PSAP seeks relief in an alternative forum, then the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report.

5. Rule 2335 - The Provision of Service During Maintenance or Emergencies.

96. The NOPR proposes minor changes to Rule 2335(d) to update a cross-reference to Rule 2143 and other terminology.

a. Discussion, Findings, and Conclusions

97. No one filed public comments on the above proposed Rule changes. The ALJ finds that changes to the Rule are appropriate to align it with other Rule changes. The ALJ adopts the proposed Rule with minor modifications to improve clarity, reflect terminology changes to adopted Rule 2131, and update internal Rule cross-references. Of note, the ALJ modifies Rule 2335(d) to refer to "access to emergency service as defined in Rule 2001(b), and basic emergency service."

6. Other Rule Changes that Comments Suggest

98. Rule 2001 is not included in the NOPR. Nonetheless, CenturyLink suggests that the Commission delete Rule 2001(b) (defining access to emergency services).¹⁵¹ In support, CenturyLink explains that the definition references BES provided by local governments or other public safety organizations, but such entities do not offer BES. Rather, BESP's offer this service.¹⁵² It states that Rule 2307(a)(IV) is the only place in the Rules where this definition is used, which is confusing "at best."¹⁵³

¹⁵¹ CenturyLink's 2/12/24 Comments at 5.

¹⁵² *Id.*

¹⁵³ *Id.*

99. BRETSA agrees that the reference in Rule 2001(b) to BES is inappropriate.¹⁵⁴ It suggests that Rule 2001(b) be amended to replace the reference to BES with either “9-1-1 Service” as defined in Rule 2131(e) or “Emergency Telephone Service” as defined in § 29-11-101(4), C.R.S.¹⁵⁵ Alternatively, it suggests that Rule 2001(b) be deleted and Rule 2307(a)(IV) be revised to refer to access to Emergency Telephone Service as defined in § 29-11-101(14), C.R.S.¹⁵⁶

a. Discussion, Findings, and Conclusions

100. The ALJ agrees that Rule 2001(b)’s definition of “access to emergency services” incorrectly implies that PSAPs and local governments provide BES. This definition ties into requirements under Rule 2307 for switched access service and basic service providers to ensure that those using their service can access emergency services (by dialing 9-1-1 on their phone), and adopted Rule 2335(d), discussed above. For the reasons discussed, the ALJ adopts the following changes to Rule 2001(b):

- (b) "Access to emergency services" means access to ~~services, such as 9-1-1 basic emergency telephone service provided by local governments or other public safety organizations~~ as defined in § 29-11-101(14), C.R.S., to the extent the local government or the public safety organization has implemented 9-1-1.

B. Conclusions

101. In adopting Rules, the ALJ has endeavored to balance the many competing interests at stake while placing the public interest first and paramount.¹⁵⁷ As noted, to effectuate the changes to definitions in Rule 2131, this Decision adopts changes throughout the Rules to replace outdated

¹⁵⁴ BRETSA’s 2/21/24 Comments at 7.

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Pub. Serv. Co. of Colo.*, 350 P.2d at 549.

terminology with adopted terminology, which is within the subject-matter of the NOPR.¹⁵⁸ The ALJ adopts Rules consistent with the above discussion, as set forth in Attachments A and B hereto.

102. Being fully advised in this matter and consistent with the above discussion, in accordance with § 40-6-109, C.R.S., the ALJ now transmits to the Commission the record in this proceeding along with this written recommended decision and attachments.

V. **ORDER**

A. **It Is Ordered That:**

1. The Rules Regulating Telecommunications Services and Providers of Telecommunications Services in 4 *Code of Colorado Regulations* (the Rules), 4 *Code of Colorado Regulations* 723-2 attached to this Recommended Decision as Attachments A and B are adopted.

2. The rules in redline and final format (Attachments A and B), are available through the Commission's E-Filings system at:

https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=23R-0577T

3. Proceeding No. 23R-0577T is closed.

4. This Recommended Decision will be effective on the day it becomes the Decision of the Commission, if that is the case, and is entered as of the date above.

5. As provided by § 40-6-109, C.R.S., copies of this Recommended Decision will be served upon the parties, who may file exceptions to it.

6. If no exceptions are filed within 20 days after service or within any extended period of time authorized, or unless the decision is stayed by the Commission upon its own motion, the

¹⁵⁸ Because such changes are consistent with the subject-matter in the NOPR, they may be adopted without running afoul of § 24-4-103, C.R.S. See § 24-4-103(4)(c), C.R.S.

recommended decision will become the decision of the Commission and subject to the provisions of § 40-6-114, C.R.S.

7. If a party seeks to amend, modify, annul, or reverse basic findings of fact in its exceptions, that party must request and pay for a transcript to be filed, or the parties may stipulate to portions of the transcript according to the procedure stated in § 40-6-113, C.R.S. If no transcript or stipulation is filed, the Commission is bound by the facts set out by the administrative law judge and the parties cannot challenge these facts. This will limit what the Commission can review if exceptions are filed.

8. If exceptions to this Decision are filed, they may not exceed 30 pages in length, unless the Commission for good cause shown permits this limit to be exceeded.

(S E A L)



THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

MELODY MIRBABA

Administrative Law Judge

ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads "Rebecca E. White".

Rebecca E. White,
Director

COLORADO DEPARTMENT OF REGULATORY AGENCIES

Public Utilities Commission

4 CODE OF COLORADO REGULATIONS (CCR) 723-2

PART 2

**RULES REGULATING TELECOMMUNICATIONS SERVICES
 AND PROVIDERS OF TELECOMMUNICATIONS SERVICES**

2001. Definitions.

* * * *

[indicates omission of unaffected rules]

(b) "Access to emergency services" means access to ~~services, such as 9-1-1 basic~~ emergency telephone service ~~provided by local governments or other public safety organizations as defined in § 29-11-101(14), C.R.S.,~~ to the extent the local government or the public safety organization has implemented 9-1-1.

* * * *

[indicates omission of unaffected rules]

2011. Regulated Telecommunications Utility Rule Violations, Civil Enforcement, and Civil Penalties.

An admission to or Commission adjudication for liability for an intentional violation of the following may result in the assessment of a civil penalty of up to \$2,000.00 per offense. Fines shall accumulate up to, but shall not exceed, the applicable statutory limits set in § 40-7-113.5, C.R.S.

Citation	Description	Maximum Penalty Per Violation
Rule 2109(b),(e)-(g); text preceding (a)	Discontinuance of Regulated Services	\$2000
Rule 2110, text preceding (a) only	Applications to Transfer or Encumber	\$2000

Rule 2122	Keeping a Current Tariff on File with the Commission	\$2000
Rule 2135	Uniform System of Accounts, Cost Segregation and Collection	\$2000
Rule 2136	Obligations of Basic Emergency Service Providers	\$2000
Rule 2139	Obligations of Resellers of Basic Local Exchange Service	\$2000
Rule 2142	Nondisclosure of Name/Number/Address Information	\$2000
Rule 2143	Diverse Routing and Priority Service Restoration <u>Basic Emergency Service Reliability and Service Disruption Response</u>	\$2000
Rule 2150	Administration of the 9-1-1 Surcharge Trust Cash Fund	\$2000
Rule 2152	Audit of Service Providers Regarding Emergency Telephone Charge and 9-1-1 Surcharge Practices	\$2000
Rule 2186(a),(d), (e) and (f)	Relinquishment of Designation as Provider of Last Resort	\$2000
<u>Rule 2302(a)-(c);(e)-(g)</u>	<u>Applications for Service, Customer Deposits, and Third Party Guarantees</u>	<u>\$500</u>
Rule 2305, text preceding (a) only	Refund Plans	\$2000
<u>Rule 2334</u>	<u>Construction and Maintenance Practices for Telecommunications Facilities</u>	<u>\$1000</u>
Rule 2335	Provision of Service During Maintenance or Emergencies	\$2000
<u>Rule 2337(a)</u>	<u>Standard Performance Characteristics for Customer Access Lines</u>	<u>\$1000</u>

Rule 2413	Affiliate Transactions for Local Exchange Providers	\$2000
Rule 2533	Submission of Agreement and Amendments for Approval	\$2000
Rule 2742	Abbreviated Dialing Codes	\$2000
Rule 2334	Construction and Maintenance Practices for Telecommunications Facilities	\$1000
Rule 2337(a)	Standard Performance Characteristics for Customer Access Lines	\$1000
Rule 2302(a)-(c);(e)-(g)	Applications for Service, Customer Deposits, and Third Party Guarantees	\$500
Rule 2823(a),(c)-(e)	Conformity with the Federal Americans with Disabilities Act of 1990	\$100
Rule 2824	Conformity with the Commission's Quality of Service Rules	\$100
Rule 2827(b)	Timely or Completely Filing or Making Appropriate Payments to the TRS Fund	\$100
Rule (TBD) 2845	Timely or Completely Filing or Making Appropriate Payments to the HCSM Fund	\$100

* * * *

[indicates omission of unaffected rules]

2131. Definitions.

The following definitions apply only in the context of rules 2130 through 2159:

- (a) "9-1-1" means a three-digit abbreviated dialing code used to report an emergency situation requiring a response by a public agency such as a fire department or police department.
- (b) "9-1-1 access connection" means any communications service including wireline, wireless cellular, interconnected voice-over-internet-protocol, or satellite in which connections are enabled, configured, or capable of making 9-1-1 calls. The term does not include facilities-based broadband services. The number of 9-1-1 access connections is determined by the configured capacity for simultaneous outbound calling.

- (c) “9-1-1 Advisory Task Force” means the representative group established in accordance with rule 2145, which provides oversight of the statewide implementation and provision of basic emergency service, and periodically reports to the Commission on matters related to 9-1-1 service delivery in the state of Colorado.
- (d) “9-1-1 call” means a request for emergency assistance from the public by dialing 9-1-1 or addressing the E911 regardless of the technology used, and may include voice, text, images, and video, whether originated by wireline, wireless, satellite, or other means.
- (e) “9-1-1 service” means the service by which a 9-1-1 call is routed and transported from the end user to the governing body or PSAP serving the caller’s location. 9-1-1 service also includes location information routed to the PSAP.
- (f) “9-1-1 surcharge” or “state 9-1-1 surcharge” means the surcharge established pursuant to § 29-11-102.3, C.R.S.
- (g) “Alternate PSAP” means a PSAP or PSAPs designated to receive 9-1-1 calls when the BESP is unable to deliver those calls to the primary demarcation point, or at the request of the PSAP that is normally responsible for receiving calls in that geographic area or at the request of its governing body.
- (h) “Automatic Location Identification” (ALI) means the automatic provision to a PSAP for display, on equipment at the PSAP, of the telephone number and location of the caller. ALI data includes non-listed and non-published numbers and addresses, and other information about the caller’s location.
- (hi) “Automatic Number Identification” (ANI) means the automatic provision to a PSAP for display of the caller’s telephone number at the PSAP
- (ij) “Basic emergency service” (BES) means the aggregation and transportation of a 9-1-1 call directly to a demarcation point with a governing body or PSAP, regardless of the technology used to provide the service. The aggregation of calls means the collection of 9-1-1 calls from one or more OSPs or IASPs for the purpose of selectively routing and transporting 9-1-1 calls directly to a demarcation point with a governing body or PSAP. The offering or providing of location information or selective routing directly to a governing body or PSAP is also a basic emergency service. Basic emergency service does not include:
 - (I) the portion of a 9-1-1 call provided by an OSP;
 - (II) the portion of a 9-1-1 call or services provided by an IASP;
 - (III) the portion of a 9-1-1 call from the OSP or an IASP to a demarcation point with the BESP;
 - (IV) the portion of a 9-1-1 call after the demarcation point between the BESP and the governing body or PSAP; or
 - (V) the delivery of text messages to a governing body or PSAP via networks or connections separate from the basic emergency service network.

- (k) “Basic emergency service facilities” or “BES facilities” means the lines, wires, cables, conduit, ducts, poles, cross-arms, equipment, supporting structures, and other infrastructure used by the BESP to provide basic emergency service. “Facilities” has the same meaning, unless the context requires otherwise.
- (l) “Basic emergency service network” or “BES network” means the portion of the 9-1-1 call path that begins at the demarcation point between an OSP or IASP and a BESP and ends at the demarcation point between a BESP and a governing body or PSAP to provide basic emergency service.
- ~~(l) “Basic emergency service outage” or “BES outage” means a failure of basic emergency service that prevents or would prevent 9-1-1 calls, ANI, or location information from being delivered from the demarcation point between the OSP or IASP and the BESP to the demarcation point between the BESP and the governing body or PSAP.~~
- (m) “Basic Emergency Service Provider” (BESP) means any person certificated by the Commission to provide basic emergency service.
- (n) “Concurrent session” means a channel for an inbound simultaneous 9-1-1 call.
- (o) “Demarcation point” means a physical point of interconnection where the responsibility for a portion of 9-1-1 service changes from one party to another. ~~It includes the point of interconnection between BESP and the OSP, IASP, or other BESP for the purpose of selectively routing and transporting 9-1-1 calls directly to a demarcation point with a governing body or PSAP. It includes the point of interconnection mutually agreed upon in writing by the BESP and each governing body or PSAP with primary responsibility for dispatching first responders to the callers’ locations.~~
- (p) “Emergency notification service” (ENS) means a public alerting service that, upon activation by a public agency, rapidly distributes notifications within a specified geographic area of hazardous conditions or emergent events that threaten the health or lives of people or threatens damage or destruction of property, including, without limitation, floods, fires, and hazardous materials incidents.
- (q) “Emergency telephone charge” means a charge established by a governing body pursuant to § 29-11-102(2)(a), C.R.S., to pay for the expenses authorized in § 29-11-104, C.R.S.
- (r) “Geographic area” means the area such as a city, municipality, county, multiple counties or other areas defined by a governing body or other governmental entity for the purpose of providing public agency response to 9-1-1 calls.
- (s) “Governing body” means the organization responsible for establishing, collecting, and disbursing the emergency telephone charge in a specific geographic area, pursuant to §§ 29-11-102, 103, and 104, C.R.S.
- (t) “Improvement amount” means the amount approved by the Commission as described in subparagraph 2137(e)(II).

- (u) “Improvement plan” means the plan proposed by a BESP or approved by the Commission as described in paragraph 2143(b).
- (v) “Intermediary aggregation service provider” (IASP) means a person that aggregates and transports 9-1-1 calls for one or more OSPs for delivery to a demarcation point with a BESP.
- (w) “Location information” means ALI or its functional equivalent associated with a 9-1-1 call and provided by a BESP pursuant to its BES tariff.
- (x) "Multi-line telephone system" (MLTS) means a system comprised of common control units, telephones, and control hardware and software providing local telephone service to multiple customers in businesses, apartments, townhouses, condominiums, schools, dormitories, hotels, motels, resorts, extended care facilities, or similar entities, facilities, or structures. Multi-line telephone system includes:
 - (I) network and premises-based systems such as Centrex, PBX, and hybrid-key telephone systems; and
 - (II) systems owned or leased by governmental agencies, nonprofit entities, and for-profit businesses.
- (y) "Multiple-line telephone system operator" means the person that operates an MLTS from which an end user may place a 9-1-1 call through the public switched network.
- (z) “Network Operations Center” (NOC) or “Basic Emergency Service Network Operations Center” means a 24x7, 365 days a year single point of contact for Basic Emergency Service (BES). The NOC is responsible for monitoring the BES network, notifying PSAPs of ~~BES outages~~PSAP service disruptions, initiating repairs, troubleshooting, and resolving BES network issues.
- (aa) “Originating service provider” (OSP) means a local exchange carrier, wireless carrier, Voice-over-Internet-Protocol service provider, or other provider of functionally equivalent services supplying the ability to place 9-1-1 calls.
- (bb) “Primary demarcation point” means the demarcation point designated to the BESP as the primary or first location for delivery of 9-1-1 calls, ANI, and location information for a specific geographic area. This designation is determined by the governing body or PSAP with jurisdictional authority for the geographic area from which the call originates. The physical location of a primary demarcation point may be at a PSAP, at a point of interconnection with a governing body’s local network, or at any other location designated by the governing body or PSAP for delivery of 9-1-1 calls to a PSAP.
- (cc) “PSAP service disruption” means any situation in which a BESP is unable to deliver 9-1-1 calls, ANI, or location information to the primary demarcation point due to an event or incident inside the BES network or on the BESP’s side of the demarcation point. A PSAP service disruption includes, but is not limited to:
 - (I) any event or incident that occurs inside the BES network that results in or requires the BESP to reroute 9-1-1 calls to the demarcation point for an alternate PSAP or the governing body for an alternate PSAP; or

(II) any situation in which a PSAP is unable to receive 9-1-1 calls or location information as the result of an event or incident that occurs inside the BES network, even if the facilities involved in the event or incident also provide OSP connectivity.

(~~ddb~~) "Public Safety Answering Point" (PSAP) means a facility equipped and staffed to receive and process 9-1-1 calls from a BESP.

(~~eee~~) "Selective routing" means the routing of a 9-1-1 call to the demarcation point with a governing body or PSAP based upon the location information or other factors as agreed upon by the governing body or PSAP.

* * * *

[indicates omission of unaffected rules]

2134. Process for Certification of Basic Emergency Service Providers (BESPs).

* * * *

[indicates omission of unaffected rules]

(e) ~~Two years from the grant of the application~~ By March 30, 2025, and each two years thereafter, each BESP actively providing BES shall file with the Commission updates regarding any changes to the following required information in paragraph (c): items (I)-(IV), (XII)-(XVIII), (XX)-(XXV), and (XXIX)(A)-(C). Additionally, the BESP shall include with this filing an attestation that the information provided is true, accurate, and correct, and that the BESP remains financially and administratively sound and capable of providing the BES offered in its current tariff(s).

* * * *

[indicates omission of unaffected rules]

2136. Obligations of Basic Emergency Service Providers.

(a) A BESP certificated by the Commission shall interconnect with all OSPs and IASPs who have customers in areas served by the BESP. BESPs shall interconnect with all other BESPs for the purpose of transferring 9-1-1 calls to PSAPs served by the other BESPs.

(b) The BESP shall provide geographically diverse demarcation points for aggregating 9-1-1 calls and location information from OSPs and IASPs. At the request of an OSP or IASP, a BESP shall interconnect with the requestor for the purpose of aggregating and transporting 9-1-1 calls and location information from the requestor to the demarcation point with the governing body or PSAP. Interconnection shall be accomplished in a timely manner, generally not more than 30 days from the time the BESP receives a written order. Interconnection facilities shall generally be engineered as follows:

(I) dedicated facilities for connecting OSPs and IASPs to a BESP shall be based on the requirements established by the BESP to serve the customers within that local exchange;
or

- (II) if shared or common facility groups are used to transport calls from an OSP or IASP to a BESP, they shall be sized to carry the additional call volume requirements. Additionally, common or shared groups shall be arranged to provide 9-1-1 calls on a priority basis where economically and technically feasible.
- (c) A BESP shall develop and file with the Commission tariffs that comply with the requirements set forth in rule 2137.
- (d) A BESP shall render to each governing body or PSAP a single monthly bill for its tariffed services. The monthly bill shall be sufficiently detailed to allow the governing body or PSAP to determine that it is being billed properly based on the billing increments as approved by the Commission.
- (e) BESP's shall ensure, to the extent possible and in the most efficient manner, that basic emergency service is available for transmitting 9-1-1 calls from deaf, hard of hearing, and persons with speech impairments to the appropriate PSAP.
- (f) A BESP shall ensure that all BES facilities, and interconnections between it and the OSPs and IASPs are engineered, installed, maintained, and monitored in order to provide a minimum of two circuits and a minimum P.01 grade of service (one percent or less blocking during the busy hour), or such other minimum grade of service requirements approved by the Commission.
- (g) Where a BESP obtains BES facilities from a basic local exchange carrier, the rates for such facilities shall be reflected in a tariff or agreement filed for approval with the Commission. Such tariffs or agreements shall ensure that such facilities are engineered, installed, maintained, and monitored to provide a minimum of two circuits and a grade of service that has one percent (P.01) or less blocking. The basic local exchange carrier providing such facilities shall not be considered a BESP. The provisions of this rule shall not apply to routing arrangements implemented pursuant to paragraph 2143(j)(II).
- (h) To expedite the restoration of service following a 9-1-1 outage PSAP service disruption, each BESP shall designate a telephone number for governing bodies, PSAPs, IASPs, and OSPs to report trouble. Such telephone number shall be staffed seven days a week, 24 hours a day, by personnel capable of processing calls to initiate immediate corrective action.
- (i) A BESP shall keep on file with the Commission its contingency plan as described in paragraph 2143(e).
- (j) BESP's shall identify service providers supplying service within a governing body or PSAP's service area, or statewide, to the extent that the BESP possesses such information, in response to a request from a governing body, PSAP, or the Commission.
- (k) A BESP shall report to the Commission a list of every PSAP serviced by the BESP with the number of concurrent sessions provided to each PSAP. This report shall be updated and filed annually with the Commission by June 1 of each year.
- (l) These requirements are in addition to those in paragraph 2335(d). If the BESP is aware of repairs or maintenance being conducted or to be conducted that have the potential to impact service to a primary demarcation point, the BESP shall notify the associated PSAP(s) of the potential of a PSAP service disruption at least 24 hours prior to work commencing, or as soon as

possible. This notification shall be provided by voice call to the PSAP, if possible, and to the contact maintained for the PSAP as described in paragraph 2143(c). When scheduling routing maintenance or repairs, the BESP should schedule such repairs at a time likely to cause the least impact to the affected PSAP(s). Wherever practicable, maintenance of the BES network shall be performed with no scheduled downtime. The BESP shall employ best efforts to ensure that planned events for routine maintenance are scheduled and communicated to avoid impacts to each affected PSAP's 9-1-1 operations. Conduct of emergency or unscheduled repairs in order to restore service to a PSAP should not be delayed in order to make PSAP notification.

2137. Required Components of a Basic Emergency Service Tariff.

- (a) At a minimum, a BES tariff must include the following services:
- (I) delivery of 9-1-1 calls to the demarcation point with the governing body or PSAP with primary responsibility for dispatching first responders to the caller's location unless otherwise directed by the PSAP or governing body;
 - (II) delivery of location information to the governing body or PSAP receiving the 9-1-1 call;
 - (III) the ability to automatically route 9-1-1 calls to one or more alternate PSAPs, as designated by the governing body or PSAP, in the event of a call overflow, outagePSAP service disruption, or PSAP abandonment, including split contingent routing of 9-1-1 calls to multiple alternate PSAPs if feasible;
 - (IV) the ability to transfer 9-1-1 calls to other Colorado governing bodies or PSAPs with location information;
 - (V) when feasible, the ability to transfer 9-1-1 calls to 10-digit lines without additional long distance charges;
 - (VI) if feasible, the ability to transfer 9-1-1 calls to a PSAP in another state with location information without additional long distance charges;
 - (VII) processes or tools that a governing body or PSAP and the BESP may use to pre-validate location information and routing information associated with specific telephone numbers and to correct such information or to report telephone numbers that do not have associated location information;
 - (VIII) minimum quality of service metrics that the BES will meet (examples: service availability percentage, jitter, packet loss, mean opinion score, latency, successful call delivery percentage, and call delivery accuracy percentage);
 - (IX) a description of the internal schedules for testing, monitoring, maintaining, and replacing all equipment and electronics that will be used to provide BES;
 - (X) the provision of technical support 24 hours per day, every day of each year;
 - (XI) reporting tools for access to service metrics, call processing, call status, and other call and service data;

- (XII) nonrecurring charges for one-time costs, such as installation of equipment or change orders related to the delivery of BES must be listed separately in the tariff, unless those costs are included in the monthly recurring charges provided for in the tariff; and
- (XIII) terms of payment for invoices for BES must be stated, including late fees.

* * * *

[indicates omission of unaffected rules]

2143. Basic Emergency Service Reliability and Outage-Service Disruption Response.

* * * *

[indicates omission of unaffected rules]

- (c) Each BESP shall maintain contact information for each PSAP ~~as specified by the governing body or PSAP~~ served by the BESP for notification of actual or potential ~~BES outages~~PSAP service disruptions. No less than annually, the BESP shall contact each PSAP that is served by the BESP to verify the notification information on file.
- (d) The BESP shall obtain from each governing body or PSAP its preferred alternative method(s) for the governing body or PSAP and the BESP to communicate during a ~~BES outage~~PSAP service disruption.

* * * *

[indicates omission of unaffected rules]

- (g) Where feasible, the BESP should develop plans for its technicians to communicate with the NOC in the event of an isolation of a central office serving a PSAP in a manner that will allow for expeditious resolution of the ~~outage~~PSAP service disruption.

* * * *

[indicates omission of unaffected rules]

- (i) All call recordings and messages transmitted or received by the BESP regarding ~~an outage~~a PSAP service disruption shall be retained for at least 24 months. All logs, call recordings and messages concerning a specific ~~outage~~disruption shall be assigned a unique trouble ticket number.
- (j) In the event of a confirmed or ~~potential BES outage~~possible PSAP service disruption, the following shall occur.
 - (I) The BESP shall notify each affected governing body or PSAP via the contacts previously provided in accordance with paragraph (c) of this rule. Such notifications shall be made as soon as is practical, and shall include a trouble ticket number, the nature and extent of the ~~BES outage~~confirmed or possible PSAP service disruption, if known, and the actions

being taken to correct the outagedisruption. If applicable, the notice shall include interim measures being taken to route 9-1-1 calls to alternate PSAPs or other locations. If known, the notification shall also include an estimated time of repair.

- (II) If the BES outageconfirmed or possible PSAP service disruption exceeds or is anticipated to exceed 15 minutes from the time a BESP becomes aware of the outagedisruption, the BESP shall implement the appropriate contingency plan as established in paragraph (e) or provide temporary solutions so that 9-1-1 calls can be answered until the disruption is resolvedBES is restored. The BESP shall coordinate any alternate solutions with the contact(s) provided in accordance with paragraph (c) for the affected governing body or PSAP. In the event of a confirmed or possible PSAP service disruption, the BESP must deliver all 9-1-1 calls to an alternate PSAP, if possible, until the PSAP service disruption is resolved.
- (III) If a confirmed or possible PSAP service disruption ~~of BES~~ exceeds 30 minutes in duration, the responsible BESP shall inform the Commission within two hours of the time that the BESP becomes aware of the disruptionoutage. Such notification shall be made through a service disruption reporting form, available on the Commission's website, in a manner prescribed by the Commission, outlining the nature and extent of the outage and actions taken to restore service and any interim measures taken to mitigate the outage prior to resolution. The BESP shall notify the Commission of restoration of service by the beginning of the next business day. This notification shall be followed within 30 days of such outage by a report to the Commission. The report shall follow Commission reporting format and guidelines and shall include a statement of whether call back numbers for 9-1-1 calls, which could not be connected, were provided to the PSAP pursuant to subparagraph 2143(j)(V). Commission staff may request an update regarding an ongoing outage at any time.
- (IV) In addition to the notification to Commission staff required by subparagraph (III), the BESP shall also copy Commission staff on all email notifications provided to Colorado PSAPs regarding confirmed or possible PSAP service disruptions at an email address designated for this purpose. All 9-1-1 calls received by the BESP shall be routed to the PSAP with primary responsibility for dispatching first responders to the caller's location, or in accordance with the alternate solutions described in paragraph (j)(II) of this rule, or, if unavailable, to another PSAP if possible.
- (V) The BESP shall notify the Commission of restoration of service by the beginning of the next business day following service restoration. Following the restoration of BES, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the outage. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information.
- (VI) The BESP shall submit a final report to the Commission through the service disruption reporting form within 30 days of the restoration of service. The report shall include a statement as to whether call back numbers for 9-1-1 calls which could not be connected due to the confirmed or possible PSAP service disruption were provided to the PSAP as required by subparagraph 2143(j)(VII). In the event of a BES outage of more than four

~~hours duration, or 12 hours in duration if the outage is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the duration of the outage in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles.~~

(VII) Following the restoration of PSAP service, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the disruption. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information. The BESP must provide this information to the governing body or PSAP without requiring a request from the governing body or PSAP.

(VIII) In the event of a confirmed PSAP service disruption of more than four hours duration, or 12 hours in duration if the disruption is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the full duration of the disruption in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles to the governing body or PSAP that normally receives the bill. If, as the result of a formal complaint proceeding or other proceeding, the Commission finds that a BESP has failed to provide a credit required under this paragraph, the Commission may order the amount of the credit to be doubled. The BESP must provide billing credits required under this rule automatically, without requiring a request from the governing body or PSAP. Additionally, civil penalties may be assessed as described in rules 2009 through 2011.

(k) Commission staff shall commence an informal investigation regarding each confirmed or possible PSAP service disruption~~apparent basic emergency service outage~~ meeting the below criteria ~~established by the 9-1-1 Advisory Task Force~~, despite the dispute resolution process ~~set forth~~ in the BESP's tariff, if any. The 9-1-1 Advisory Task Force may participate in the investigation.

(I) Informal investigations are required when the service disruption meets any of the following criteria:

(A) multiple PSAPs are affected;

(B) the details of the service disruption, such as the cause, the beginning and end times, and the implemented mitigation strategies are unclear from the information available to Commission staff;

(C) the service disruption lasted longer than four hours;

(D) there was an apparent failure to notify the PSAP as required by subparagraph 2143(j)(l);

(E) there were repeated service disruptions of a similar nature or in the same area within a 30-day period;

(F) at the request of one or more affected PSAP or governing body; or

(G) when there was a possible violation of a Commission rule.

- (I) Each informal investigation under this paragraph ~~will should~~ be handled as follows.
- (A) Commission staff shall refer an informal investigation form to the BESP for its written response on a standardized form developed by Commission staff for that purpose. This form shall include questions developed by and solicited from the affected governing body or PSAP and the 9-1-1 Advisory Task Force. The BESP shall respond in writing with complete responses within thirty days, or such lesser or greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. If requested, the response shall include: (1) the NOC call log entries; and (2) copies of e-mails and transcripts or recordings of phone calls between the NOC and other parties related to the ~~outage~~confirmed or possible PSAP service disruption.
- (B) The BESP's responses shall fairly meet the substance of each request. The BESP may not provide an incomplete response citing a lack of information or knowledge unless it states it has made diligent and reasonable inquiry and requests that Commission staff allow a reasonable extension of time not to exceed fourteen days. Additional reasonable extensions of time may be granted upon request. Requests for any extensions shall be accompanied with estimates of when information may be provided.
- (C) Commission staff, the affected governing bodies or PSAPs, or the 9-1-1 Advisory Task Force may also request a meeting with the BESP, which may be recorded, provided that the recording may not be used by any person for any purpose in subsequent proceedings before the Commission. The BESP should arrange for appropriate staff to participate in the meeting, including technical support, service, and management with relevant knowledge and sufficient level of authority or supervision.
- (II) During the pendency of an informal investigation, communications regarding the investigation between Commission staff and any participant in the investigation shall be in writing and copied to the BESP, Commission staff, the affected governing body or PSAP, and the Chair of the 9-1-1 Advisory Task Force or his or her designee. Commission staff shall maintain a complete file related to each informal investigation, including all communications and recordings, and access to and use of the file is subject to applicable Commission rules regarding information claimed to be confidential or highly confidential.
- (IV#) Commission staff will document in a report the closure of each informal investigation within sixty days of the ~~outage~~confirmed or possible PSAP service disruption, or such greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. The report should include whether the ~~outage-incident~~ was a ~~BES-outage~~PSAP service disruption as defined in paragraph 2131(cc), whether the BESP handled the ~~BES-outage~~PSAP service disruption in a timely manner with the appropriate personnel, and whether the BESP has taken or committed to taking corrective action to prevent or mitigate a similar ~~outage-disruption~~ from occurring in the future, specifying the corrective action and the timeframe, if applicable. The report shall also document any non-compliance with Commission rules or the BESP's tariff, including the BESP's service quality plan. Within 14 days, the 9-1-1 Advisory Task

Force, the affected governing body or PSAP, or the BESP may submit to Commission staff written comments, which Commission staff shall append to the report and preserve in the informal investigation file.

- (IV) At any time, Commission staff, the 9-1-1 Advisory Task Force, or the affected governing body or PSAP may commence a proceeding before the Commission, at which time the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report. If the affected governing body or PSAP seeks relief in an alternative forum, then the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report.

* * * *

[indicates omission of unaffected rules]

2335. The Provision of Service During Maintenance or Emergencies.

The following paragraphs describe minimum standards for maintaining service.

* * * *

[indicates omission of unaffected rules]

- (d) Service interruptions for an extended time due to maintenance requirements shall be performed at a time that causes minimal inconvenience to impacted customers. Each provider of services identified in rule 2330 shall take reasonable steps to notify the customer in advance of extended maintenance requirements. If possible, such providers shall also make access to emergency service as defined in paragraph 2001(b), and basic emergency service, as applicable, available by alternative means when the provider knows that the service interruption affects 1,000 or more access lines and when the provider knows, based upon the prior experience of the provider, that the interruption may last more than four hours during the hours of 8 a.m. to 10 p.m. If ~~the a basic emergency service~~ provider ~~cannot provide emergency service~~ experiences a possible or confirmed PSAP service, it shall file a report of the occurrence as required by subparagraph 2143(j)(III).

COLORADO DEPARTMENT OF REGULATORY AGENCIES

Public Utilities Commission

4 CODE OF COLORADO REGULATIONS (CCR) 723-2

PART 2

**RULES REGULATING TELECOMMUNICATIONS SERVICES
 AND PROVIDERS OF TELECOMMUNICATIONS SERVICES**

2001. Definitions.

* * * *

[indicates omission of unaffected rules]

(b) "Access to emergency services" means access to emergency telephone service as defined in § 29-11-101(14), C.R.S., to the extent the local government or the public safety organization has implemented 9-1-1.

* * * *

[indicates omission of unaffected rules]

2011. Regulated Telecommunications Utility Rule Violations, Civil Enforcement, and Civil Penalties.

An admission to or Commission adjudication for liability for an intentional violation of the following may result in the assessment of a civil penalty of up to \$2,000.00 per offense. Fines shall accumulate up to, but shall not exceed, the applicable statutory limits set in § 40-7-113.5, C.R.S.

Citation	Description	Maximum Penalty Per Violation
Rule 2109(b),(e)-(g); text preceding (a)	Discontinuance of Regulated Services	\$2000
Rule 2110, text preceding (a) only	Applications to Transfer or Encumber	\$2000
Rule 2122	Keeping a Current Tariff on File with the Commission	\$2000

Rule 2135	Uniform System of Accounts, Cost Segregation and Collection	\$2000
Rule 2136	Obligations of Basic Emergency Service Providers	\$2000
Rule 2139	Obligations of Resellers of Basic Local Exchange Service	\$2000
Rule 2142	Nondisclosure of Name/Number/Address Information	\$2000
Rule 2143	Basic Emergency Service Reliability and Service Disruption Response	\$2000
Rule 2150	Administration of the 9-1-1 Surcharge Trust Cash Fund	\$2000
Rule 2152	Audit of Service Providers Regarding Emergency Telephone Charge and 9-1-1 Surcharge Practices	\$2000
Rule 2186(a),(d), (e) and (f)	Relinquishment of Designation as Provider of Last Resort	\$2000
Rule 2302(a)-(c);(e)-(g)	Applications for Service, Customer Deposits, and Third Party Guarantees	\$500
Rule 2305, text preceding (a) only	Refund Plans	\$2000
Rule 2334	Construction and Maintenance Practices for Telecommunications Facilities	\$1000
Rule 2335	Provision of Service During Maintenance or Emergencies	\$2000
Rule 2337(a)	Standard Performance Characteristics for Customer Access Lines	\$1000
Rule 2413	Affiliate Transactions for Local Exchange Providers	\$2000

Rule 2533	Submission of Agreement and Amendments for Approval	\$2000
Rule 2742	Abbreviated Dialing Codes	\$2000
Rule 2823(a),(c)-(e)	Conformity with the Federal Americans with Disabilities Act of 1990	\$100
Rule 2824	Conformity with the Commission’s Quality of Service Rules	\$100
Rule 2827(b)	Timely or Complete Filing or Making Appropriate Payments to the TRS Fund	\$100
Rule 2845	Timely or Complete Filing or Making Appropriate Payments to the HCSM Fund	\$100

* * * *

[indicates omission of unaffected rules]

2131. Definitions.

The following definitions apply only in the context of rules 2130 through 2159:

- (a) "9-1-1" means a three-digit abbreviated dialing code used to report an emergency situation requiring a response by a public agency such as a fire department or police department.
- (b) "9-1-1 access connection" means any communications service including wireline, wireless cellular, interconnected voice-over-internet-protocol, or satellite in which connections are enabled, configured, or capable of making 9-1-1 calls. The term does not include facilities-based broadband services. The number of 9-1-1 access connections is determined by the configured capacity for simultaneous outbound calling.
- (c) "9-1-1 Advisory Task Force" means the representative group established in accordance with rule 2145, which provides oversight of the statewide implementation and provision of basic emergency service, and periodically reports to the Commission on matters related to 9-1-1 service delivery in the state of Colorado.
- (d) "9-1-1 call" means a request for emergency assistance from the public by dialing 9-1-1 or addressing the E911 regardless of the technology used, and may include voice, text, images, and video, whether originated by wireline, wireless, satellite, or other means.
- (e) "9-1-1 service" means the service by which a 9-1-1 call is routed and transported from the end user to the governing body or PSAP serving the caller’s location. 9-1-1 service also includes location information routed to the PSAP.

- (f) "9-1-1 surcharge" or "state 9-1-1 surcharge" means the surcharge established pursuant to § 29-11-102.3, C.R.S.
- (g) "Alternate PSAP" means a PSAP or PSAPs designated to receive 9-1-1 calls when the BESP is unable to deliver those calls to the primary demarcation point, or at the request of the PSAP that is normally responsible for receiving calls in that geographic area or at the request of its governing body.
- (h) "Automatic Location Identification" (ALI) means the automatic provision to a PSAP for display, on equipment at the PSAP, of the telephone number and location of the caller. ALI data includes non-listed and non-published numbers and addresses, and other information about the caller's location.
- (i) "Automatic Number Identification" (ANI) means the automatic provision to a PSAP for display of the caller's telephone number at the PSAP
- (j) "Basic emergency service" (BES) means the aggregation and transportation of a 9-1-1 call directly to a demarcation point with a governing body or PSAP, regardless of the technology used to provide the service. The aggregation of calls means the collection of 9-1-1 calls from one or more OSPs or IASPs for the purpose of selectively routing and transporting 9-1-1 calls directly to a demarcation point with a governing body or PSAP. The offering or providing of location information or selective routing directly to a governing body or PSAP is also a basic emergency service. Basic emergency service does not include:
 - (I) the portion of a 9-1-1 call provided by an OSP;
 - (II) the portion of a 9-1-1 call or services provided by an IASP;
 - (III) the portion of a 9-1-1 call from the OSP or an IASP to a demarcation point with the BESP;
 - (IV) the portion of a 9-1-1 call after the demarcation point between the BESP and the governing body or PSAP; or
 - (V) the delivery of text messages to a governing body or PSAP via networks or connections separate from the basic emergency service network.
- (k) "Basic emergency service facilities" or "BES facilities" means the lines, wires, cables, conduit, ducts, poles, cross-arms, equipment, supporting structures, and other infrastructure used by the BESP to provide basic emergency service. "Facilities" has the same meaning, unless the context requires otherwise.
- (l) "Basic emergency service network" or "BES network" means the portion of the 9-1-1 call path that begins at the demarcation point between an OSP or IASP and a BESP and ends at the demarcation point between a BESP and a governing body or PSAP to provide basic emergency service.
- (m) "Basic Emergency Service Provider" (BESP) means any person certificated by the Commission to provide basic emergency service.

- (n) “Concurrent session” means a channel for an inbound simultaneous 9-1-1 call.
- (o) “Demarcation point” means a physical point of interconnection where the responsibility for a portion of 9-1-1 service changes from one party to another.
- (p) “Emergency notification service” (ENS) means a public alerting service that, upon activation by a public agency, rapidly distributes notifications within a specified geographic area of hazardous conditions or emergent events that threaten the health or lives of people or threatens damage or destruction of property, including, without limitation, floods, fires, and hazardous materials incidents.
- (q) “Emergency telephone charge” means a charge established by a governing body pursuant to § 29-11-102(2)(a), C.R.S., to pay for the expenses authorized in § 29-11-104, C.R.S.
- (r) “Geographic area” means the area such as a city, municipality, county, multiple counties or other areas defined by a governing body or other governmental entity for the purpose of providing public agency response to 9-1-1 calls.
- (s) “Governing body” means the organization responsible for establishing, collecting, and disbursing the emergency telephone charge in a specific geographic area, pursuant to §§ 29-11-102, 103, and 104, C.R.S.
- (t) “Improvement amount” means the amount approved by the Commission as described in subparagraph 2137(e)(II).
- (u) “Improvement plan” means the plan proposed by a BESP or approved by the Commission as described in paragraph 2143(b).
- (v) “Intermediary aggregation service provider” (IASP) means a person that aggregates and transports 9-1-1 calls for one or more OSPs for delivery to a demarcation point with a BESP.
- (w) “Location information” means ALI or its functional equivalent associated with a 9-1-1 call and provided by a BESP pursuant to its BES tariff.
- (x) “Multi-line telephone system” (MLTS) means a system comprised of common control units, telephones, and control hardware and software providing local telephone service to multiple customers in businesses, apartments, townhouses, condominiums, schools, dormitories, hotels, motels, resorts, extended care facilities, or similar entities, facilities, or structures. Multi-line telephone system includes:
 - (I) network and premises-based systems such as Centrex, PBX, and hybrid-key telephone systems; and
 - (II) systems owned or leased by governmental agencies, nonprofit entities, and for-profit businesses.
- (y) “Multiple-line telephone system operator” means the person that operates an MLTS from which an end user may place a 9-1-1 call through the public switched network.

- (z) “Network Operations Center” (NOC) or “Basic Emergency Service Network Operations Center” means a 24x7, 365 days a year single point of contact for Basic Emergency Service (BES). The NOC is responsible for monitoring the BES network, notifying PSAPs of PSAP service disruptions, initiating repairs, troubleshooting, and resolving BES network issues.
- (aa) “Originating service provider” (OSP) means a local exchange carrier, wireless carrier, Voice-over-Internet-Protocol service provider, or other provider of functionally equivalent services supplying the ability to place 9-1-1 calls.
- (bb) “Primary demarcation point” means the demarcation point designated to the BESP as the primary or first location for delivery of 9-1-1 calls, ANI, and location information for a specific geographic area. This designation is determined by the governing body or PSAP with jurisdictional authority for the geographic area from which the call originates. The physical location of a primary demarcation point may be at a PSAP, at a point of interconnection with a governing body’s local network, or at any other location designated by the governing body or PSAP for delivery of 9-1-1 calls to a PSAP.
- (cc) “PSAP service disruption” means any situation in which a BESP is unable to deliver 9-1-1 calls, ANI, or location information to the primary demarcation point due to an event or incident inside the BES network or on the BESP’s side of the demarcation point. A PSAP service disruption includes, but is not limited to:
 - (I) any event or incident that occurs inside the BES network that results in or requires the BESP to reroute 9-1-1 calls to the demarcation point for an alternate PSAP or the governing body for an alternate PSAP; or
 - (II) any situation in which a PSAP is unable to receive 9-1-1 calls or location information as the result of an event or incident that occurs inside the BES network, even if the facilities involved in the event or incident also provide OSP connectivity.
- (dd) "Public Safety Answering Point" (PSAP) means a facility equipped and staffed to receive and process 9-1-1 calls from a BESP.
- (ee) "Selective routing" means the routing of a 9-1-1 call to the demarcation point with a governing body or PSAP based upon the location information or other factors as agreed upon by the governing body or PSAP.

* * * *

[indicates omission of unaffected rules]

2134. Process for Certification of Basic Emergency Service Providers (BESPs).

* * * *

[indicates omission of unaffected rules]

- (e) By March 30, 2025, and each two years thereafter, each BESP actively providing BES shall file with the Commission updates regarding any changes to the following required information in

paragraph (c): items (I)-(IV), (XII)-(XVIII), (XX)-(XXV), and (XXIX)(A)-(C). Additionally, the BESP shall include with this filing an attestation that the information provided is true, accurate, and correct, and that the BESP remains financially and administratively sound and capable of providing the BES offered in its current tariff(s).

* * * *

[indicates omission of unaffected rules]

2136. Obligations of Basic Emergency Service Providers.

- (a) A BESP certificated by the Commission shall interconnect with all OSPs and IASPs who have customers in areas served by the BESP. BESP's shall interconnect with all other BESP's for the purpose of transferring 9-1-1 calls to PSAPs served by the other BESP's.
- (b) The BESP shall provide geographically diverse demarcation points for aggregating 9-1-1 calls and location information from OSPs and IASPs. At the request of an OSP or IASP, a BESP shall interconnect with the requestor for the purpose of aggregating and transporting 9-1-1 calls and location information from the requestor to the demarcation point with the governing body or PSAP. Interconnection shall be accomplished in a timely manner, generally not more than 30 days from the time the BESP receives a written order. Interconnection facilities shall generally be engineered as follows:
 - (I) dedicated facilities for connecting OSPs and IASPs to a BESP shall be based on the requirements established by the BESP to serve the customers within that local exchange; or
 - (II) if shared or common facility groups are used to transport calls from an OSP or IASP to a BESP, they shall be sized to carry the additional call volume requirements. Additionally, common or shared groups shall be arranged to provide 9-1-1 calls on a priority basis where economically and technically feasible.
- (c) A BESP shall develop and file with the Commission tariffs that comply with the requirements set forth in rule 2137.
- (d) A BESP shall render to each governing body or PSAP a single monthly bill for its tariffed services. The monthly bill shall be sufficiently detailed to allow the governing body or PSAP to determine that it is being billed properly based on the billing increments as approved by the Commission.
- (e) BESP's shall ensure, to the extent possible and in the most efficient manner, that basic emergency service is available for transmitting 9-1-1 calls from deaf, hard of hearing, and persons with speech impairments to the appropriate PSAP.
- (f) A BESP shall ensure that all BES facilities, and interconnections between it and the OSPs and IASPs are engineered, installed, maintained, and monitored in order to provide a minimum of two circuits and a minimum P.01 grade of service (one percent or less blocking during the busy hour), or such other minimum grade of service requirements approved by the Commission.

- (g) Where a BESP obtains BES facilities from a basic local exchange carrier, the rates for such facilities shall be reflected in a tariff or agreement filed for approval with the Commission. Such tariffs or agreements shall ensure that such facilities are engineered, installed, maintained, and monitored to provide a minimum of two circuits and a grade of service that has one percent (P.01) or less blocking. The basic local exchange carrier providing such facilities shall not be considered a BESP. The provisions of this rule shall not apply to routing arrangements implemented pursuant to paragraph 2143(j)(II).
- (h) To expedite the restoration of service following a PSAP service disruption, each BESP shall designate a telephone number for governing bodies, PSAPs, IASPs, and OSPs to report trouble. Such telephone number shall be staffed seven days a week, 24 hours a day, by personnel capable of processing calls to initiate immediate corrective action.
- (i) A BESP shall keep on file with the Commission its contingency plan as described in paragraph 2143(e).
- (j) BESP's shall identify service providers supplying service within a governing body or PSAP's service area, or statewide, to the extent that the BESP possesses such information, in response to a request from a governing body, PSAP, or the Commission.
- (k) A BESP shall report to the Commission a list of every PSAP serviced by the BESP with the number of concurrent sessions provided to each PSAP. This report shall be updated and filed annually with the Commission by June 1 of each year.
- (l) These requirements are in addition to those in paragraph 2335(d). If the BESP is aware of repairs or maintenance being conducted or to be conducted that have the potential to impact service to a primary demarcation point, the BESP shall notify the associated PSAP(s) of the potential of a PSAP service disruption at least 24 hours prior to work commencing, or as soon as possible. This notification shall be provided by voice call to the PSAP, if possible, and to the contact maintained for the PSAP as described in paragraph 2143(c). When scheduling routing maintenance or repairs, the BESP should schedule such repairs at a time likely to cause the least impact to the affected PSAP(s). Wherever practicable, maintenance of the BES network shall be performed with no scheduled downtime. The BESP shall employ best efforts to ensure that planned events for routine maintenance are scheduled and communicated to avoid impacts to each affected PSAP's 9-1-1 operations. Conduct of emergency or unscheduled repairs in order to restore service to a PSAP should not be delayed in order to make PSAP notification.

2137. Required Components of a Basic Emergency Service Tariff.

- (a) At a minimum, a BES tariff must include the following services:
 - (I) delivery of 9-1-1 calls to the demarcation point with the governing body or PSAP with primary responsibility for dispatching first responders to the caller's location unless otherwise directed by the PSAP or governing body;
 - (II) delivery of location information to the governing body or PSAP receiving the 9-1-1 call;
 - (III) the ability to automatically route 9-1-1 calls to one or more alternate PSAPs, as designated by the governing body or PSAP, in the event of a call overflow, PSAP service

disruption, or PSAP abandonment, including split contingent routing of 9-1-1 calls to multiple alternate PSAPs if feasible;

- (IV) the ability to transfer 9-1-1 calls to other Colorado governing bodies or PSAPs with location information;
- (V) when feasible, the ability to transfer 9-1-1 calls to 10-digit lines without additional long distance charges;
- (VI) if feasible, the ability to transfer 9-1-1 calls to a PSAP in another state with location information without additional long distance charges;
- (VII) processes or tools that a governing body or PSAP and the BESP may use to pre-validate location information and routing information associated with specific telephone numbers and to correct such information or to report telephone numbers that do not have associated location information;
- (VIII) minimum quality of service metrics that the BES will meet (examples: service availability percentage, jitter, packet loss, mean opinion score, latency, successful call delivery percentage, and call delivery accuracy percentage);
- (IX) a description of the internal schedules for testing, monitoring, maintaining, and replacing all equipment and electronics that will be used to provide BES;
- (X) the provision of technical support 24 hours per day, every day of each year;
- (XI) reporting tools for access to service metrics, call processing, call status, and other call and service data;
- (XII) nonrecurring charges for one-time costs, such as installation of equipment or change orders related to the delivery of BES must be listed separately in the tariff, unless those costs are included in the monthly recurring charges provided for in the tariff; and
- (XIII) terms of payment for invoices for BES must be stated, including late fees.

* * * *

[indicates omission of unaffected rules]

2143. Basic Emergency Service Reliability and Service Disruption Response.

* * * *

[indicates omission of unaffected rules]

- (c) Each BESP shall maintain contact information for each PSAP served by the BESP for notification of actual or potential PSAP service disruptions. No less than annually, the BESP shall contact each PSAP that is served by the BESP to verify the notification information on file.

- (d) The BESP shall obtain from each governing body or PSAP its preferred alternative method(s) for the governing body or PSAP and the BESP to communicate during a PSAP service disruption.

* * * *

[indicates omission of unaffected rules]

- (g) Where feasible, the BESP should develop plans for its technicians to communicate with the NOC in the event of an isolation of a central office serving a PSAP in a manner that will allow for expeditious resolution of the PSAP service disruption.

* * * *

[indicates omission of unaffected rules]

- (i) All call recordings and messages transmitted or received by the BESP regarding a PSAP service disruption shall be retained for at least 24 months. All logs, call recordings and messages concerning a specific disruption shall be assigned a unique trouble ticket number.

- (j) In the event of a confirmed or possible PSAP service disruption, the following shall occur.

- (I) The BESP shall notify each affected governing body or PSAP via the contacts previously provided in accordance with paragraph (c) of this rule. Such notifications shall be made as soon as is practical, and shall include a trouble ticket number, the nature and extent of the confirmed or possible PSAP service disruption, if known, and the actions being taken to correct the disruption. If applicable, the notice shall include interim measures being taken to route 9-1-1 calls to alternate PSAPs or other locations. If known, the notification shall also include an estimated time of repair.
- (II) If the confirmed or possible PSAP service disruption exceeds or is anticipated to exceed 15 minutes from the time a BESP becomes aware of the disruption, the BESP shall implement the appropriate contingency plan as established in paragraph (e) or provide temporary solutions so that 9-1-1 calls can be answered until the disruption is resolved. The BESP shall coordinate any alternate solutions with the contact(s) provided in accordance with paragraph (c) for the affected governing body or PSAP. In the event of a confirmed or possible PSAP service disruption, the BESP must deliver all 9-1-1 calls to an alternate PSAP, if possible, until the PSAP service disruption is resolved.
- (III) If a confirmed or possible PSAP service disruption exceeds 30 minutes in duration, the responsible BESP shall inform the Commission within two hours of the time that the BESP becomes aware of the disruption. Such notification shall be made through a service disruption reporting form, available on the Commission's website.
- (IV) In addition to the notification to Commission staff required by subparagraph (III), the BESP shall also copy Commission staff on all email notifications provided to Colorado PSAPs regarding confirmed or possible PSAP service disruptions at an email address designated for this purpose.

- (V) The BESP shall notify the Commission of restoration of service by the beginning of the next business day following service restoration.
 - (VI) The BESP shall submit a final report to the Commission through the service disruption reporting form within 30 days of the restoration of service. The report shall include a statement as to whether call back numbers for 9-1-1 calls which could not be connected due to the confirmed or possible PSAP service disruption were provided to the PSAP as required by subparagraph 2143(j)(VII).
 - (VII) Following the restoration of PSAP service, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the disruption. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information. The BESP must provide this information to the governing body or PSAP without requiring a request from the governing body or PSAP.
 - (VIII) In the event of a confirmed PSAP service disruption of more than four hours duration, or 12 hours in duration if the disruption is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the full duration of the disruption in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles to the governing body or PSAP that normally receives the bill. If, as the result of a formal complaint proceeding or other proceeding, the Commission finds that a BESP has failed to provide a credit required under this paragraph, the Commission may order the amount of the credit to be doubled. The BESP must provide billing credits required under this rule automatically, without requiring a request from the governing body or PSAP. Additionally, civil penalties may be assessed as described in rules 2009 through 2011.
- (k) Commission staff shall commence an informal investigation regarding each confirmed or possible PSAP service disruption meeting the below criteria, despite the dispute resolution process in the BESP's tariff, if any. The 9-1-1 Advisory Task Force may participate in the investigation.
- (l) Informal investigations are required when the service disruption meets any of the following criteria:
 - (A) multiple PSAPs are affected;
 - (B) the details of the service disruption, such as the cause, the beginning and end times, and the implemented mitigation strategies are unclear from the information available to Commission staff;
 - (C) the service disruption lasted longer than four hours;
 - (D) there was an apparent failure to notify the PSAP as required by subparagraph 2143(j)(I);
 - (E) there were repeated service disruptions of a similar nature or in the same area within a 30-day period;

- (F) at the request of one or more affected PSAP or governing body; or
 - (G) when there was a possible violation of a Commission rule.
- (II) Each informal investigation under this paragraph will be handled as follows.
- (A) Commission staff shall refer an informal investigation form to the BESP for its written response on a standardized form developed by Commission staff for that purpose. This form shall include questions developed by and solicited from the affected governing body or PSAP and the 9-1-1 Advisory Task Force. The BESP shall respond in writing with complete responses within thirty days, or such lesser or greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. If requested, the response shall include: (1) the NOC call log entries; and (2) copies of e-mails and transcripts or recordings of phone calls between the NOC and other parties related to the confirmed or possible PSAP service disruption.
 - (B) The BESP's responses shall fairly meet the substance of each request. The BESP may not provide an incomplete response citing a lack of information or knowledge unless it states it has made diligent and reasonable inquiry and requests that Commission staff allow a reasonable extension of time not to exceed fourteen days. Additional reasonable extensions of time may be granted upon request. Requests for any extensions shall be accompanied with estimates of when information may be provided.
 - (C) Commission staff, the affected governing bodies or PSAPs, or the 9-1-1 Advisory Task Force may also request a meeting with the BESP, which may be recorded, provided that the recording may not be used by any person for any purpose in subsequent proceedings before the Commission. The BESP should arrange for appropriate staff to participate in the meeting, including technical support, service, and management with relevant knowledge and sufficient level of authority or supervision.
- (III) During the pendency of an informal investigation, communications regarding the investigation between Commission staff and any participant in the investigation shall be in writing and copied to the BESP, Commission staff, the affected governing body or PSAP, and the Chair of the 9-1-1 Advisory Task Force or his or her designee. Commission staff shall maintain a complete file related to each informal investigation, including all communications and recordings, and access to and use of the file is subject to applicable Commission rules regarding information claimed to be confidential or highly confidential.
- (IV) Commission staff will document in a report the closure of each informal investigation within sixty days of the confirmed or possible PSAP service disruption, or such greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. The report should include whether the incident was a PSAP service disruption as defined in paragraph 2131(cc), whether the BESP handled the PSAP service disruption in a timely manner with the appropriate personnel, and whether the BESP has taken or committed to taking corrective action to

prevent or mitigate a similar disruption from occurring in the future, specifying the corrective action and the timeframe, if applicable. The report shall also document any non-compliance with Commission rules or the BESP's tariff, including the BESP's service quality plan. Within 14 days, the 9-1-1 Advisory Task Force, the affected governing body or PSAP, or the BESP may submit to Commission staff written comments, which Commission staff shall append to the report and preserve in the informal investigation file.

- (V) At any time, Commission staff, the 9-1-1 Advisory Task Force, or the affected governing body or PSAP may commence a proceeding before the Commission, at which time the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report. If the affected governing body or PSAP seeks relief in an alternative forum, then the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report.

* * * *

[indicates omission of unaffected rules]

2335. The Provision of Service During Maintenance or Emergencies.

The following paragraphs describe minimum standards for maintaining service.

* * * *

[indicates omission of unaffected rules]

- (d) Service interruptions for an extended time due to maintenance requirements shall be performed at a time that causes minimal inconvenience to impacted customers. Each provider of services identified in rule 2330 shall take reasonable steps to notify the customer in advance of extended maintenance requirements. If possible, such providers shall also make access to emergency service as defined in paragraph 2001(b), and basic emergency service, as applicable, available by alternative means when the provider knows that the service interruption affects 1,000 or more access lines and when the provider knows, based upon the prior experience of the provider, that the interruption may last more than four hours during the hours of 8 a.m. to 10 p.m. If a basic emergency service provider experiences a possible or confirmed PSAP service, it shall file a report of the occurrence as required by subparagraph 2143(j)(III).

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 23R-0577T

IN THE MATTER OF THE PROPOSED AMENDMENTS TO 4 CODE OF COLORADO REGULATIONS 723-2 MODIFYING THE COMMISSION RULES REGARDING BASIC EMERGENCY SERVICE OUTAGE PREVENTION, RESPONSE, AND REPORTING.

**COMMISSION DECISION DENYING EXCEPTIONS TO
RECOMMENDED DECISION**

Issued Date: August 19, 2024

Adopted Date: August 7, 2024

TABLE OF CONTENTS

I. STATEMENT, FINDINGS, AND CONCLUSIONS	2
A. STATEMENT	2
B. BACKGROUND	2
C. EXCEPTIONS TO RECOMMENDED DECISION	4
1. Rule 2131(cc) – Definition of PSAP service disruption	4
a. Exceptions	5
b. Findings and Conclusions	6
2. Rule 2131(cc)(I) – Rerouting of 9-1-1 calls to alternate PSAP	6
a. Exceptions	7
b. Findings and Conclusions	8
3. Rule 2131(cc)(II)	9
a. Exceptions	10
b. Findings and Conclusions	10
4. Rule 2143(j)(VII)	11
a. Exceptions	12
b. Findings and Conclusions	12
5. Rule 2143(j)(VIII)	13
a. Exceptions	14

b. Findings and Conclusions15

6. Rule 2143(k).....15

 a. Exceptions16

 b. Findings and Conclusions16

II. ORDER.....17

 A. The Commission Orders That:17

 B. ADOPTED IN COMMISSIONERS’ WEEKLY MEETING August 7, 2024.....19

I. STATEMENT, FINDINGS, AND CONCLUSIONS

A. STATEMENT

1. Through this Decision, the Commission denies the exceptions filed on July 3, 2024, by Lumen doing business as CenturyLink QC (“CenturyLink”) to Decision No. R24-0403, issued June 13, 2024, by Administrative Law Judge (“ALJ”) Melody Mirbaba (“Recommended Decision”).

2. The Commission adopts amendments to the Colorado Public Utilities Commission’s (the “Commission”) Rules Regulating Telecommunications Services and providers of Telecommunications Services, 4 *Code of Colorado Regulations* (“CCR”) 723-2 (the “Rules”). Changes amend Rules relating to basic emergency service in Rules 2131, 2134, 2136, 2143, and Rule 2335, 4 CCR 723-2. The adopted rules are attached to this Decision in legislative format (*i.e.* ~~strikeout/underline~~) as Attachment A, and in final format as Attachment B.

B. BACKGROUND

3. During the weekly meeting held on November 29, 2023, the Commission initiated this Proceeding by issuing a Notice of Proposed Rulemaking (“NOPR”) to amend the Rules, issued as Decision No C23-0800. The NOPR proposed to amend several existing sections of the Rules in order to clarify responsibilities of Basic Emergency Service Providers (“BESP”) in the provision

of Basic Emergency Service (“BES”), specifically handling of outages, required notification in the event of an outage, and the provision of billing credits in the case of extended BES outages.

4. The NOPR adopted a schedule for filing comments and invited interested participants to file initial comments no later than January 10, 2024, and requested reply comments no later than January 19, 2024. The Commission referred this matter to an ALJ to preside over rulemaking hearings and for the issuance of a recommended decision. A public rulemaking hearing was scheduled for January 29, 2024. The hearing was convened on that date for the sole purpose of continuing the public hearing comment to a future hearing date, set for February 29, 2024, and modifying the deadline for initial comments to February 12, 2024, and the deadline for responsive comments to February 21, 2024.¹

5. On April 23, 2024, the ALJ took administrative notice of a filing that the 9-1-1 Advisory Task Force (“Task Force”) made in Proceeding 17M-0276T on March 14, 2023, titled “Adopted Criteria for Informal Investigations of BES Outages” and invited additional comment on this issue, due by May 1, 2024.²

6. The ALJ issued Recommended Decision No. R24-0403 on June 13, 2024, proposing adoption of amended rules similar to the rules initially proposed in the NOPR, but also incorporating new definitions based on comments made through the rulemaking proceeding.

7. The Commission adopts amendments to the Commission’s Rules Regulating Telecommunications Services and providers of Telecommunications Services, 4 CCR 723-2. Changes amend Rules relating to basic emergency service in Rules 2131, 2134, 2136, 2143, and

¹ See Interim Decision R24-0068-I, issued January 30, 2024.

² See Interim Decision R24-0263-I, issued April 23, 2024.

Rule 2335, 4 CCR 723-2. The adopted rules are attached to this Decision in legislative format (*i.e.* ~~strikeout/underline~~) as Attachment A, and in final format as Attachment B.

C. EXCEPTIONS TO RECOMMENDED DECISION

8. On July 3, 2024, CenturyLink filed exceptions to the Recommended Decision. Specifically, CenturyLink objected to provisions related to Rule 2131(cc), Rule 2131(cc)(I), Rule 2131(cc)(II), Rule 2143(j)(VII), Rule 2143(j)(VIII), and Rule 2143(k). Overall, CenturyLink’s arguments are that the definitions in the Decision are too broad, that the rules impose a burden unbalanced by benefit, and that the Rules do not give Commission Staff enough flexibility in managing implementation of the Rules.

9. No other participants filed exceptions to the Recommended Decision.

10. Two parties, Colorado Council of Authorities (“CCOA”) and the Adams County 911 Authority, the Arapahoe County 911 Authority, and the Jefferson County Emergency Communications Authority (“AAJ” or the “AAJ Authorities”), filed responses to CenturyLink’s exceptions.

1. Rule 2131(cc) – Definition of PSAP service disruption

11. Rule 2131(cc) creates a new definition of “PSAP service disruption” as follows: “PSAP service disruption” means any situation in which a BESP is unable to deliver 9-1-1 calls, Automatic Number Identification (“ANI”), Automatic Location Identification (“ALI”) or location information to the primary demarcation point due to an event or incident inside the BES network or on the BESP’s side of the demarcation point. A PSAP service disruption includes, but is not limited to: (1) any event or incident that occurs inside the BES network that results in or requires the BESP to reroute 9-1-1 calls to the demarcation point for an alternate PSAP or the governing

body for an alternate PSAP; or (2) any situation in which a PSAP is unable to receive 9-1-1 calls or location information as the result of an event or incident that occurs inside the BES network, even if the facilities involved in the event or incident also provide OSP connectivity.”³

12. This definition replaces the previous definition of “Basic emergency service outage” or “BES outage,” which was “a failure of basic emergency service that prevents or would prevent 9-1-1 calls, ANI, or location information from being delivered from the demarcation point between the OSP or IASP and the BESP to the demarcation point between the BESP and the governing body or PSAP.”⁴

13. Through her Recommended Decision, the ALJ declined to adopt a proposed amendment to the definition of “Basic emergency service outage,” finding that “the public interest is better served by replacing the definition of ‘BES Outage’ with terminology and language that more accurately addresses the underlying issues while maintaining consistency with the statutory definition of BES.”

a. Exceptions

14. Through its Exceptions, CenturyLink maintains that this rule is too broad and “could be read to broadly define as a service interruption any ‘event or incident’ without limit on the BESP side of the demarcation point.” CenturyLink further argues that “this could include problems or troubles in any Originating Service Provider (“OSP”) network that, for whatever reason and through no fault of the BESP, prevents that provider’s customers from calling 9-1-1 and/or reaching the BESP.” CenturyLink proposes deleting the clause “or on the BESP’s side of the demarcation point.”

³ See Recommended Decision ¶ 42.

⁴ See Rule 2131(l) 4 CCR 723-2.

b. Findings and Conclusions

15. We disagree with CenturyLink's arguments. The Commission finds the revised definition of "PSAP service disruption" clear in that it excludes outages of individual OSPs, and only includes situation where the BESP is unable to deliver 9-1-1 calls to a PSAP or governing body due to issues in the BES network, even when portions of the BES network serve to provide originating service as well as BES. The Commission has authority where an outage or failure affects BES, regardless of whether the outage has other effects as well. We find that this is an appropriate use of Commission authority regardless of whether in certain cases the "event or incident" could also be OSP-related.

16. For this reason, the Commission denies CenturyLink's exception to this rule, and notes that the replies from both the AAJ Authorities and CCOA support this position. The AAJ Authorities agree with the Commission that the Rule applies to events or incidents that occur inside the BES network, even if facilities involved also provide OSP connectivity. They also argue that dual service does not automatically immune the facility from falling under the PSAP Service Disruption parameters, which we agree is a clear reading of the implemented rule.

2. Rule 2131(cc)(I) – Rerouting of 9-1-1 calls to alternate PSAP

17. Rule 2131(cc)(I) states that "any event or incident that occurs inside the BES network that results in or requires the BESP to reroute 9-1-1 calls to the demarcation point for an alternate PSAP or the governing body for an alternate PSAP."

18. This subparagraph of the definition of "PSAP service disruption" was adopted to address CenturyLink's argument in this Proceeding that "if it delivers a 9-1-1 call to an alternate PSAP, it has provided BES, and there has been no BES outage."⁵

⁵ See Recommended Decision ¶ 41.

19. Through her recommended Decision, the ALJ noted that, by interpreting the definition of BES outage in this way, “CenturyLink fails to recognize that there are real consequences to the public’s health and safety when 9-1-1 calls are not delivered to the point of interconnection with the PSAP or governing body primarily responsible for the 9-1-1 call based on the caller’s location.” The ALJ further noted that “when a BESP instead delivers a 9-1-1 call to the point of interconnection with an alternate PSAP or governing body (who are not primarily responsible for the 9-1-1 call based on the caller’s location), this amounts to BES that negatively impacts the public health, welfare, and safety, and as a result, requires Commission oversight and intervention.”⁶

20. The ALJ further states that “This definition directly tackles a primary issue that the Commission intended to address through this Proceeding (*i.e.*, issues surrounding delivery to a demarcation point for an alternate PSAP rather than the demarcation point for the caller’s location). The definition, combined with other Rule changes will enable the Commission to determine what action, if any, can be taken to avoid or mitigate these issues, thereby safeguarding the public interest from delays in receiving emergency assistance.”⁷

a. Exceptions

21. Through its Exceptions, CenturyLink states that the Recommended Decision is operating on “the mistaken concept that the delivery of a 9-1-1 call, with ALI/ANI intact, to the designated alternate PSAP per contingency planning, is a network outage.”⁸ CenturyLink further states that “a call delivered to an alternate PSAP is *not* a service disruption.”

⁶ See Recommended Decision ¶ 41.

⁷ See Recommended Decision ¶ 43.

⁸ CenturyLink Exceptions, p. 3.

b. Findings and Conclusions

22. We disagree with CenturyLink's arguments. Contrary to CenturyLink's characterization, the proposed rule does not declare situations in which calls are re-routed to an alternate PSAP to be a "network outage." Rather, the rule recognizes that such situations are a PSAP service disruption, because calls cannot be routed to the intended PSAP, as defined by "primary demarcation point."

23. CenturyLink states that "a call delivered to an alternate PSAP is not a service disruption."⁹ To the contrary, the Commission recognizes that when the BESP is unable to deliver 9-1-1 calls to the primary demarcation point of a PSAP or governing body, then service to that PSAP *has* been disrupted. In such cases, the PSAP is not receiving the service that the PSAP or governing body is paying to receive, which is delivery of 9-1-1 calls to that PSAP or governing body. Additionally, such disruptions are very burdensome to the PSAP, can delay dispatching of emergency responses, and create risk to public safety.

24. In its reply to CenturyLink's Exceptions, CCOA notes that CenturyLink Tariff No. 25 denotes an objective for call delivery accuracy to be at or greater than 99.99 percent for "calls delivered to the correct PSAP demarcation point based on the location information provided to the Company."¹⁰

25. In its reply comments, AAJ states that it agrees with the Recommended Decision that any reroute can affect PSAP operations and delay response times, and accordingly are important to report and should require notification to the affected primary and backup PSAP.

⁹ *Id.*

¹⁰ CCOA Exceptions, p. 3, citing CenturyLink Tariff No. 25, Original Page 67, 9.2.5 (I)(2)(g).

26. Additionally, CenturyLink Tariff No. 25 defines the inability of a PSAP to receive a 9-1-1 call as a “Severity Level 1 Network Failure.”¹¹ Based on this, the Commission can surmise that CenturyLink understands the importance of delivering calls to the correct PSAP or governing body whenever possible. Delivery of calls to an alternate PSAP is an important and critical strategy to mitigate the impact of a PSAP service disruption, but it does mean that a PSAP service disruption has occurred.

27. For the reasons stated above, the Commission denies CenturyLink’s Exception to this rule, and notes that both the AAJ Authorities and CCOA, in their reply comments described above, agree with this position.

3. Rule 2131(cc)(II)

28. Rule 2131(cc)(II) states that “any situation in which a PSAP is unable to receive 9-1-1 calls or location information as the result of an event or incident that occurs inside the BES network, even if the facilities involved in the event or incident also provide OSP connectivity.”

29. This subsection of the definition of “PSAP service disruption” is addressed by the ALJ in her Recommended Decision. Specifically, the ALJ states that “the language clarifies that when a service disruption occurs due to an event or incident that occurred inside the BES network or on the BEBP’s side of the demarcation point that may have also involved facilities that provide OSP connectivity, this is still a service disruption under Commission Rules. This recognizes that while BEBPs have discretion to use facilities for BES that are also used for OSP connectivity, doing so has no impact on whether a service disruption subject to the Commission’s regulation has occurred. It also squarely addresses misguided positions that CenturyLink has taken on this issue in prior investigations, as discussed in the NOPR. What is more, although the above definition

¹¹ CCOA Exceptions, p. 3, citing CenturyLink Tariff No. 25, Original Page 65, 9.2.5 (I)(1).

references OSP connectivity, it does not contemplate or attempt to regulate OSP connectivity and services.”¹²

a. Exceptions

30. Through its Exceptions, CenturyLink takes the position that the Recommended Decision improperly expands its jurisdiction over OSP operations.

31. CenturyLink proposes to delete the last clause of the rule, specifically “even if the facilities involved in the event or incident also provide OSP connectivity.”

32. In its response, AAJ notes that this rule is necessary to ensure that merely providing a dual service does not automatically immune the facility from falling under the PSAP Service Disruption parameters.

b. Findings and Conclusions

33. The Commission disagrees with CenturyLink’s exception and proposed clause deletion. The Commission finds this phrase necessary to include because CenturyLink has previously denied that outages to a PSAP were their responsibility as a Basic Emergency Service Provider, even when the outage was due to a central office outage. Such central offices serve as a component of both the Originating Service Provider network and the BESP network. When such facilities experience outages, the BESP is unable to deliver any 9-1-1 calls to the primary demarcation point of the PSAP or governing body.

34. Accepting CenturyLink’s interpretation that the failure of a component of the OSP network is not a PSAP service disruption, even when that component is critical in delivering 9-1-1 calls to a PSAP or governing body and is therefore part of the BES network, would essentially

¹² See Recommended Decision ¶ 45.

relieve CenturyLink of all responsibility for the operation of all components involved in the transportation of 9-1-1 calls from the ESInet to the PSAP or governing body.

35. For the reasons stated above, the Commission denies CenturyLink's Exception to this rule, and notes that the AAJ Authorities and CCOA agree with this position.

4. Rule 2143(j)(VII)

36. Rule 2143(j)(VII) states "Following the restoration of PSAP service, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the disruption. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information. The BESP must provide this information to the governing body or PSAP without requiring a request from the governing body or PSAP."

37. This Rule strengthens the previous Rule language, which was "Following the restoration of BES, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the outage. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information."¹³

38. Commission Staff recommended the change to the rule because CenturyLink had previously asserted, in informal outage investigations, that this information would only be provided to PSAPs upon request.

¹³ Rule 2143(j)(V), 4 CCR 723-2.

a. Exceptions

39. Through its Exceptions, CenturyLink takes the position that this rule “imposes on the BESP the onerous burden of providing the call back number within two hours of service restoration with no evidence that the requirement benefits the PSAP or the public.”¹⁴

40. CenturyLink further states that calling back a number after potential delays of hours has low value. CenturyLink states “[q]uite likely the emergency that has prompted the 9-1-1 call is over, making the value of a callback negligible.”¹⁵

41. CenturyLink also states that “PSAPs have rarely, if ever, expressed any interest in callback information.”¹⁶

42. CenturyLink proposes to modify the rule to make the provision of call back numbers conditional upon request instead of automatic.

b. Findings and Conclusions

43. The Commission finds CenturyLink’s position to be erroneous and potentially dangerous and harmful to the public interest. In this exception, CenturyLink makes an assumption that the caller would have either already gotten help or would no longer need help by the point that the callback number could be delivered. Calls to 9-1-1 where the caller cannot speak do occur, and the provision of ANI/ALI information to the PSAP ensures that the PSAP can send emergency services to investigate.

44. Calls made to 9-1-1 that are undelivered have the potential to result in a loss of life or property that may not have occurred if the call had been delivered or if call information were to be provided after the fact.

¹⁴ CenturyLink Exceptions, p. 5.

¹⁵ *Id.*

¹⁶ *Id.*

45. It is imperative that PSAPs have call back numbers for these calls as soon as possible following a PSAP service disruption, and it is incumbent upon the BESP to provide these numbers without requiring a request from the PSAP or governing body.

46. In short, it is the Commission's position that every 9-1-1 call placed by a citizen in this state should be received by a PSAP, and when this cannot happen, the PSAP should have the opportunity to send first responders to investigate as soon as the call information is available.

47. The Commission notes regarding CenturyLink's claim that this information is rarely requested that PSAPs and governing bodies may simply not have been aware that such data was available. Furthermore, PSAPs and governing bodies may choose not to act on call data provided after a PSAP service disruption, but they would not have the choice if the information is not provided at all.

48. CCOA, in its reply comments to CenturyLink's Exceptions, cites CenturyLink Tariff No. 25, which states that CenturyLink "shall comply with 4 CCR 723-2 § 2143(h) and provide call back information, including ALI information when possible, within two hours of the restoration of basic emergency service."¹⁷ This tariff provision exists despite the fact that, to the Commission's knowledge, CenturyLink has never provided such callback information to a PSAP automatically.

49. For these reasons, the Commission finds it necessary to strengthen this rule for potential future enforcement rather than weaken it and denies CenturyLink's Exception to this rule.

5. Rule 2143(j)(VIII)

50. Rule 2143(j)(VIII) states "In the event of a confirmed PSAP service disruption of more than four hours duration, or 12 hours in duration if the disruption is due to a fiber cut, the

¹⁷ CCOA Response, citing CenturyLink Tariff No. 25, Original Page 35, 9.2.5(A)(8).

BESP shall provide a credit equal to the ratio of hours of the full duration of the disruption in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles to the governing body or PSAP that normally receives the bill. If, as the result of a formal complaint proceeding or other proceeding, the Commission finds that a BESP has failed to provide a credit required under this paragraph, the Commission may order the amount of the credit to be doubled. The BESP must provide billing credits required under this rule automatically, without requiring a request from the governing body or PSAP. Additionally, civil penalties may be assessed as described in rules 2009 through 2011.”

51. Through her Recommended Decision, the ALJ stated that the changes to this rule “seeks to accomplish two goals: ensure that BESP’s timely provide bill credits to reflect poorer quality BES, and, notably, to motivate BESP’s to resolve service disruptions as quickly as possible to maintain higher quality BES. Both goals directly speak to the Commission’s compelling interest to protect the public health, welfare, and safety.”¹⁸

a. Exceptions

52. Through its Exceptions, CenturyLink takes the position that billing credits should not begin to accrue until after the four-hour repair window or, in the case of fiber cut, the 12-hour repair window.

53. CenturyLink proposes a modification to the rule to say “...the BESP shall provide a credit equal to the ratio of hours of the full duration of the disruption in hours *less four hours or, in the case of a fiber cut, less 12 hours*, to the total number of hours in the billing cycle” (italics added to indicate proposed modification).

¹⁸ See Recommended Decision ¶ 88.

b. Findings and Conclusions

54. The Commission sees the imposition of billing credits as a method of incentivizing CenturyLink to minimize both the frequency and duration of PSAP service disruptions. To this end, it is appropriate to assess billing credits from the start of a PSAP service disruption. A window for allowance of repair time is built into this rule: four hours, or in the case of fiber cut, twelve hours.

55. Additionally, the Commission notes that, to its knowledge, CenturyLink has failed to pay a single billing credit under the current rules, which have been in effect since March 30, 2023.

56. For the reasons stated above, the Commission finds it prudent to strengthen this rule rather than to weaken it at this time and denies CenturyLink's Exception to this rule.

6. Rule 2143(k)

57. Rule 2143(k) states: "Commission staff shall commence an informal investigation regarding each confirmed or possible PSAP service disruption meeting the below criteria, despite the dispute resolution process in the BESP's tariff, if any. The 9-1-1 Advisory Task Force may participate in the investigation. (I) Informal investigations are required when the service disruption meets any of the following criteria: (A) multiple PSAPs are affected; (B) the details of the service disruption, such as the cause, the beginning and end times, and the implemented mitigation strategies are unclear from the information available to Commission staff; (C) the service disruption lasted longer than four hours; (D) there was an apparent failure to notify the PSAP as required by subparagraph 2143(j)(I); (E) there were repeated service disruptions of a similar nature or in the same area within a 30-day period; (F) at the request of one or more affected PSAP or governing body; or (G) when there was a possible violation of a Commission rule."

58. In her Recommended Decision, the ALJ specifically states “As modified, the ALJ finds that the criteria set reasonable limits on when an investigation must occur. These limits dispel arguments that the Commission must investigate any service disruption. The ALJ does not adopt changes to make investigations discretionary because the adopted criteria already limit the circumstances under which an investigation is needed, and doing so would create needless uncertainty as to the circumstances under which the Commission will investigate.”¹⁹

a. Exceptions

59. Through its Exceptions, CenturyLink takes the position that Commission staff should have the flexibility to initiate information investigations or not, even when PSAP service disruptions would otherwise meet the criteria for an investigation.

60. CenturyLink proposes changing the word “shall” to “may” in the first sentence of Rule 2143(k).

61. CenturyLink asserts that “In 2023 only a very small percentage of the events investigated could be traced back to a failure in the BES network. In 2024, only one of the events identified was related to a BES network impact.”²⁰

b. Findings and Conclusions

62. The Commission notes that CenturyLink made the same argument in its comments filed in this Proceeding that were addressed by the ALJ in her Recommended Decision. CCOA objects to this suggestion and notes that CenturyLink made a similar argument in a 2022 rulemaking proceeding, which was rejected.²¹

¹⁹ Recommended Decision, ¶ 92.

²⁰ CenturyLink Exceptions, p. 7.

²¹ See Recommended Decision ¶ 84.

63. One of the primary purposes of such investigations contemplated by this rule is to identify trends, frequent causes of disruptions, and areas for improvement in the delivery of BES. Investigations for such purposes must be performed consistently.

64. The Commission notes that a review of statistics provided by Commission staff on the 9-1-1 Program website indicates that as of this date, since the beginning of the informal investigation process in March 2023, 29 investigations have been completed, and 20 of those investigations, or 69 percent, were determined by Commission staff to have been BES Outages under the current Commission rules, or PSAP service disruptions, as they would be classified under the proposed rules.²² Based on these statistics, the Commission concludes that the investigation process set forth in Rule 2143(k) is producing useful analysis and review of outages or disruptions, and should continue to be conducted in a consistent manner.

65. Based on the reasoning above as well as the arguments of CCOA and AAJ, the Commission determines that continuing to require Commission staff to conduct investigations of all incidents that meet the criteria set forth in the rules is a prudent measure.

66. For the reasons stated above, the Commission denies CenturyLink's Exception to this rule.

II. ORDER

A. The Commission Orders That:

1. The exceptions to Recommended Decision No. 24-0403, filed by Lumen doing business as CenturyLink QC ("CenturyLink") on July 3, 2024, are denied, consistent with the discussion above.

²² <https://sites.google.com/state.co.us/colorado911program/basic-emergency-service>

2. The Rules amending the Colorado Public Utilities Commission's (the "Commission") Rules Regulating Telecommunications Services and providers of Telecommunications Services, 4 *Code of Colorado Regulations* ("CCR") 723-2 (the "Rules"), relating to basic emergency service in Rules 2131, 2134, 2136, 2143, and rule 2335, 4 CCR 723-2 are adopted. The adopted rules are attached to this Decision in legislative format (*i.e.* ~~strikeout~~/underline) as Attachment A, and in final format as Attachment B, and are available through the Commission's Electronic Filings system at:

https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=23R-0577T

3. Subject to a filing of an application for rehearing, reargument, or reconsideration, the opinion of the Attorney General of the State of Colorado shall be obtained regarding constitutionality and legality of the rules as finally adopted. A copy of the final, adopted rules shall be filed with the Office of the Secretary of State. The rules shall be effective 20 days after publication in The Colorado Register by the Office of the Secretary of State.

4. The 20-day time period provided by § 40-6-114, C.R.S., to file an application for rehearing, reargument, or reconsideration shall begin on the first day after the effective date of this Decision.

5. This Decision is effective immediately on its Issued Date.

**B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING
August 7, 2024.**

(S E A L)



ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads 'Rebecca E. White'.

Rebecca E. White,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

ERIC BLANK

MEGAN M. GILMAN

TOM PLANT

Commissioners

COLORADO DEPARTMENT OF REGULATORY AGENCIES

Public Utilities Commission

4 CODE OF COLORADO REGULATIONS (CCR) 723-2

PART 2

RULES REGULATING TELECOMMUNICATIONS SERVICES AND PROVIDERS OF TELECOMMUNICATIONS SERVICES

2001. Definitions.

* * * *

[indicates omission of unaffected rules]

- (b) "Access to emergency services" means access to ~~services, such as 9-1-1 basic~~ emergency telephone service ~~provided by local governments or other public safety organizations as defined in § 29-11-101(14), C.R.S.,~~ to the extent the local government or the public safety organization has implemented 9-1-1.

* * * *

[indicates omission of unaffected rules]

2011. Regulated Telecommunications Utility Rule Violations, Civil Enforcement, and Civil Penalties.

An admission to or Commission adjudication for liability for an intentional violation of the following may result in the assessment of a civil penalty of up to \$2,000.00 per offense. Fines shall accumulate up to, but shall not exceed, the applicable statutory limits set in § 40-7-113.5, C.R.S.

Citation	Description	Maximum Penalty Per Violation
Rule 2109(b),(e)-(g); text preceding (a)	Discontinuance of Regulated Services	\$2000
Rule 2110, text preceding (a) only	Applications to Transfer or Encumber	\$2000

Rule 2122	Keeping a Current Tariff on File with the Commission	\$2000
Rule 2135	Uniform System of Accounts, Cost Segregation and Collection	\$2000
Rule 2136	Obligations of Basic Emergency Service Providers	\$2000
Rule 2139	Obligations of Resellers of Basic Local Exchange Service	\$2000
Rule 2142	Nondisclosure of Name/Number/Address Information	\$2000
Rule 2143	Diverse Routing and Priority Service Restoration <u>Basic Emergency Service Reliability and Service Disruption Response</u>	\$2000
Rule 2150	Administration of the 9-1-1 Surcharge Trust Cash Fund	\$2000
Rule 2152	Audit of Service Providers Regarding Emergency Telephone Charge and 9-1-1 Surcharge Practices	\$2000
Rule 2186(a),(d), (e) and (f)	Relinquishment of Designation as Provider of Last Resort	\$2000
<u>Rule 2302(a)-(c);(e)-(g)</u>	<u>Applications for Service, Customer Deposits, and Third Party Guarantees</u>	<u>\$500</u>
Rule 2305, text preceding (a) only	Refund Plans	\$2000
<u>Rule 2334</u>	<u>Construction and Maintenance Practices for Telecommunications Facilities</u>	<u>\$1000</u>
Rule 2335	Provision of Service During Maintenance or Emergencies	\$2000
<u>Rule 2337(a)</u>	<u>Standard Performance Characteristics for Customer Access Lines</u>	<u>\$1000</u>

Rule 2413	Affiliate Transactions for Local Exchange Providers	\$2000
Rule 2533	Submission of Agreement and Amendments for Approval	\$2000
Rule 2742	Abbreviated Dialing Codes	\$2000
Rule 2334	Construction and Maintenance Practices for Telecommunications Facilities	\$1000
Rule 2337(a)	Standard Performance Characteristics for Customer Access Lines	\$1000
Rule 2302(a)-(c);(e)-(g)	Applications for Service, Customer Deposits, and Third Party Guarantees	\$500
Rule 2823(a),(c)-(e)	Conformity with the Federal Americans with Disabilities Act of 1990	\$100
Rule 2824	Conformity with the Commission's Quality of Service Rules	\$100
Rule 2827(b)	Timely or Completely Filing or Making Appropriate Payments to the TRS Fund	\$100
Rule (TBD) 2845	Timely or Completely Filing or Making Appropriate Payments to the HCSM Fund	\$100

* * * *

[indicates omission of unaffected rules]

2131. Definitions.

The following definitions apply only in the context of rules 2130 through 2159:

- (a) "9-1-1" means a three-digit abbreviated dialing code used to report an emergency situation requiring a response by a public agency such as a fire department or police department.
- (b) "9-1-1 access connection" means any communications service including wireline, wireless cellular, interconnected voice-over-internet-protocol, or satellite in which connections are enabled, configured, or capable of making 9-1-1 calls. The term does not include facilities-based broadband services. The number of 9-1-1 access connections is determined by the configured capacity for simultaneous outbound calling.

- (c) “9-1-1 Advisory Task Force” means the representative group established in accordance with rule 2145, which provides oversight of the statewide implementation and provision of basic emergency service, and periodically reports to the Commission on matters related to 9-1-1 service delivery in the state of Colorado.
- (d) “9-1-1 call” means a request for emergency assistance from the public by dialing 9-1-1 or addressing the E911 regardless of the technology used, and may include voice, text, images, and video, whether originated by wireline, wireless, satellite, or other means.
- (e) “9-1-1 service” means the service by which a 9-1-1 call is routed and transported from the end user to the governing body or PSAP serving the caller’s location. 9-1-1 service also includes location information routed to the PSAP.
- (f) “9-1-1 surcharge” or “state 9-1-1 surcharge” means the surcharge established pursuant to § 29-11-102.3, C.R.S.
- (g) “Alternate PSAP” means a PSAP or PSAPs designated to receive 9-1-1 calls when the BESP is unable to deliver those calls to the primary demarcation point, or at the request of the PSAP that is normally responsible for receiving calls in that geographic area or at the request of its governing body.
- (h) “Automatic Location Identification” (ALI) means the automatic provision to a PSAP for display, on equipment at the PSAP, of the telephone number and location of the caller. ALI data includes non-listed and non-published numbers and addresses, and other information about the caller’s location.
- (hi) “Automatic Number Identification” (ANI) means the automatic provision to a PSAP for display of the caller’s telephone number at the PSAP
- (j) “Basic emergency service” (BES) means the aggregation and transportation of a 9-1-1 call directly to a demarcation point with a governing body or PSAP, regardless of the technology used to provide the service. The aggregation of calls means the collection of 9-1-1 calls from one or more OSPs or IASPs for the purpose of selectively routing and transporting 9-1-1 calls directly to a demarcation point with a governing body or PSAP. The offering or providing of location information or selective routing directly to a governing body or PSAP is also a basic emergency service. Basic emergency service does not include:
 - (I) the portion of a 9-1-1 call provided by an OSP;
 - (II) the portion of a 9-1-1 call or services provided by an IASP;
 - (III) the portion of a 9-1-1 call from the OSP or an IASP to a demarcation point with the BESP;
 - (IV) the portion of a 9-1-1 call after the demarcation point between the BESP and the governing body or PSAP; or
 - (V) the delivery of text messages to a governing body or PSAP via networks or connections separate from the basic emergency service network.

- (k) "Basic emergency service facilities" or "BES facilities" means the lines, wires, cables, conduit, ducts, poles, cross-arms, equipment, supporting structures, and other infrastructure used by the BESP to provide basic emergency service. "Facilities" has the same meaning, unless the context requires otherwise.
- (l) "Basic emergency service network" or "BES network" means the portion of the 9-1-1 call path that begins at the demarcation point between an OSP or IASP and a BESP and ends at the demarcation point between a BESP and a governing body or PSAP to provide basic emergency service.
- ~~(l) "Basic emergency service outage" or "BES outage" means a failure of basic emergency service that prevents or would prevent 9-1-1 calls, ANI, or location information from being delivered from the demarcation point between the OSP or IASP and the BESP to the demarcation point between the BESP and the governing body or PSAP.~~
- (m) "Basic Emergency Service Provider" (BESP) means any person certificated by the Commission to provide basic emergency service.
- (n) "Concurrent session" means a channel for an inbound simultaneous 9-1-1 call.
- (o) "Demarcation point" means a physical point of interconnection where the responsibility for a portion of 9-1-1 service changes from one party to another. ~~It includes the point of interconnection between BESP and the OSP, IASP, or other BESP for the purpose of selectively routing and transporting 9-1-1 calls directly to a demarcation point with a governing body or PSAP. It includes the point of interconnection mutually agreed upon in writing by the BESP and each governing body or PSAP with primary responsibility for dispatching first responders to the callers' locations.~~
- (p) "Emergency notification service" (ENS) means a public alerting service that, upon activation by a public agency, rapidly distributes notifications within a specified geographic area of hazardous conditions or emergent events that threaten the health or lives of people or threatens damage or destruction of property, including, without limitation, floods, fires, and hazardous materials incidents.
- (q) "Emergency telephone charge" means a charge established by a governing body pursuant to § 29-11-102(2)(a), C.R.S., to pay for the expenses authorized in § 29-11-104, C.R.S.
- (r) "Geographic area" means the area such as a city, municipality, county, multiple counties or other areas defined by a governing body or other governmental entity for the purpose of providing public agency response to 9-1-1 calls.
- (s) "Governing body" means the organization responsible for establishing, collecting, and disbursing the emergency telephone charge in a specific geographic area, pursuant to §§ 29-11-102, 103, and 104, C.R.S.
- (t) "Improvement amount" means the amount approved by the Commission as described in subparagraph 2137(e)(II).

- (u) “Improvement plan” means the plan proposed by a BESP or approved by the Commission as described in paragraph 2143(b).
- (v) “Intermediary aggregation service provider” (IASP) means a person that aggregates and transports 9-1-1 calls for one or more OSPs for delivery to a demarcation point with a BESP.
- (w) “Location information” means ALI or its functional equivalent associated with a 9-1-1 call and provided by a BESP pursuant to its BES tariff.
- (x) "Multi-line telephone system" (MLTS) means a system comprised of common control units, telephones, and control hardware and software providing local telephone service to multiple customers in businesses, apartments, townhouses, condominiums, schools, dormitories, hotels, motels, resorts, extended care facilities, or similar entities, facilities, or structures. Multi-line telephone system includes:
 - (I) network and premises-based systems such as Centrex, PBX, and hybrid-key telephone systems; and
 - (II) systems owned or leased by governmental agencies, nonprofit entities, and for-profit businesses.
- (y) "Multiple-line telephone system operator" means the person that operates an MLTS from which an end user may place a 9-1-1 call through the public switched network.
- (z) “Network Operations Center” (NOC) or “Basic Emergency Service Network Operations Center” means a 24x7, 365 days a year single point of contact for Basic Emergency Service (BES). The NOC is responsible for monitoring the BES network, notifying PSAPs of ~~BES outages~~PSAP service disruptions, initiating repairs, troubleshooting, and resolving BES network issues.
- (aa) “Originating service provider” (OSP) means a local exchange carrier, wireless carrier, Voice-over-Internet-Protocol service provider, or other provider of functionally equivalent services supplying the ability to place 9-1-1 calls.
- (bb) “Primary demarcation point” means the demarcation point designated to the BESP as the primary or first location for delivery of 9-1-1 calls, ANI, and location information for a specific geographic area. This designation is determined by the governing body or PSAP with jurisdictional authority for the geographic area from which the call originates. The physical location of a primary demarcation point may be at a PSAP, at a point of interconnection with a governing body’s local network, or at any other location designated by the governing body or PSAP for delivery of 9-1-1 calls to a PSAP.
- (cc) “PSAP service disruption” means any situation in which a BESP is unable to deliver 9-1-1 calls, ANI, or location information to the primary demarcation point due to an event or incident inside the BES network or on the BESP’s side of the demarcation point. A PSAP service disruption includes, but is not limited to:
 - (I) any event or incident that occurs inside the BES network that results in or requires the BESP to reroute 9-1-1 calls to the demarcation point for an alternate PSAP or the governing body for an alternate PSAP; or

(II) any situation in which a PSAP is unable to receive 9-1-1 calls or location information as the result of an event or incident that occurs inside the BES network, even if the facilities involved in the event or incident also provide OSP connectivity.

~~(ddb)~~ "Public Safety Answering Point" (PSAP) means a facility equipped and staffed to receive and process 9-1-1 calls from a BESP.

~~(eee)~~ "Selective routing" means the routing of a 9-1-1 call to the demarcation point with a governing body or PSAP based upon the location information or other factors as agreed upon by the governing body or PSAP.

* * * *

[indicates omission of unaffected rules]

2134. Process for Certification of Basic Emergency Service Providers (BESPs).

* * * *

[indicates omission of unaffected rules]

(e) ~~Two years from the grant of the application~~ By March 30, 2025, and each two years thereafter, each BESP actively providing BES shall file with the Commission updates regarding any changes to the following required information in paragraph (c): items (I)-(IV), (XII)-(XVIII), (XX)-(XXV), and (XXIX)(A)-(C). Additionally, the BESP shall include with this filing an attestation that the information provided is true, accurate, and correct, and that the BESP remains financially and administratively sound and capable of providing the BES offered in its current tariff(s).

* * * *

[indicates omission of unaffected rules]

2136. Obligations of Basic Emergency Service Providers.

(a) A BESP certificated by the Commission shall interconnect with all OSPs and IASPs who have customers in areas served by the BESP. BESPs shall interconnect with all other BESPs for the purpose of transferring 9-1-1 calls to PSAPs served by the other BESPs.

(b) The BESP shall provide geographically diverse demarcation points for aggregating 9-1-1 calls and location information from OSPs and IASPs. At the request of an OSP or IASP, a BESP shall interconnect with the requestor for the purpose of aggregating and transporting 9-1-1 calls and location information from the requestor to the demarcation point with the governing body or PSAP. Interconnection shall be accomplished in a timely manner, generally not more than 30 days from the time the BESP receives a written order. Interconnection facilities shall generally be engineered as follows:

(I) dedicated facilities for connecting OSPs and IASPs to a BESP shall be based on the requirements established by the BESP to serve the customers within that local exchange;
or

- (II) if shared or common facility groups are used to transport calls from an OSP or IASP to a BESP, they shall be sized to carry the additional call volume requirements. Additionally, common or shared groups shall be arranged to provide 9-1-1 calls on a priority basis where economically and technically feasible.
- (c) A BESP shall develop and file with the Commission tariffs that comply with the requirements set forth in rule 2137.
- (d) A BESP shall render to each governing body or PSAP a single monthly bill for its tariffed services. The monthly bill shall be sufficiently detailed to allow the governing body or PSAP to determine that it is being billed properly based on the billing increments as approved by the Commission.
- (e) BESP's shall ensure, to the extent possible and in the most efficient manner, that basic emergency service is available for transmitting 9-1-1 calls from deaf, hard of hearing, and persons with speech impairments to the appropriate PSAP.
- (f) A BESP shall ensure that all BES facilities, and interconnections between it and the OSPs and IASPs are engineered, installed, maintained, and monitored in order to provide a minimum of two circuits and a minimum P.01 grade of service (one percent or less blocking during the busy hour), or such other minimum grade of service requirements approved by the Commission.
- (g) Where a BESP obtains BES facilities from a basic local exchange carrier, the rates for such facilities shall be reflected in a tariff or agreement filed for approval with the Commission. Such tariffs or agreements shall ensure that such facilities are engineered, installed, maintained, and monitored to provide a minimum of two circuits and a grade of service that has one percent (P.01) or less blocking. The basic local exchange carrier providing such facilities shall not be considered a BESP. The provisions of this rule shall not apply to routing arrangements implemented pursuant to paragraph 2143(j)(II).
- (h) To expedite the restoration of service following a 9-1-1 outage PSAP service disruption, each BESP shall designate a telephone number for governing bodies, PSAPs, IASPs, and OSPs to report trouble. Such telephone number shall be staffed seven days a week, 24 hours a day, by personnel capable of processing calls to initiate immediate corrective action.
- (i) A BESP shall keep on file with the Commission its contingency plan as described in paragraph 2143(e).
- (j) BESP's shall identify service providers supplying service within a governing body or PSAP's service area, or statewide, to the extent that the BESP possesses such information, in response to a request from a governing body, PSAP, or the Commission.
- (k) A BESP shall report to the Commission a list of every PSAP serviced by the BESP with the number of concurrent sessions provided to each PSAP. This report shall be updated and filed annually with the Commission by June 1 of each year.
- (l) These requirements are in addition to those in paragraph 2335(d). If the BESP is aware of repairs or maintenance being conducted or to be conducted that have the potential to impact service to a primary demarcation point, the BESP shall notify the associated PSAP(s) of the potential of a PSAP service disruption at least 24 hours prior to work commencing, or as soon as

possible. This notification shall be provided by voice call to the PSAP, if possible, and to the contact maintained for the PSAP as described in paragraph 2143(c). When scheduling routing maintenance or repairs, the BESP should schedule such repairs at a time likely to cause the least impact to the affected PSAP(s). Wherever practicable, maintenance of the BES network shall be performed with no scheduled downtime. The BESP shall employ best efforts to ensure that planned events for routine maintenance are scheduled and communicated to avoid impacts to each affected PSAP's 9-1-1 operations. Conduct of emergency or unscheduled repairs in order to restore service to a PSAP should not be delayed in order to make PSAP notification.

2137. Required Components of a Basic Emergency Service Tariff.

- (a) At a minimum, a BES tariff must include the following services:
- (I) delivery of 9-1-1 calls to the demarcation point with the governing body or PSAP with primary responsibility for dispatching first responders to the caller's location unless otherwise directed by the PSAP or governing body;
 - (II) delivery of location information to the governing body or PSAP receiving the 9-1-1 call;
 - (III) the ability to automatically route 9-1-1 calls to one or more alternate PSAPs, as designated by the governing body or PSAP, in the event of a call overflow, outagePSAP service disruption, or PSAP abandonment, including split contingent routing of 9-1-1 calls to multiple alternate PSAPs if feasible;
 - (IV) the ability to transfer 9-1-1 calls to other Colorado governing bodies or PSAPs with location information;
 - (V) when feasible, the ability to transfer 9-1-1 calls to 10-digit lines without additional long distance charges;
 - (VI) if feasible, the ability to transfer 9-1-1 calls to a PSAP in another state with location information without additional long distance charges;
 - (VII) processes or tools that a governing body or PSAP and the BESP may use to pre-validate location information and routing information associated with specific telephone numbers and to correct such information or to report telephone numbers that do not have associated location information;
 - (VIII) minimum quality of service metrics that the BES will meet (examples: service availability percentage, jitter, packet loss, mean opinion score, latency, successful call delivery percentage, and call delivery accuracy percentage);
 - (IX) a description of the internal schedules for testing, monitoring, maintaining, and replacing all equipment and electronics that will be used to provide BES;
 - (X) the provision of technical support 24 hours per day, every day of each year;
 - (XI) reporting tools for access to service metrics, call processing, call status, and other call and service data;

- (XII) nonrecurring charges for one-time costs, such as installation of equipment or change orders related to the delivery of BES must be listed separately in the tariff, unless those costs are included in the monthly recurring charges provided for in the tariff; and
- (XIII) terms of payment for invoices for BES must be stated, including late fees.

* * * *

[indicates omission of unaffected rules]

2143. Basic Emergency Service Reliability and Outage-Service Disruption Response.

* * * *

[indicates omission of unaffected rules]

- (c) Each BESP shall maintain contact information for each PSAP ~~as specified by the governing body or PSAP~~ served by the BESP for notification of actual or potential ~~BES outages~~PSAP service disruptions. No less than annually, the BESP shall contact each PSAP that is served by the BESP to verify the notification information on file.
- (d) The BESP shall obtain from each governing body or PSAP its preferred alternative method(s) for the governing body or PSAP and the BESP to communicate during a ~~BES outage~~PSAP service disruption.

* * * *

[indicates omission of unaffected rules]

- (g) Where feasible, the BESP should develop plans for its technicians to communicate with the NOC in the event of an isolation of a central office serving a PSAP in a manner that will allow for expeditious resolution of the ~~outage~~PSAP service disruption.

* * * *

[indicates omission of unaffected rules]

- (i) All call recordings and messages transmitted or received by the BESP regarding ~~an outage~~a PSAP service disruption shall be retained for at least 24 months. All logs, call recordings and messages concerning a specific ~~outage~~disruption shall be assigned a unique trouble ticket number.
- (j) In the event of a confirmed or ~~potential BES outage~~possible PSAP service disruption, the following shall occur.
 - (l) The BESP shall notify each affected governing body or PSAP via the contacts previously provided in accordance with paragraph (c) of this rule. Such notifications shall be made as soon as is practical, and shall include a trouble ticket number, the nature and extent of the ~~BES outage~~confirmed or possible PSAP service disruption, if known, and the actions

being taken to correct the ~~outagedisruption~~. If applicable, the notice shall include interim measures being taken to route 9-1-1 calls to alternate PSAPs or other locations. ~~If known, the notification shall also include an estimated time of repair.~~

- (II) If the ~~BES outage~~confirmed or possible PSAP service disruption exceeds or is anticipated to exceed 15 minutes from the time a BESP becomes aware of the ~~outagedisruption~~, the BESP shall implement the appropriate contingency plan as established in paragraph (e) or provide temporary solutions so that 9-1-1 calls can be answered until ~~the disruption is resolved~~BES is restored. The BESP shall coordinate any alternate solutions with the contact(s) provided in accordance with paragraph (c) for the affected governing body or PSAP. In the event of a confirmed or possible PSAP service disruption, the BESP must deliver all 9-1-1 calls to an alternate PSAP, if possible, until the PSAP service disruption is resolved.
- (III) If a ~~confirmed or possible PSAP service~~ disruption ~~of BES~~ exceeds 30 minutes ~~in duration~~, the responsible BESP shall inform the Commission within two hours of the time that the BESP becomes aware of the ~~disruption~~outage. Such notification shall be made ~~through a service disruption reporting form, available on the Commission's website, in a manner prescribed by the Commission, outlining the nature and extent of the outage and actions taken to restore service and any interim measures taken to mitigate the outage prior to resolution. The BESP shall notify the Commission of restoration of service by the beginning of the next business day. This notification shall be followed within 30 days of such outage by a report to the Commission. The report shall follow Commission reporting format and guidelines and shall include a statement of whether call back numbers for 9-1-1 calls, which could not be connected, were provided to the PSAP pursuant to subparagraph 2143(j)(V). Commission staff may request an update regarding an ongoing outage at any time.~~
- (IV) In addition to the notification to Commission staff required by subparagraph (III), the BESP shall also copy Commission staff on all email notifications provided to Colorado PSAPs regarding confirmed or possible PSAP service disruptions at an email address designated for this purpose. All 9-1-1 calls received by the BESP shall be routed to the PSAP with primary responsibility for dispatching first responders to the caller's location, or in accordance with the alternate solutions described in paragraph (j)(II) of this rule, or, if unavailable, to another PSAP if possible.
- (V) The BESP shall notify the Commission of restoration of service by the beginning of the next business day following service restoration. Following the restoration of BES, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the outage. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information.
- (VI) The BESP shall submit a final report to the Commission through the service disruption reporting form within 30 days of the restoration of service. The report shall include a statement as to whether call back numbers for 9-1-1 calls which could not be connected due to the confirmed or possible PSAP service disruption were provided to the PSAP as required by subparagraph 2143(j)(VII). In the event of a BES outage of more than four

~~hours duration, or 12 hours in duration if the outage is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the duration of the outage in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles.~~

(VII) Following the restoration of PSAP service, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the disruption. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information. The BESP must provide this information to the governing body or PSAP without requiring a request from the governing body or PSAP.

(VIII) In the event of a confirmed PSAP service disruption of more than four hours duration, or 12 hours in duration if the disruption is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the full duration of the disruption in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles to the governing body or PSAP that normally receives the bill. If, as the result of a formal complaint proceeding or other proceeding, the Commission finds that a BESP has failed to provide a credit required under this paragraph, the Commission may order the amount of the credit to be doubled. The BESP must provide billing credits required under this rule automatically, without requiring a request from the governing body or PSAP. Additionally, civil penalties may be assessed as described in rules 2009 through 2011.

(k) Commission staff shall commence an informal investigation regarding each confirmed or possible PSAP service disruption~~apparent basic emergency service outage~~ meeting the below criteria ~~established by the 9-1-1 Advisory Task Force~~, despite the dispute resolution process ~~set forth~~ in the BESP's tariff, if any. The 9-1-1 Advisory Task Force may participate in the investigation.

(I) Informal investigations are required when the service disruption meets any of the following criteria:

(A) multiple PSAPs are affected;

(B) the details of the service disruption, such as the cause, the beginning and end times, and the implemented mitigation strategies are unclear from the information available to Commission staff;

(C) the service disruption lasted longer than four hours;

(D) there was an apparent failure to notify the PSAP as required by subparagraph 2143(j)(l);

(E) there were repeated service disruptions of a similar nature or in the same area within a 30-day period;

(F) at the request of one or more affected PSAP or governing body; or

(G) when there was a possible violation of a Commission rule.

- (I) Each informal investigation under this paragraph ~~will should~~ be handled as follows.
- (A) Commission staff shall refer an informal investigation form to the BESP for its written response on a standardized form developed by Commission staff for that purpose. This form shall include questions developed by and solicited from the affected governing body or PSAP and the 9-1-1 Advisory Task Force. The BESP shall respond in writing with complete responses within thirty days, or such lesser or greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. If requested, the response shall include: (1) the NOC call log entries; and (2) copies of e-mails and transcripts or recordings of phone calls between the NOC and other parties related to the ~~outage~~confirmed or possible PSAP service disruption.
- (B) The BESP's responses shall fairly meet the substance of each request. The BESP may not provide an incomplete response citing a lack of information or knowledge unless it states it has made diligent and reasonable inquiry and requests that Commission staff allow a reasonable extension of time not to exceed fourteen days. Additional reasonable extensions of time may be granted upon request. Requests for any extensions shall be accompanied with estimates of when information may be provided.
- (C) Commission staff, the affected governing bodies or PSAPs, or the 9-1-1 Advisory Task Force may also request a meeting with the BESP, which may be recorded, provided that the recording may not be used by any person for any purpose in subsequent proceedings before the Commission. The BESP should arrange for appropriate staff to participate in the meeting, including technical support, service, and management with relevant knowledge and sufficient level of authority or supervision.
- (II) During the pendency of an informal investigation, communications regarding the investigation between Commission staff and any participant in the investigation shall be in writing and copied to the BESP, Commission staff, the affected governing body or PSAP, and the Chair of the 9-1-1 Advisory Task Force or his or her designee. Commission staff shall maintain a complete file related to each informal investigation, including all communications and recordings, and access to and use of the file is subject to applicable Commission rules regarding information claimed to be confidential or highly confidential.
- (IV#) Commission staff will document in a report the closure of each informal investigation within sixty days of the ~~outage~~confirmed or possible PSAP service disruption, or such greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. The report should include whether the ~~outage-incident~~ was a ~~BES-outage~~PSAP service disruption as defined in paragraph 2131(cc), whether the BESP handled the ~~BES-outage~~PSAP service disruption in a timely manner with the appropriate personnel, and whether the BESP has taken or committed to taking corrective action to prevent or mitigate a similar ~~outage-disruption~~ from occurring in the future, specifying the corrective action and the timeframe, if applicable. The report shall also document any non-compliance with Commission rules or the BESP's tariff, including the BESP's service quality plan. Within 14 days, the 9-1-1 Advisory Task

Force, the affected governing body or PSAP, or the BESP may submit to Commission staff written comments, which Commission staff shall append to the report and preserve in the informal investigation file.

- (IV) At any time, Commission staff, the 9-1-1 Advisory Task Force, or the affected governing body or PSAP may commence a proceeding before the Commission, at which time the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report. If the affected governing body or PSAP seeks relief in an alternative forum, then the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report.

* * * *

[indicates omission of unaffected rules]

2335. The Provision of Service During Maintenance or Emergencies.

The following paragraphs describe minimum standards for maintaining service.

* * * *

[indicates omission of unaffected rules]

- (d) Service interruptions for an extended time due to maintenance requirements shall be performed at a time that causes minimal inconvenience to impacted customers. Each provider of services identified in rule 2330 shall take reasonable steps to notify the customer in advance of extended maintenance requirements. If possible, such providers shall also make access to emergency service as defined in paragraph 2001(b), and basic emergency service, as applicable, available by alternative means when the provider knows that the service interruption affects 1,000 or more access lines and when the provider knows, based upon the prior experience of the provider, that the interruption may last more than four hours during the hours of 8 a.m. to 10 p.m. If the a basic emergency service provider cannot provide emergency service experiences a possible or confirmed PSAP service, it shall file a report of the occurrence as required by subparagraph 2143(j)(III).

COLORADO DEPARTMENT OF REGULATORY AGENCIES

Public Utilities Commission

4 CODE OF COLORADO REGULATIONS (CCR) 723-2

PART 2

**RULES REGULATING TELECOMMUNICATIONS SERVICES
 AND PROVIDERS OF TELECOMMUNICATIONS SERVICES**

2001. Definitions.

* * * *

[indicates omission of unaffected rules]

- (b) "Access to emergency services" means access to emergency telephone service as defined in § 29-11-101(14), C.R.S., to the extent the local government or the public safety organization has implemented 9-1-1.

* * * *

[indicates omission of unaffected rules]

2011. Regulated Telecommunications Utility Rule Violations, Civil Enforcement, and Civil Penalties.

An admission to or Commission adjudication for liability for an intentional violation of the following may result in the assessment of a civil penalty of up to \$2,000.00 per offense. Fines shall accumulate up to, but shall not exceed, the applicable statutory limits set in § 40-7-113.5, C.R.S.

Citation	Description	Maximum Penalty Per Violation
Rule 2109(b),(e)-(g); text preceding (a)	Discontinuance of Regulated Services	\$2000
Rule 2110, text preceding (a) only	Applications to Transfer or Encumber	\$2000
Rule 2122	Keeping a Current Tariff on File with the Commission	\$2000

Rule 2135	Uniform System of Accounts, Cost Segregation and Collection	\$2000
Rule 2136	Obligations of Basic Emergency Service Providers	\$2000
Rule 2139	Obligations of Resellers of Basic Local Exchange Service	\$2000
Rule 2142	Nondisclosure of Name/Number/Address Information	\$2000
Rule 2143	Basic Emergency Service Reliability and Service Disruption Response	\$2000
Rule 2150	Administration of the 9-1-1 Surcharge Trust Cash Fund	\$2000
Rule 2152	Audit of Service Providers Regarding Emergency Telephone Charge and 9-1-1 Surcharge Practices	\$2000
Rule 2186(a),(d), (e) and (f)	Relinquishment of Designation as Provider of Last Resort	\$2000
Rule 2302(a)-(c);(e)-(g)	Applications for Service, Customer Deposits, and Third Party Guarantees	\$500
Rule 2305, text preceding (a) only	Refund Plans	\$2000
Rule 2334	Construction and Maintenance Practices for Telecommunications Facilities	\$1000
Rule 2335	Provision of Service During Maintenance or Emergencies	\$2000
Rule 2337(a)	Standard Performance Characteristics for Customer Access Lines	\$1000
Rule 2413	Affiliate Transactions for Local Exchange Providers	\$2000

Rule 2533	Submission of Agreement and Amendments for Approval	\$2000
Rule 2742	Abbreviated Dialing Codes	\$2000
Rule 2823(a),(c)-(e)	Conformity with the Federal Americans with Disabilities Act of 1990	\$100
Rule 2824	Conformity with the Commission’s Quality of Service Rules	\$100
Rule 2827(b)	Timely or Complete Filing or Making Appropriate Payments to the TRS Fund	\$100
Rule 2845	Timely or Complete Filing or Making Appropriate Payments to the HCSM Fund	\$100

* * * *

[indicates omission of unaffected rules]

2131. Definitions.

The following definitions apply only in the context of rules 2130 through 2159:

- (a) "9-1-1" means a three-digit abbreviated dialing code used to report an emergency situation requiring a response by a public agency such as a fire department or police department.
- (b) "9-1-1 access connection" means any communications service including wireline, wireless cellular, interconnected voice-over-internet-protocol, or satellite in which connections are enabled, configured, or capable of making 9-1-1 calls. The term does not include facilities-based broadband services. The number of 9-1-1 access connections is determined by the configured capacity for simultaneous outbound calling.
- (c) "9-1-1 Advisory Task Force" means the representative group established in accordance with rule 2145, which provides oversight of the statewide implementation and provision of basic emergency service, and periodically reports to the Commission on matters related to 9-1-1 service delivery in the state of Colorado.
- (d) "9-1-1 call" means a request for emergency assistance from the public by dialing 9-1-1 or addressing the ESInet regardless of the technology used, and may include voice, text, images, and video, whether originated by wireline, wireless, satellite, or other means.
- (e) "9-1-1 service" means the service by which a 9-1-1 call is routed and transported from the end user to the governing body or PSAP serving the caller’s location. 9-1-1 service also includes location information routed to the PSAP.

- (f) "9-1-1 surcharge" or "state 9-1-1 surcharge" means the surcharge established pursuant to § 29-11-102.3, C.R.S.
- (g) "Alternate PSAP" means a PSAP or PSAPs designated to receive 9-1-1 calls when the BESP is unable to deliver those calls to the primary demarcation point, or at the request of the PSAP that is normally responsible for receiving calls in that geographic area or at the request of its governing body.
- (h) "Automatic Location Identification" (ALI) means the automatic provision to a PSAP for display, on equipment at the PSAP, of the telephone number and location of the caller. ALI data includes non-listed and non-published numbers and addresses, and other information about the caller's location.
- (i) "Automatic Number Identification" (ANI) means the automatic provision to a PSAP for display of the caller's telephone number at the PSAP
- (j) "Basic emergency service" (BES) means the aggregation and transportation of a 9-1-1 call directly to a demarcation point with a governing body or PSAP, regardless of the technology used to provide the service. The aggregation of calls means the collection of 9-1-1 calls from one or more OSPs or IASPs for the purpose of selectively routing and transporting 9-1-1 calls directly to a demarcation point with a governing body or PSAP. The offering or providing of location information or selective routing directly to a governing body or PSAP is also a basic emergency service. Basic emergency service does not include:
 - (I) the portion of a 9-1-1 call provided by an OSP;
 - (II) the portion of a 9-1-1 call or services provided by an IASP;
 - (III) the portion of a 9-1-1 call from the OSP or an IASP to a demarcation point with the BESP;
 - (IV) the portion of a 9-1-1 call after the demarcation point between the BESP and the governing body or PSAP; or
 - (V) the delivery of text messages to a governing body or PSAP via networks or connections separate from the basic emergency service network.
- (k) "Basic emergency service facilities" or "BES facilities" means the lines, wires, cables, conduit, ducts, poles, cross-arms, equipment, supporting structures, and other infrastructure used by the BESP to provide basic emergency service. "Facilities" has the same meaning, unless the context requires otherwise.
- (l) "Basic emergency service network" or "BES network" means the portion of the 9-1-1 call path that begins at the demarcation point between an OSP or IASP and a BESP and ends at the demarcation point between a BESP and a governing body or PSAP to provide basic emergency service.
- (m) "Basic Emergency Service Provider" (BESP) means any person certificated by the Commission to provide basic emergency service.

- (n) “Concurrent session” means a channel for an inbound simultaneous 9-1-1 call.
- (o) “Demarcation point” means a physical point of interconnection where the responsibility for a portion of 9-1-1 service changes from one party to another.
- (p) “Emergency notification service” (ENS) means a public alerting service that, upon activation by a public agency, rapidly distributes notifications within a specified geographic area of hazardous conditions or emergent events that threaten the health or lives of people or threatens damage or destruction of property, including, without limitation, floods, fires, and hazardous materials incidents.
- (q) “Emergency telephone charge” means a charge established by a governing body pursuant to § 29-11-102(2)(a), C.R.S., to pay for the expenses authorized in § 29-11-104, C.R.S.
- (r) “Geographic area” means the area such as a city, municipality, county, multiple counties or other areas defined by a governing body or other governmental entity for the purpose of providing public agency response to 9-1-1 calls.
- (s) “Governing body” means the organization responsible for establishing, collecting, and disbursing the emergency telephone charge in a specific geographic area, pursuant to §§ 29-11-102, 103, and 104, C.R.S.
- (t) “Improvement amount” means the amount approved by the Commission as described in subparagraph 2137(e)(II).
- (u) “Improvement plan” means the plan proposed by a BESP or approved by the Commission as described in paragraph 2143(b).
- (v) “Intermediary aggregation service provider” (IASP) means a person that aggregates and transports 9-1-1 calls for one or more OSPs for delivery to a demarcation point with a BESP.
- (w) “Location information” means ALI or its functional equivalent associated with a 9-1-1 call and provided by a BESP pursuant to its BES tariff.
- (x) “Multi-line telephone system” (MLTS) means a system comprised of common control units, telephones, and control hardware and software providing local telephone service to multiple customers in businesses, apartments, townhouses, condominiums, schools, dormitories, hotels, motels, resorts, extended care facilities, or similar entities, facilities, or structures. Multi-line telephone system includes:
 - (I) network and premises-based systems such as Centrex, PBX, and hybrid-key telephone systems; and
 - (II) systems owned or leased by governmental agencies, nonprofit entities, and for-profit businesses.
- (y) “Multiple-line telephone system operator” means the person that operates an MLTS from which an end user may place a 9-1-1 call through the public switched network.

- (z) “Network Operations Center” (NOC) or “Basic Emergency Service Network Operations Center” means a 24x7, 365 days a year single point of contact for Basic Emergency Service (BES). The NOC is responsible for monitoring the BES network, notifying PSAPs of PSAP service disruptions, initiating repairs, troubleshooting, and resolving BES network issues.
- (aa) “Originating service provider” (OSP) means a local exchange carrier, wireless carrier, Voice-over-Internet-Protocol service provider, or other provider of functionally equivalent services supplying the ability to place 9-1-1 calls.
- (bb) “Primary demarcation point” means the demarcation point designated to the BESP as the primary or first location for delivery of 9-1-1 calls, ANI, and location information for a specific geographic area. This designation is determined by the governing body or PSAP with jurisdictional authority for the geographic area from which the call originates. The physical location of a primary demarcation point may be at a PSAP, at a point of interconnection with a governing body’s local network, or at any other location designated by the governing body or PSAP for delivery of 9-1-1 calls to a PSAP.
- (cc) “PSAP service disruption” means any situation in which a BESP is unable to deliver 9-1-1 calls, ANI, or location information to the primary demarcation point due to an event or incident inside the BES network or on the BESP’s side of the demarcation point. A PSAP service disruption includes, but is not limited to:
 - (I) any event or incident that occurs inside the BES network that results in or requires the BESP to reroute 9-1-1 calls to the demarcation point for an alternate PSAP or the governing body for an alternate PSAP; or
 - (II) any situation in which a PSAP is unable to receive 9-1-1 calls or location information as the result of an event or incident that occurs inside the BES network, even if the facilities involved in the event or incident also provide OSP connectivity.
- (dd) "Public Safety Answering Point" (PSAP) means a facility equipped and staffed to receive and process 9-1-1 calls from a BESP.
- (ee) "Selective routing" means the routing of a 9-1-1 call to the demarcation point with a governing body or PSAP based upon the location information or other factors as agreed upon by the governing body or PSAP.

* * * *

[indicates omission of unaffected rules]

2134. Process for Certification of Basic Emergency Service Providers (BESPs).

* * * *

[indicates omission of unaffected rules]

- (e) By March 30, 2025, and each two years thereafter, each BESP actively providing BES shall file with the Commission updates regarding any changes to the following required information in

paragraph (c): items (I)-(IV), (XII)-(XVIII), (XX)-(XXV), and (XXIX)(A)-(C). Additionally, the BESP shall include with this filing an attestation that the information provided is true, accurate, and correct, and that the BESP remains financially and administratively sound and capable of providing the BES offered in its current tariff(s).

* * * *

[indicates omission of unaffected rules]

2136. Obligations of Basic Emergency Service Providers.

- (a) A BESP certificated by the Commission shall interconnect with all OSPs and IASPs who have customers in areas served by the BESP. BESP's shall interconnect with all other BESP's for the purpose of transferring 9-1-1 calls to PSAPs served by the other BESP's.
- (b) The BESP shall provide geographically diverse demarcation points for aggregating 9-1-1 calls and location information from OSPs and IASPs. At the request of an OSP or IASP, a BESP shall interconnect with the requestor for the purpose of aggregating and transporting 9-1-1 calls and location information from the requestor to the demarcation point with the governing body or PSAP. Interconnection shall be accomplished in a timely manner, generally not more than 30 days from the time the BESP receives a written order. Interconnection facilities shall generally be engineered as follows:
 - (I) dedicated facilities for connecting OSPs and IASPs to a BESP shall be based on the requirements established by the BESP to serve the customers within that local exchange; or
 - (II) if shared or common facility groups are used to transport calls from an OSP or IASP to a BESP, they shall be sized to carry the additional call volume requirements. Additionally, common or shared groups shall be arranged to provide 9-1-1 calls on a priority basis where economically and technically feasible.
- (c) A BESP shall develop and file with the Commission tariffs that comply with the requirements set forth in rule 2137.
- (d) A BESP shall render to each governing body or PSAP a single monthly bill for its tariffed services. The monthly bill shall be sufficiently detailed to allow the governing body or PSAP to determine that it is being billed properly based on the billing increments as approved by the Commission.
- (e) BESP's shall ensure, to the extent possible and in the most efficient manner, that basic emergency service is available for transmitting 9-1-1 calls from deaf, hard of hearing, and persons with speech impairments to the appropriate PSAP.
- (f) A BESP shall ensure that all BES facilities, and interconnections between it and the OSPs and IASPs are engineered, installed, maintained, and monitored in order to provide a minimum of two circuits and a minimum P.01 grade of service (one percent or less blocking during the busy hour), or such other minimum grade of service requirements approved by the Commission.

- (g) Where a BESP obtains BES facilities from a basic local exchange carrier, the rates for such facilities shall be reflected in a tariff or agreement filed for approval with the Commission. Such tariffs or agreements shall ensure that such facilities are engineered, installed, maintained, and monitored to provide a minimum of two circuits and a grade of service that has one percent (P.01) or less blocking. The basic local exchange carrier providing such facilities shall not be considered a BESP. The provisions of this rule shall not apply to routing arrangements implemented pursuant to paragraph 2143(j)(II).
- (h) To expedite the restoration of service following a PSAP service disruption, each BESP shall designate a telephone number for governing bodies, PSAPs, IASPs, and OSPs to report trouble. Such telephone number shall be staffed seven days a week, 24 hours a day, by personnel capable of processing calls to initiate immediate corrective action.
- (i) A BESP shall keep on file with the Commission its contingency plan as described in paragraph 2143(e).
- (j) BESP's shall identify service providers supplying service within a governing body or PSAP's service area, or statewide, to the extent that the BESP possesses such information, in response to a request from a governing body, PSAP, or the Commission.
- (k) A BESP shall report to the Commission a list of every PSAP serviced by the BESP with the number of concurrent sessions provided to each PSAP. This report shall be updated and filed annually with the Commission by June 1 of each year.
- (l) These requirements are in addition to those in paragraph 2335(d). If the BESP is aware of repairs or maintenance being conducted or to be conducted that have the potential to impact service to a primary demarcation point, the BESP shall notify the associated PSAP(s) of the potential of a PSAP service disruption at least 24 hours prior to work commencing, or as soon as possible. This notification shall be provided by voice call to the PSAP, if possible, and to the contact maintained for the PSAP as described in paragraph 2143(c). When scheduling routing maintenance or repairs, the BESP should schedule such repairs at a time likely to cause the least impact to the affected PSAP(s). Wherever practicable, maintenance of the BES network shall be performed with no scheduled downtime. The BESP shall employ best efforts to ensure that planned events for routine maintenance are scheduled and communicated to avoid impacts to each affected PSAP's 9-1-1 operations. Conduct of emergency or unscheduled repairs in order to restore service to a PSAP should not be delayed in order to make PSAP notification.

2137. Required Components of a Basic Emergency Service Tariff.

- (a) At a minimum, a BES tariff must include the following services:
 - (I) delivery of 9-1-1 calls to the demarcation point with the governing body or PSAP with primary responsibility for dispatching first responders to the caller's location unless otherwise directed by the PSAP or governing body;
 - (II) delivery of location information to the governing body or PSAP receiving the 9-1-1 call;
 - (III) the ability to automatically route 9-1-1 calls to one or more alternate PSAPs, as designated by the governing body or PSAP, in the event of a call overflow, PSAP service

disruption, or PSAP abandonment, including split contingent routing of 9-1-1 calls to multiple alternate PSAPs if feasible;

- (IV) the ability to transfer 9-1-1 calls to other Colorado governing bodies or PSAPs with location information;
- (V) when feasible, the ability to transfer 9-1-1 calls to 10-digit lines without additional long distance charges;
- (VI) if feasible, the ability to transfer 9-1-1 calls to a PSAP in another state with location information without additional long distance charges;
- (VII) processes or tools that a governing body or PSAP and the BESP may use to pre-validate location information and routing information associated with specific telephone numbers and to correct such information or to report telephone numbers that do not have associated location information;
- (VIII) minimum quality of service metrics that the BES will meet (examples: service availability percentage, jitter, packet loss, mean opinion score, latency, successful call delivery percentage, and call delivery accuracy percentage);
- (IX) a description of the internal schedules for testing, monitoring, maintaining, and replacing all equipment and electronics that will be used to provide BES;
- (X) the provision of technical support 24 hours per day, every day of each year;
- (XI) reporting tools for access to service metrics, call processing, call status, and other call and service data;
- (XII) nonrecurring charges for one-time costs, such as installation of equipment or change orders related to the delivery of BES must be listed separately in the tariff, unless those costs are included in the monthly recurring charges provided for in the tariff; and
- (XIII) terms of payment for invoices for BES must be stated, including late fees.

* * * *

[indicates omission of unaffected rules]

2143. Basic Emergency Service Reliability and Service Disruption Response.

* * * *

[indicates omission of unaffected rules]

- (c) Each BESP shall maintain contact information for each PSAP served by the BESP for notification of actual or potential PSAP service disruptions. No less than annually, the BESP shall contact each PSAP that is served by the BESP to verify the notification information on file.

- (d) The BESP shall obtain from each governing body or PSAP its preferred alternative method(s) for the governing body or PSAP and the BESP to communicate during a PSAP service disruption.

* * * *

[indicates omission of unaffected rules]

- (g) Where feasible, the BESP should develop plans for its technicians to communicate with the NOC in the event of an isolation of a central office serving a PSAP in a manner that will allow for expeditious resolution of the PSAP service disruption.

* * * *

[indicates omission of unaffected rules]

- (i) All call recordings and messages transmitted or received by the BESP regarding a PSAP service disruption shall be retained for at least 24 months. All logs, call recordings and messages concerning a specific disruption shall be assigned a unique trouble ticket number.

- (j) In the event of a confirmed or possible PSAP service disruption, the following shall occur.

- (I) The BESP shall notify each affected governing body or PSAP via the contacts previously provided in accordance with paragraph (c) of this rule. Such notifications shall be made as soon as is practical, and shall include a trouble ticket number, the nature and extent of the confirmed or possible PSAP service disruption, if known, and the actions being taken to correct the disruption. If applicable, the notice shall include interim measures being taken to route 9-1-1 calls to alternate PSAPs or other locations. If known, the notification shall also include an estimated time of repair.
- (II) If the confirmed or possible PSAP service disruption exceeds or is anticipated to exceed 15 minutes from the time a BESP becomes aware of the disruption, the BESP shall implement the appropriate contingency plan as established in paragraph (e) or provide temporary solutions so that 9-1-1 calls can be answered until the disruption is resolved. The BESP shall coordinate any alternate solutions with the contact(s) provided in accordance with paragraph (c) for the affected governing body or PSAP. In the event of a confirmed or possible PSAP service disruption, the BESP must deliver all 9-1-1 calls to an alternate PSAP, if possible, until the PSAP service disruption is resolved.
- (III) If a confirmed or possible PSAP service disruption exceeds 30 minutes in duration, the responsible BESP shall inform the Commission within two hours of the time that the BESP becomes aware of the disruption. Such notification shall be made through a service disruption reporting form, available on the Commission's website.
- (IV) In addition to the notification to Commission staff required by subparagraph (III), the BESP shall also copy Commission staff on all email notifications provided to Colorado PSAPs regarding confirmed or possible PSAP service disruptions at an email address designated for this purpose.

- (V) The BESP shall notify the Commission of restoration of service by the beginning of the next business day following service restoration.
 - (VI) The BESP shall submit a final report to the Commission through the service disruption reporting form within 30 days of the restoration of service. The report shall include a statement as to whether call back numbers for 9-1-1 calls which could not be connected due to the confirmed or possible PSAP service disruption were provided to the PSAP as required by subparagraph 2143(j)(VII).
 - (VII) Following the restoration of PSAP service, the BESP shall notify each affected governing body or PSAP whether call back phone numbers are available for calls that were made to 9-1-1 but could not be delivered due to the disruption. If available, these call back numbers shall be provided to each governing body or PSAP within two hours of the restoration of service. When possible, this information should also include location information. The BESP must provide this information to the governing body or PSAP without requiring a request from the governing body or PSAP.
 - (VIII) In the event of a confirmed PSAP service disruption of more than four hours duration, or 12 hours in duration if the disruption is due to a fiber cut, the BESP shall provide a credit equal to the ratio of hours of the full duration of the disruption in hours to the total number of hours in the billing cycle. The credit shall be provided within no more than two billing cycles to the governing body or PSAP that normally receives the bill. If, as the result of a formal complaint proceeding or other proceeding, the Commission finds that a BESP has failed to provide a credit required under this paragraph, the Commission may order the amount of the credit to be doubled. The BESP must provide billing credits required under this rule automatically, without requiring a request from the governing body or PSAP. Additionally, civil penalties may be assessed as described in rules 2009 through 2011.
- (k) Commission staff shall commence an informal investigation regarding each confirmed or possible PSAP service disruption meeting the below criteria, despite the dispute resolution process in the BESP's tariff, if any. The 9-1-1 Advisory Task Force may participate in the investigation.
- (l) Informal investigations are required when the service disruption meets any of the following criteria:
 - (A) multiple PSAPs are affected;
 - (B) the details of the service disruption, such as the cause, the beginning and end times, and the implemented mitigation strategies are unclear from the information available to Commission staff;
 - (C) the service disruption lasted longer than four hours;
 - (D) there was an apparent failure to notify the PSAP as required by subparagraph 2143(j)(I);
 - (E) there were repeated service disruptions of a similar nature or in the same area within a 30-day period;

- (F) at the request of one or more affected PSAP or governing body; or
 - (G) when there was a possible violation of a Commission rule.
- (II) Each informal investigation under this paragraph will be handled as follows.
- (A) Commission staff shall refer an informal investigation form to the BESP for its written response on a standardized form developed by Commission staff for that purpose. This form shall include questions developed by and solicited from the affected governing body or PSAP and the 9-1-1 Advisory Task Force. The BESP shall respond in writing with complete responses within thirty days, or such lesser or greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. If requested, the response shall include: (1) the NOC call log entries; and (2) copies of e-mails and transcripts or recordings of phone calls between the NOC and other parties related to the confirmed or possible PSAP service disruption.
 - (B) The BESP's responses shall fairly meet the substance of each request. The BESP may not provide an incomplete response citing a lack of information or knowledge unless it states it has made diligent and reasonable inquiry and requests that Commission staff allow a reasonable extension of time not to exceed fourteen days. Additional reasonable extensions of time may be granted upon request. Requests for any extensions shall be accompanied with estimates of when information may be provided.
 - (C) Commission staff, the affected governing bodies or PSAPs, or the 9-1-1 Advisory Task Force may also request a meeting with the BESP, which may be recorded, provided that the recording may not be used by any person for any purpose in subsequent proceedings before the Commission. The BESP should arrange for appropriate staff to participate in the meeting, including technical support, service, and management with relevant knowledge and sufficient level of authority or supervision.
- (III) During the pendency of an informal investigation, communications regarding the investigation between Commission staff and any participant in the investigation shall be in writing and copied to the BESP, Commission staff, the affected governing body or PSAP, and the Chair of the 9-1-1 Advisory Task Force or his or her designee. Commission staff shall maintain a complete file related to each informal investigation, including all communications and recordings, and access to and use of the file is subject to applicable Commission rules regarding information claimed to be confidential or highly confidential.
- (IV) Commission staff will document in a report the closure of each informal investigation within sixty days of the confirmed or possible PSAP service disruption, or such greater period as Commission staff may require if such period is reasonable under the circumstances of the informal investigation. The report should include whether the incident was a PSAP service disruption as defined in paragraph 2131(cc), whether the BESP handled the PSAP service disruption in a timely manner with the appropriate personnel, and whether the BESP has taken or committed to taking corrective action to

prevent or mitigate a similar disruption from occurring in the future, specifying the corrective action and the timeframe, if applicable. The report shall also document any non-compliance with Commission rules or the BESP's tariff, including the BESP's service quality plan. Within 14 days, the 9-1-1 Advisory Task Force, the affected governing body or PSAP, or the BESP may submit to Commission staff written comments, which Commission staff shall append to the report and preserve in the informal investigation file.

- (V) At any time, Commission staff, the 9-1-1 Advisory Task Force, or the affected governing body or PSAP may commence a proceeding before the Commission, at which time the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report. If the affected governing body or PSAP seeks relief in an alternative forum, then the informal investigation process shall terminate, if not yet closed, other than Commission staff's preparation of the report.

* * * *

[indicates omission of unaffected rules]

2335. The Provision of Service During Maintenance or Emergencies.

The following paragraphs describe minimum standards for maintaining service.

* * * *

[indicates omission of unaffected rules]

- (d) Service interruptions for an extended time due to maintenance requirements shall be performed at a time that causes minimal inconvenience to impacted customers. Each provider of services identified in rule 2330 shall take reasonable steps to notify the customer in advance of extended maintenance requirements. If possible, such providers shall also make access to emergency service as defined in paragraph 2001(b), and basic emergency service, as applicable, available by alternative means when the provider knows that the service interruption affects 1,000 or more access lines and when the provider knows, based upon the prior experience of the provider, that the interruption may last more than four hours during the hours of 8 a.m. to 10 p.m. If a basic emergency service provider experiences a possible or confirmed PSAP service, it shall file a report of the occurrence as required by subparagraph 2143(j)(III).