

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 15R-0318T

IN THE MATTER OF THE PROPOSED RULES REGARDING BASIC EMERGENCY SERVICE, 4 CODE OF COLORADO REGULATIONS 723-2.

NOTICE OF PROPOSED RULEMAKING

Mailed Date: May 13, 2015
Adopted Date: May 6, 2015

TABLE OF CONTENTS

I.	BY THE COMMISSION	2
A.	Introduction and Statement.....	2
B.	Factual Background Indicating Need for Rule Revision.....	4
1.	Evolution from 9-1-1 and E9-1-1 to NG9-1-1	4
2.	Background and Commission Proceedings.....	6
C.	Areas of Rule Reform and Request for Comment.....	10
1.	Definitions	10
2.	Reporting of 911 Network Outages	11
3.	Geographic and Physical Diversity	14
4.	Statewide Averaging for Costs of Diverse Routing	15
5.	Competition in 9-1-1 Markets	16
6.	NG9-1-1 and New Technologies.....	18
7.	Making Permanent Temporary ALI Rules	20
8.	Oversight of Points of Interconnection	20
9.	Miscellaneous	20
D.	Commission Authority to Regulate Basic Emergency Service	21
E.	Conclusion	25
II.	ORDER.....	26

I. BY THE COMMISSION**A. Introduction and Statement**

1. Through this Decision, the Commission issues a Notice of Proposed Rulemaking (NOPR) regarding rules regulating basic emergency service, currently Rules 2130 through 2159 of the Regulating Telecommunications Providers, Services, and Products, 4 *Code of Colorado Regulations* (CCR) 723-2.

2. Communications in emergency situations through the use of 9-1-1 are critical for the health and safety of Colorado citizens and visitors of our state. The Commission ensures the reliability, resiliency, and affordability of these services throughout Colorado by regulating basic emergency service. Recent legislative reform deregulated certain aspects of telecommunications service. However, to ensure critical emergency services are available to citizens and visitors of our state, the legislature ensured the Commission retained jurisdiction over basic emergency service in § 40-15-201, C.R.S., regardless of the technology used to provide service.

3. Due to recent events, including floods and fires affecting 9-1-1 network reliability in Colorado, the Commission conducted an investigation and learned 9-1-1 network, system, and operational deficiencies that affected the availability of basic emergency service, and issues with accurate and timely reporting of these matters to the 9-1-1 Public Safety Answering Points (PSAPs), 9-1-1 authorities, and citizens of Colorado. Additionally, significant technological advancements and the potential and actual entry into the market for 9-1-1 services by new and different providers to PSAPs also require the Commission to consider revisions to its rules.

4. Through Commission investigations, emergency and temporary rulemakings, and meetings of the Colorado 9-1-1 Advisory Task Force,¹ the Commission received input and recommendations from industry participants, citizens, municipalities, counties, local agencies governing emergency responses, and PSAP representatives. This information serves as the basis for much of the proposed revisions to Commission rules. Our proposals also encourage and promote a statewide transition to internet-protocol (IP) based Next Generation 9-1-1 (NG9-1-1), without compromising 9-1-1 reliability, resiliency, affordability, and outage reporting.

Specifically, and as described in more detail below, the Commission proposes the following:

- a) Revision of the definition of “basic emergency service” to clarify those services that are subject to the Commission’s 911 regulation, and we update terminology;
- b) Reporting requirements for 9-1-1 network outages to PSAPs, 9-1-1 authorities, and the Commission by all service providers;
- c) Requiring geographic and physical diversity for circuits carrying 9-1-1 calls;
- d) Averaging costs throughout the state, including costs of diverse routing;
- e) Consideration of competition in the 9-1-1 market, subject to certification and approval by the Commission;
- f) Enabling a transition to NG9-1-1 and new technologies, while protecting the integrity of the network;

¹ The 9-1-1 Advisory Task Force is established by the Commission through current Rule 2145. The purpose of the Task Force is to provide oversight of the statewide implementation of basic emergency service and includes, but is not limited to, representatives in 9-1-1 service from: consumer groups, governing bodies, basic local exchange service providers, wireless service providers, providers of basic emergency services, customers of basic emergency service, ALI database providers, and other telecommunications providers.

- g) Making permanent the temporary rules in affect regarding ALI services; and
- h) Regulating interconnections between originating service providers and providers that transport, aggregate, and route 9-1-1 calls.

5. The statutory authority for the proposed rules is found in §§ 24-4-103, 29-11-106, 40-2-108, 40-3-110, 40-4-101, 40-15-101, 40-15-201, and 40-15-501, C.R.S.

6. Because the proposed rules would supplant current rules, the proposed rules are not being published in legislative format that would indicate stricken language and underline new language proposals. The proposed rules are included with this NOPR as Attachment A and are available through the Commission's Electronic Filings (E-Filings) system at: https://www.dora.state.co.us/pls/efi/EFI.Show_Docket?p_session_id=&p_docket_id=15R-0318T or by searching the E-Filings system from <https://www.dora.state.co.us/pls/efi/EFI.homepage>.²

7. The Commission encourages and invites public comment on all proposed rules. While comprehensive revisions are made to the rules and we request participant input on all proposed changes, the Commission highlights the reasoning for significant changes and solicits comment on specific areas of revision, discussed below.

B. Factual Background Indicating Need for Rule Revision

1. Evolution from 9-1-1 and E9-1-1 to NG9-1-1

8. The 9-1-1 network is transitioning from a traditional, or "legacy," 9-1-1 network to a NG9-1-1 network. Legacy 9-1-1 services transmit only a voice call to a PSAP. Enhanced 9-1-1 (E9-1-1) transmits the voice call as well as the caller's telephone number and information about the caller's location. E9-1-1 service expands on legacy 9-1-1 service by also providing the

² From the E-Filings webpage, the rules can be accessed by selecting "Search" and entering this proceeding number (15R-0318T).

call taker with the caller's call-back number and location information, known as Automatic Numbering Information (ANI) and Automatic Location Identification (ALI).

9. Federal statutes, including the Next Generation 9-1-1 Advancement Act (part of the Middle Class Tax Relief Act), promote local and national evolution of the network to a NG9-1-1 network. With the transition to NG9-1-1, the circuit-switched architecture of legacy 9-1-1 will be replaced with an IP-based architecture that enables all current functions of the legacy 9-1-1 system as well as new capabilities. While individual states continue to move forward implementing NG9-1-1 systems, this transition is in its early stages and, as of 2013, the Federal Communications Commission (FCC) noted that, at that time, there were "no fully enabled" NG9-1-1 systems in operation.³

10. NG9-1-1 uses IP-based components to provide call identifications, location determinations, call routing, and call signaling for emergency calls. Emergency Services IP Networks (ESInets), transmit calls to PSAPs and also enable access to other databases containing geographic and other information helpful to emergency responders. ESInets are designed to support traditional 9-1-1 voice calls, but can also receive text, data, and video.

11. It is anticipated that the NG9-1-1 architecture will improve flexibility and resiliency of the network due to additional technology components and network architecture design possibilities and alternatives. System components may not need to be geographically close to each PSAP, and multiple alternatives will be available for rerouting emergency communications to avoid congestion or outages. As the Commission considers revising its rules regulating basic emergency service, it is cognizant of this transition, including that a NG9-1-1 network will supplant the current 9-1-1 network.

³ FCC Legal and Regulatory Framework NG911 Report to Congress, February 2013, at 10.

2. Background and Commission Proceedings

12. Commission initiatives and proceedings have prompted the need for amended rules. In 2011, the Colorado 9-1-1 Resource Center, working with the Colorado 9-1-1 Task Force, awarded a contract to Mission Critical Partners to conduct a study to determine options for the future transition to NG9-1-1 in Colorado. The Mission Critical Partners released its Report on August 29, 2011. Following the Report, the Colorado 9-1-1 Task Force fostered the formation of the Colorado NG9-1-1 Steering Committee to address issues and gather information pertinent to the transition to NG9-1-1 in Colorado.

13. More recently, the Commission gathered stakeholder input on how best Colorado should transition to NG9-1-1 through Proceeding No. 13M-0781T. The Commission established workshops and requested comments, which solicited input on implementation of statewide NG9-1-1, including: governance and policy; system design, features, and services; and funding.⁴ Workshops were held by a facilitator, who generated a report recommending areas of Commission action and rule revision to enable NG9-1-1.⁵ The participants did not agree on how to move forward with NG9-1-1 implementation; their only point of consensus was to recommend that the Commission open a rulemaking to revise its current 9-1-1 rules and regulations to enable a transition to NG9-1-1.⁶ After the report was issued, Boulder Regional Emergency Telephone Service Association (BRETSA), submitted comments, including specific legislative and Commission rule changes it argues could better enable the development of NG9-1-1.⁷

⁴ See Decision No. C13-1561-I, Proceeding No. 13M-0781T, at ¶ 4.

⁵ Workshop Report, filed September 10, 2014, Proceeding No. 13M-0781T.

⁶ *Id.*, at pp. 1, 20, and 22.

⁷ *BRETSA Comments on the Workshop Facilitator's NG9-1-1 Report*, filed October 14, 2015, Proceeding No. 13M-0781T.

14. Commission investigations also indicate that rule revisions are necessary. Due to severe flooding in 2013 and major fires in 2012 and 2013, many citizens were unable to call 9-1-1 and reach emergency responders. The Commission commenced Proceeding No. 13I-1147T to learn about 9-1-1 system performance and impacts due to these natural disasters, which affected fundamental 9-1-1 infrastructure components and resulted in outages. Commissioner Patton as hearing officer visited areas of Colorado affected by natural disasters, held workshops, solicited information, and reported on recent outages in Colorado in order to both recognize processes that worked well and provide recommendations to avoid risks of 9-1-1 system vulnerabilities.

15. In the immediate aftermath of the floods, the Larimer Emergency Telephone Authority (LETA) raised questions about the lack of physical diversity in the service providers' and the Basic Emergency Service Provider's (BESP) 9-1-1 networks.⁸ In a letter to the Commission dated October 17, 2013, LETA stated that, prior to the flood events, it was unclear to LETA if the 9-1-1 network in Larimer County had a physical diverse path from the Central Office in Estes Park to the Selective Routers located in Capital Hill and Broomfield, Colorado. LETA also expressed concern that it was unclear what entity was responsible for ensuring diverse routing and that the authority was unable to obtain maps depicting the physical path of LETA's 9-1-1 network.⁹

16. After visiting areas affected by recent natural disasters, including Larimer County, and holding workshops, in her report, Commissioner Patton recommended communication improvements, 9-1-1 Advisory Task Force direction, and physical and geographic network diversification, in addition to requiring Staff to gain stakeholder input on updating

⁸ Decision No. R14-0303, ¶ 5, Proceeding No. 13I-1147T.

⁹ Attachment 3 to Memo for Record, Larimer Emergency Telephone Authority Reporting 911 Impact to PUC Director, filed October 30, 2013, Proceeding No. 13I-1147T.

outage reporting rules.¹⁰ Consistent with Commissioner Patton's decision, the 9-1-1 Advisory Task Force formed a subcommittee in August 2014 to discuss proposed rules addressing outages in Colorado. Stakeholders participating in the subcommittee included CenturyLink, Intrado, Staff, and various PSAPs. Suggestions were provided by the subcommittee to Commission Staff for inclusion in the basic emergency service rules.

17. The Commission has also addressed changing technologies and the increased possibility of market competition in 9-1-1 through emergency and temporary rules. In July of 2014, the Commission adopted emergency rules to ensure continued reliability and affordability of ALI services due to the potential transition of services between CenturyLink and Intrado.¹¹ The rules require Commission approval of the provisioning of new ALI services in Colorado. These rules expired February 23, 2015. In January of 2015, CenturyLink provided a letter to the Commission indicating that CenturyLink and Intrado had entered into an agreement to continue provision of ALI services. After Staff inquiry and audit, the Commission determined that temporary rules were still required in the absence of permanent rules.¹² Even though CenturyLink and Intrado renewed their contract, the Commission found that new, untested ALI services could be offered by providers, and that rules were necessary to ensure reliability, safety, and affordability.

18. Narrow rule revisions also were proposed recently by certain 9-1-1 authorities. On February 25, 2015, Douglas County Emergency Telephone Service Authority, Eagle County Emergency Telephone Service Authority, and El Paso-teller Counties Emergency Telephone Service Authority (Joint 9-1-1 Authorities), petitioned the Commission to open a rulemaking to

¹⁰ Decision No. R14-0303, issued March 20, 2014, Proceeding No. 13I-1147T.

¹¹ Decision No. C14-0893, issued July 28, 2014, Proceeding No. 14R-0804T

¹² Decision No. C15-0179, issued February 23, 2015, Proceeding No. 15R-0110T.

amend rules pertaining to E9-1-1 databases, and request rule changes specific to certain routing and database functions of current rules 2136(d) and (e); 2138(b), (c), and (f); 2140; and 2141. Joint 9-1-1 Authorities state that these proposed rules are consistent with existing practices, particularly with respect to how governing bodies and PSAPs pay for basic emergency service from a basic emergency service provider, and for purposes of remitting emergency telephone service fees pursuant to § 29-11-100.5, *et seq.* C.R.S. The Commission granted the petition to open a rulemaking, but stated that the topic areas raised by the Joint 9-1-1 Authorities would be combined with this NOPR.¹³ The proposed rules include consideration of the Joint 9-1-1 Authorities' suggested language for participant comment and consideration.

19. In addition, we recognize that emergency telephone service is not germane to Colorado alone; regional and national events, issues, and rules that affect emergency service also inform the Commission's proposed rules. Examples include 9-1-1 outages that occurred resulting from weather related events, like the 2012 derecho and Hurricane Sandy that occurred in the Northeast United States, multiple state "sunny-day" outages that occurred in April of 2014, and a separate multi-state outage that affected Colorado in October of 2014

20. The FCC recently completed its investigation of the multi-state 9-1-1 outage in April of 2014 that prevented more than 11 million people in seven states from being able to reach emergency call centers for over six hours. Due to the companies' failures to meet their emergency call obligations during the 9-1-1 outage, the FCC's Enforcement Bureau reached a \$16 million settlement with CenturyLink and a \$1.4 million settlement with Intrado. This Commission agrees with Chairman Wheeler's statements that "Americans need to be confident that the service they use to reach first responders is reliable and accessible in their

¹³ Decision No. C15-0296, issued April 3, 2015, Proceeding No. 15M-0122T.

time of need.... Providers have a responsibility to ensure that Americans can use 9-1-1 to call for help at any time. When a company fails to live up to its obligations, it will be held accountable.”¹⁴ The Commission intends these rules to address Colorado’s interests in maintaining public safety, consistent with FCC initiatives and declarations of nationwide policies.

21. We encourage participants to include in filed comments, documents and citations from any federal or state proceeding they find relevant in support of a proposed rule revision.

C. Areas of Rule Reform and Request for Comment

1. Definitions

22. The proposed rules eliminate the term “basic emergency service provider,” or “BESP.” In current rules, this term is used for the provider of the backbone network that aggregates, transports, and routes all 9-1-1 calls to the PSAP. Because the definition of “basic emergency service” includes more than just aggregation, transportation, and routing of 9-1-1 calls, we propose that a more descriptive term be used. Our proposed rules identify a “transport, aggregation, or routing provider,” or a “TARP,” as the term for entities that were traditionally defined as “BESPs.”

23. The term “basic emergency service” defines services regulated under § 40-15-201(2), C.R.S. In addition to transport, aggregation and routing, the proposed definition identifies the services and conduct vital to the interests of connectivity, outage reporting, statewide average pricing, and database accuracy, regardless of technology used:

¹⁴ FCC Fines CenturyLink and Intrado \$17.4 Million for Multi-State 911 Outage, released April 6, 2015 (available at https://apps.fcc.gov/edocs_public/attachmatch/DOC-332853A1.pdf).

- a. interconnection for 9-1-1 calls between a TARP and an originating service provider or a provider of intermediary aggregation services;
- b. delivery of 9-1-1 calls from an originating service provider or a provider of intermediary aggregation services to a TARP;
- c. delivery of 9-1-1 calls by a TARP to a PSAP including, but not limited to, switching, routing, aggregation, transport, protocol conversion, database inquiries, and interconnection to the PSAP;
- d. ALI and ANI services; and
- e. provisioning by originating service providers or a provider of intermediary aggregation services to TARPs, ALI providers and providers of ANI of information required to deliver 9-1-1 calls to a PSAP, including but not limited to, telephone numbers, including non-published and non-listed numbers.

24. We solicit comment to address whether this definition includes the necessary elements of basic emergency service.

25. In addition, the proposed rules make clear that they apply to all technologies that may be used to provide 9-1-1 service. Definitions are revised to include new terminology due to technological advancements, including a definition of “NG9-1-1,” and to clarify technology neutral application. For example “9-1-1 call” means “any form of communication, regardless of technology....” Other definitions, in addition to “basic emergency service” discussed above, also include clarifying language to indicate that the item is defined, regardless of the technology used, including without limitation: “9-1-1 system and network”; “9-1-1 tandem” or “9-1-1 tandem switch”; and “ALI provider.”

26. We request comment on these and other definitional proposals, including specific revision suggestions from participants.

2. Reporting of 911 Network Outages

27. During Commissioner Patton’s investigation into the 2013 floods and fires, the Estes Park Chief of Police stated that the extended 9-1-1 outage was more concerning to him

than the town's physical isolation and other utility outages.¹⁵ Workshops and site visits revealed that PSAPs and other 9-1-1 stakeholders did not receive comprehensive, timely, and actionable outage notifications during the 2013 tragedy. Commissioner Patton, among other things, directed CenturyLink to continue its dialogue with 9-1-1 Authorities, PSAPs, and the Commission by scheduling a presentation for the 9-1-1 Task Force on communication processes with CenturyLink during an outage, including how to utilize online access, e-mail notifications, and other types of emergency pathways.¹⁶

28. In response to the natural disasters in 2013 and Commissioner Patton's directives, the 9-1-1 Task Force in August 2014 formed a subcommittee, which included CenturyLink, Intrado, Staff, and various PSAPs. The Commission appreciates the efforts of this subcommittee and incorporates suggested changes within this NOPR, with modification, within the comprehensive revisions to the rules regulating basic emergency service.

29. Specifically, the proposed rules require all carriers providing 9-1-1 service to end user customers to report outage and network failures. The 9-1-1 network backbone provider, currently CenturyLink, is also required to report outages to the PSAPs and 9-1-1 authorities. The rules accomplish these objectives in three ways.

30. First, the definition of "basic emergency service" in Rule 2131 is revised in order to ensure better reporting. The definition includes, among other changes: the delivery of 9-1-1 calls by any telecom provider to the backbone provider to the point of interconnection; the delivery of 9-1-1 calls without regard to the technology used; and reporting requirements upon all carriers in the event of 9-1-1 outages. We request comment on these definitional revisions as

¹⁵ See Hearing Commissioner Memorandum for Record filed October 30, 2013, Proceeding No. 13I-1147T.

¹⁶ Decision No. R14-0303, ¶¶ 12-14, Proceeding No. 13I-1147T.

they relate specifically to outage considerations. In addition, participants should consider comments addressing the necessity of proposed definitions for “outage,” “failure,” and “potential outage or failure” to promote the vital public interest underlying outage reporting.

31. Second, the proposed rules update reporting requirements for certain providers. Rule 2139(g) and (m) imposes oral and written reporting requirements upon all carriers in the event of any outage or system failure, including more extensive written reporting if the outage lasts 30 minutes and affects more than 400 lines or five percent of the lines, whichever is less, in a wireline exchange or equivalent VOIP wireline or wireless service area. This proposal is consistent with recommendations from the 9-1-1 Task Force subcommittee. We request comment on whether the threshold of 400 lines or five percent of the carrier’s lines to require additional reporting requirements is sufficient to protect Colorado’s public safety interests. We also request input on the necessary service or geographic area to be considered, including whether this area should be based on an individual PSAP’s service area to identify the number of lines or percentage of customers affected. Further, participants should address what outage measurements are accessible in data collected by a provider and that the provider will be alerted immediately when an outage occurs to ensure that carriers readily can comply with the rule requirements once aware a threshold requirement is exceeded. We emphasize that any threshold standard adopted does not negate the Commission’s duty to regulate a provider’s network, regardless of how many lines or customers are affected, if the Commission determines public safety is at risk.

32. Third, Rule 2139 contains detailed contingency planning requirements in the event of outages. This rule provides direction on the development of a contingency plan and precise obligations for originating service providers, intermediary aggregation service providers,

and providers certified to provide basic emergency service pursuant to Rule 2132. We solicit comment on these proposed rules to address any additional obligations that should be required, including whether PSAPs should provide all necessary information in support of the contingency plan.

3. Geographic and Physical Diversity

33. When the 2013 floods occurred, the 9-1-1 network serving the Estes Park and Allenspark wire centers lacked the ability to deliver 9-1-1 calls through physically and geographically separate circuits and separate conduits, so that once one circuit was cut or failed, no other circuit was available to carry and deliver 9-1-1 calls. In the investigative proceeding, CenturyLink identified that there are 25 wire centers serving as the host for 72 remote wire centers, including Estes Park and Allenspark.¹⁷ If the connection between one of these host wire centers and the remote wire center is lost, as it was in the 2013 floods, 9-1-1 service could be lost in the remote wire center.

34. Pre-existing Rule 2143(a) attempted to address the problem of areas that lack physical and geographic diversity by imposing a requirement upon the BESP to propose a new tariffed rate for construction of a diverse route, but only upon the request of a PSAP or 9-1-1 authority. The pre-existing rules required diverse routes “wherever feasible,” a standard that the BESP may have construed that constructing a diverse route is not feasible for whatever economic or technological reason.

35. The Commission proposes a blanket diversity requirement upon TARP, formerly called “BESPs,” and ALI providers throughout Colorado, subject to their ability to seek a waiver from the Commission upon a showing of economic or technological infeasibility.

¹⁷ Decision No. R14-0303, ¶ 7, Proceeding No. 13I-1147T.

36. Proposed Rules 2139(b) and (c) state:

(b) TARPs and ALI providers shall develop cost-based tariff rates for deploying the necessary redundancy, power, and geographic diversity for their provision of basic emergency service.

(c) A TARP may file a pleading requesting Commission waiver of the deployment of the necessary redundancy, power, and geographic diversity upon a showing of economic or technological infeasibility or that such deployment is not in the public interest.

37. We request comment on this updated proposal and process for requiring diverse routing. Any alternative recommended proposal should address how it protects public safety, and can efficiently and effectively minimize risks for areas currently lacking in physical or geographical diversity.

4. Statewide Averaging for Costs of Diverse Routing

38. The costs of providing the backbone 9-1-1 services by CenturyLink today are averaged across the state, thus allowing PSAPs in rural areas to have the same rate structures as PSAPs in more densely populated urban areas. Not all areas of the state have the benefit of diverse routes. The lack of diverse routing is generally seen in rural areas with low density and often geographic challenges such as distance and terrain where it was presumed by the current TARP to be too expensive.

39. This rulemaking will examine which entity should be obligated to build diverse routes, and how the costs of deployment should be allocated. If, for example, a rural local carrier has the obligation of constructing a diverse route to reach the TARP, then the costs of construction are borne by the customers of only the rural carrier. If the TARP shoulders the responsibility of building diverse routing to the rural local carrier, then the costs of constructing that same circuit is spread among all of the 9-1-1 Authorities who are the TARP's customers throughout the state.

40. The proposed rules impose the construction and build-out obligations upon the TARP, thus allowing the costs to be distributed to all citizens in the state. A proposed exemption exists if the local carrier's network is outside the TARP's service area, in which case the local carrier must construct the circuit to reach the TARP's service area.

41. The new proposed rule is 2134(b), which states, in part:

At the request of an originating service provider, within and for an area under the responsibility of a single governing body, a TARP shall provide or arrange for the necessary facilities to interconnect, switch, and transport 9-1-1 calls from the originating service provider and other TARPs to the PSAP that is responsible for answering the 9-1-1 calls.

5. Competition in 9-1-1 Markets

42. The provision of backbone 9-1-1 services, by the aggregation, routing, and transport of calls and database information to PSAPs, historically has been provided through a single provider, CenturyLink. In addition to transporting calls to the PSAPs, CenturyLink has provided ALI database information through subcontractor relationships.

43. Advancements in IP technology provide opportunities for vendors to offer new 9-1-1 services and enter the market in competition with traditional incumbent providers. Opening the 9-1-1 market to competitive providers has benefits, but it also raises public interest issues requiring Commission consideration. Colorado currently enjoys statewide averaging of 9-1-1 rates, because the single provider model spreads costs among all 9-1-1 authorities. This results in rural communities paying the same rates as those paid in more populous, lower cost urban areas. If a new competitor provides a 9-1-1 service to a large urban 9-1-1 authority at a rate less than the single provider's service, then the single provider will likely be forced to raise its rates to rural providers to compensate for lost revenues that pay for fixed costs.

44. New providers of basic emergency services also create risks of network unreliability, because multiple networks require extensive technical and operational coordination between the basic emergency service providers and PSAPs.

45. The proposed rules do not decide whether to have a single provider or multiple providers of services to PSAPs. Instead, the rules allow new competitors to apply for certification authorizing the offering of new or alternative services to PSAPs, but only upon a showing that the entry of a new provider satisfies criteria of reliability and statewide affordability.

46. This structure of allowing multiple providers into the 9-1-1 market is reflected in the proposed rules through Rule 2131's definition of "TARP" and "ALI database Provider" to include any person offering basic emergency service to a PSAP, and by Rule 2132, which permits any provider of basic emergency service to PSAPs to apply for certification. Also, Rule 2132(b) states that the Commission may certify multiple providers if the alternative service is in the public interest. Rule 2132(c) lists the certification criteria. While proposed Rule 2132(c) requires a provider to attest that it will *offer* services statewide to any requesting PSAP, there is no requirement that services be *provided* throughout the state for application to the Commission.

47. We solicit comment on the proposed certification process and whether the proposed certification process includes all providers that should be subject to Commission approval prior to offering or providing basic emergency service. For example, currently the proposed rules do not include certification requirements for providers offering "intermediary aggregation service," defined in proposed Rule 2131. Unlike TARPs, these providers do not provide aggregation and transport directly to a PSAP, rather they provide the "aggregation and

transport of 9-1-1 calls for one or more originating service providers for delivery to a TARP's 9-1-1 selective router, or the NG9-1-1 equivalent." Participants should provide comment on circumstances when a provider would not be certified by the Commission prior to offering or providing service, and include suggested rule revision if changes are proposed.

6. NG9-1-1 and New Technologies

48. NG9-1-1 networks are based upon IP technology and create a platform by which the PSAPs can receive new forms of information to enhance their ability to respond effectively to emergencies. This new platform allows for the transmission of data and video, in addition to voice, thereby enabling the PSAP and emergency responders to interact with other information sources.

49. Due to the evolution of technology, including provision of services over IP, and ensuring the continued reliability and resiliency of 9-1-1, the FCC has updated emergency service requirements that incorporate an eventual evolution to NG9-1-1 networks. Notably, the FCC filed a report to Congress in February, 2013, on the Legal and Regulatory Framework for NG9-1-1 Services in response to the NG9-1-1 Advancement Act of 2012.¹⁸ The FCC recommends promotion of local technologies that will support NG9-1-1, regardless of the network or device used, and encourages the elimination of legacy state regulations that impede NG9-1-1 deployment.

¹⁸ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96 (2012), Title VI, Subtitle E, Next Generation 9-1-1 Advancement Act § 6509.

50. The FCC has initiated various federal rule reforms to increase safety and reliability of traditional and IP-based emergency networks. For example, in December 2013, the FCC adopted rules on 9-1-1 reliability, which require federal certification of Covered 9-1-1 Service Providers that provide critical components of emergency service. The FCC 9-1-1 Reliability Rules recognize local and state authority over emergency services, encourage providers to work with local and state authorities, and states that the rules are “not intended to preempt state and local actions so long as they do not operate to frustrate the implementation of the [FCC] rules....”¹⁹

51. Consistent with federal initiatives, the Commission has expressed its intent to move forward with enabling NG9-1-1, most recently through the workshops, discussions, and report provided in Proceeding No. 13M-0781T. However, NG9-1-1 network changes must not risk public safety or infringe upon the reliability of the network as a whole.

52. NG9-1-1 services require substantial upgrades and replacements to the existing network in Colorado. NG9-1-1 is powered by an “ESInet” network, different from CenturyLink’s current network. The ESInet system is designed to transmit communications to PSAPs and also connect to other databases. The need to supplant the existing network with a new system in turn raises the issue of whether the state should support a single ESInet provider throughout the state, or allow multiple providers to construct their own local or regional networks, potentially resulting in duplicative systems in many areas of the state. Because the NG9-1-1 workshop participants were not in consensus as to whether the state should deploy a single ESInet network versus multiple networks, the proposed rules establish a

¹⁹ FCC 911 Reliability Rules, ¶ 150.

case-by-case application process to allow the Commission to acquire the information necessary to make these threshold determinations.

53. The proposed rules clarify that NG9-1-1 services provided to a PSAP through new technologies are included within the Commission's rules, and that any provider of NG9-1-1 services must apply for certification and demonstrate the same reliability and statewide affordability required of other certified providers.

7. Making Permanent Temporary ALI Rules

54. The proposed rules incorporate the temporary rules adopted by the Commission for ALI services. These rules require certification and a showing of the criteria of reliability and statewide affordability for any new provider, or for any new type, of ALI service. The current provisioning of ALI services is exempt from obtaining new certifications.

8. Oversight of Points of Interconnection

55. Because interconnections of originating service providers' networks and the TARP are vital to the delivery and ultimate transport of calls to the PSAPs, the proposed rules provide recourse through the Commission over disputes arising out of negotiations of interconnection agreements between carriers. The proposed rules include interconnection within Commission authority in Rule 2131's definition of "basic emergency service" by defining "interconnection" as part of "basic emergency service," and in Rule 2136(a)'s dispute resolution provision.

9. Miscellaneous

56. Proposed rules include additional revisions to incorporate current practices. There are also revisions to supplement existing obligations, such as reporting requirements in Rule 2140. For example, the existing rules incorporate the National Emergency Number

Association (NENA) Standards, and the proposed rules amend Rule 2142 by adding a list of NENA publications by name. The Commission seeks input on which specific NENA publications are necessary to incorporate by reference. Participants are encouraged to comment on all aspects of the attached proposed rules, including those not mentioned explicitly in this decision.

D. Commission Authority to Regulate Basic Emergency Service

57. Commission oversight of basic emergency service is essential to ensure safe, reliable service. Federal laws and programs that regulate emergency services promote state governance and coordination, foster competition, and do not preempt state initiatives that are consistent with federal efforts.

58. For over 15 years, federal law has promoted statewide coordination to enable reliable safety networks. For example, Congress enacted the Wireless Communications and Public Safety Act of 1999 to encourage and facilitate “the prompt deployment throughout the United States of a seamless, ubiquitous, and reliable end-to-end infrastructure for communications.”²⁰ The Act required the FCC to “encourage and support efforts by states to deploy comprehensive end-to-end emergency communications infrastructure and programs, based on coordinated statewide plans...”²¹ The FCC found that these requirements create a balance between the need for federal and state leadership and responsibilities of

²⁰ Pub. Law 106-81-October 26, 1999, Sec. 2, Findings and Purpose. Congress further found that:

[T]he rapid, efficient deployment of emergency telecommunications service *requires statewide coordination* of the efforts of local public safety, fire service and law enforcement officials, emergency dispatch providers, and transportation officials; the establishment of sources of adequate funding for carrier and public safety, fire service and law enforcement agency technology development and deployment; the coordination and integration of emergency communications with traffic control and management systems and the designation of 9-1-1 as the number to call in emergencies throughout the nation.

(Emphasis added).

²¹ *Id.* Sec. 2(b).

local jurisdictions to provide 9-1-1 services. The FCC states that Congress recognized that “most of the key decisions in this are not made by the federal government, but by the private sector and state and local governments.”

59. Consistent with Federal efforts, the Commission continues to regulate basic emergency service, regardless of technology used to provide service. The Commission historically has regulated basic emergency service through its rules. These rules have included technology-neutral application, including regulated terms, conditions, and statewide averaged rates of 9-1-1, including E9-1-1, and its components through tariffs.²²

60. Recent legislation amending Colorado’s telecommunications statutes expressly maintained the Commission’s authority over emergency services (2014 Telecom Reform Legislation). The General Assembly declared “basic emergency service” to be subject to regulation under part 2 of article 15, title 40. § 40-15-201(2), C.R.S. (2014). The recent legislation amending Colorado’s telecommunications statutes clearly maintained the Commission’s authority over emergency services. The 2014 Telecom Reform Legislation expressly reserved Commission jurisdiction over 9-1-1 services: “Nothing in this part 4 shall be construed to affect, modify, limit, or expand the Commission’s authority to regulate basic emergency service.” § 40-15-401(4), C.R.S. (2014)

61. In addition to this unambiguous statutory language, the amendments’ legislative history leaves no doubt of the General Assembly’s intent to maintain Commission authority over 9-1-1 services, without regard to the technology used by a service provider. The Honorable Angela Williams, lead sponsor of the bill in the House of Representatives, stated during the key House Committee meeting that the IP bill was “clear” that nothing shall be construed to affect,

²² See current Rule 2136(c).

modify, limit, or expand the Commission's authority to regulate basic emergency service, which includes an intent to maintain the "status quo" and maintain authority "regardless of technology."²³

62. Senator Kerr also stated before the Senate Business and Labor Committee "that the intent of the legislation is to maintain the PUC's regulatory oversight of basic emergency service, regardless of technology."²⁴ The Governor's signing letter echoed the statements of Representative Williams and Senator Kerr.²⁵

63. All basic emergency services are regulated by the Commission regardless of technology, including without limitation services provided over IP for NG9-1-1. As part of the 2014 Telecom Reform Legislation, the General Assembly in House Bill (HB) 14-1329 affirmed the Commission's regulatory oversight of basic emergency services regardless of the deregulated status of any service under part 4. § 40-15-401(4), C.R.S. (2014). To the extent any of the services or products listed in § 40-15-401(1), C.R.S., including information services or IP services, is used to provide basic emergency service, it is within the Commission's regulatory authority.

64. This Commission may presume that the General Assembly passed HB 14-1329 with deliberation and full knowledge of all existing law dealing with the same subject. *See In Re Questions Submitted by the United States District Court*, 499 P.2d 1169, 1171 (Colo. 1972) (quoting *Cooper Motors, Inc. v. Board of County Commissioners*, 279 P.2d 685,

²³ Transcript of Testimony of Representative Williams before the House Business, Labor, Economic and Workforce Development Committee, March 25, 2014 (attached as Exhibit 1).

²⁴ Transcript of Testimony of Senator Kerr before Senate Business Labor Committee, April 16, 2014 (attached as Exhibit 1).

²⁵ *See* Letter of John W. Hickenlooper, Governor, dated May 9, 2014 ("Testimony in both chambers by the sponsors of this bill reinforce that the intent of this legislation is to maintain the PUC's authority to regulate basic emergency services, regardless of technology.") (attached as Exhibit 2).

688 (Colo. 1955)) (citations omitted). The General Assembly was aware of the Commission's historic regulation of basic emergency service when it passed the statutory provision stating that the Commission's regulatory authority over basic emergency service was unaffected, without regard to the technology used.

65. Commission asserts jurisdiction over intrastate services. Because 9-1-1 calls and their informational components, including ALI service, over which we assert jurisdiction in this rulemaking are placed by persons located within the state and delivered locally to a PSAP or an emergency service provider also located within Colorado, this Commission may exercise its intrastate regulatory jurisdiction over such calls.

66. Further, in-state funding supports the provisioning of 9-1-1 services. Colorado law authorizes cities, towns, counties, and other localities to impose an emergency telephone charge upon service users located within the jurisdiction providing emergency telephone service. § 29-11-102(1), and (3), C.R.S. These charges pay for the localities' equipment, installation, and other directly related costs of the continued operation of an emergency telephone service. § 29-11-104(2), C.R.S. The local governing bodies use these funds to pay basic emergency service providers such as CenturyLink for its provisioning of voice, ANI, and ALI services to the PSAPs. § 29-11-104(2)(a)(I)(B), C.R.S. Surcharges greater than seventy cents are subject to approval from the Commission. § 29-11-102(2)(b), C.R.S. Thus, emergency services providers derive their revenues from intrastate surcharges.

67. Consistent with the legislative directive to continue regulation of basic emergency service, regardless of technology used to provide service, the Commission's proposed rules are forward looking in that the rules enable the development and deployment of new technologies. The proposed rules further State interests in continuing regulation to protect visitors and citizens of Colorado by updating the rules to also account for revisions that respond to recent outages and failures. As federal efforts and rulemaking implementation continues, participants are encouraged to provide suggested rules that are consistent with FCC directives.

E. Conclusion

68. The proposed amendments will be published in the May 25, 2015, edition of the *Colorado Register*.

69. This matter is referred to an Administrative Law Judge (ALJ) for recommended decision.

70. A hearing on the proposed rules and related materials shall be held before the assigned ALJ, **9:00 a.m. to 5:00 p.m., June 26, 2015**. The ALJ may set additional hearings at the ALJ's discretion.

71. Participants may file written comments at any time and present comment orally at hearing, unless oral presentations are deemed unnecessary. However, the Commission encourages that interested persons submit comments through the Commission's E-Filings System. We request that initial comments on the attached proposed rules be filed no later than **5:00 p.m., June 5, 2015**, and that reply comments be filed no later than **5:00 p.m., June 19, 2015**.

72. Prior proceedings have included significant stakeholder input; we encourage participants to include specific reference or documents as attachments in support of their positions. In submitting comments or replies, interested persons are invited to suggest changes that will make the subject rules more efficient and effective. Interested persons are encouraged to suggest rule language revision in legislative format.

II. **ORDER**

A. **The Commission Orders That:**

1. This Notice of Proposed Rulemaking, and Attachment A attached hereto, shall be filed with the Colorado Secretary of State for publication in the May 25, 2015, edition of *The Colorado Register*.

2. This matter is assigned to an Administrative Law Judge (ALJ) for Recommended Decision.

3. A hearing on the proposed rules and related materials shall be held as follows:

DATE: June 26, 2015

TIME: 9:00 AM to 5:00 PM

PLACE: Commission Hearing Room A

Suite 250

1560 Broadway

Denver, Colorado

4. At the time set for hearing in this matter, participants may submit written comments and may present these orally, unless the ALJ deems oral comments unnecessary.

5. Participants may file written comments in this matter. The Commission requests that initial pre-filed comments be submitted no later than 5:00 p.m., June 5, 2015 and that any pre-filed comments responsive to the initial comments be submitted no later than 5:00 p.m., June 19, 2015. The Commission will consider all submissions, whether oral or written.

6. This Decision is effective upon its Mailed Date.

**B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING
May 6, 2015.**

(S E A L)



ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads "Doug Dean".

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

JOSHUA B. EPEL

PAMELA J. PATTON

GLENN A. VAAD

Commissioners