

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO**

PROCEEDING NO. 13I-1147T

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IN THE MATTER OF INQUIRY INTO E9-1-1 NETWORK PERFORMANCE DURING  
RECENT FLOOD AND FIRE RELATED DISASTERS IN THE STATE OF COLORADO.

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**RECOMMENDED DECISION OF  
HEARING COMMISSIONER  
PAMELA J. PATTON  
ORDERING FILINGS FROM CENTURYLINK AND  
ORDERING COMMISSION STAFF TO LEAD A  
SUBCOMMITTEE AND PROPOSE A 9-1-1 RULEMAKING**

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Mailed Date: March 20, 2014

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**I. STATEMENT**

1. The purpose of this investigation, as described in Decision No. C13-1355 issued October 28, 2013, opening this proceeding, is to learn about the performance of Colorado's 9-1-1 system during the September 2013 floods and earlier wildfires and to determine if improvements can and should be made to the 9-1-1 network's physical redundancy and 9-1-1 outage communications processes.

2. The most important point demonstrated by this investigation is that Colorado's emergency responders, the men and women and the communications system that supports them, work extremely well. During the flooding that occurred across 17 counties, 9-1-1 dispatchers and emergency responders responded to thousands of emergency calls. Overall, Colorado's dedicated, redundant, and nearly fail-safe 9-1-1 system delivered calls to the Public Safety Answering Points (PSAPs).

3. Qwest Corporation, doing business as CenturyLink QC (CenturyLink), the Larimer County Emergency Telephone Authority, Larimer County Sheriff's Department, Estes Park Police and Fire Departments, El Paso-Teller E9-1-1 Authority, the 9-1-1 Task Force, the Colorado 9-1-1 Resource Center, telecommunications staff of the Colorado Public Utilities Commission (Commission), and Commission advisory counsel from the Colorado Attorney General's office were all invaluable to this investigation.

**A. Background**

4. The Commission opened this proceeding to obtain input from key stakeholders regarding the performance of the 9-1-1 system during the September 2013 floods in Colorado. The specific impetus for initiating this investigation was a 97 hour 9-1-1 failure in Estes Park, Colorado, caused by fiber optic cable being washed out and severed by flooding.

5. In the immediate aftermath of the floods, the Larimer County Emergency Telephone Authority raised questions about the lack of physical diversity in service providers' and the Basic Emergency Service Provider's (BESP) 9-1-1 networks in a letter to the Commission. The Commission then opened this proceeding and assigned Commissioner Pamela J. Patton as Hearing Commissioner. The Hearing Commissioner expanded her investigation to include discussions with the El Paso-Teller E9-1-1 Authority on 9-1-1 performance during the wildfires in 2012 and 2013, seeking lessons learned. Following the Hearing Commissioner's visits to both Larimer and El Paso Counties, a workshop was held for all 9-1-1 stakeholders to allow for input and to raise questions or concerns regarding the reliability of the 9-1-1 network statewide and the processes used by the stakeholders to protect that reliability.

## **B. Recommendations**

### **1. Physical Redundancy**

6. When the 2013 flood occurred, the 9-1-1 network serving the Estes Park and Allenspark wire centers lacked geographically diverse routing. The Larimer County Emergency Telephone Authority was not aware of the service provider's lack of geographic diversity. 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.<sup>1</sup> Estes Park, the gateway to Rocky Mountain National Park, hosts 4 million visitors a years and reliable 9-1-1 calls are paramount for public safety.

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<sup>1</sup> See Hearing Commissioner Memorandum for Record filed October 30, 2013.

7. CenturyLink, the state's BESP, identified in this proceeding that there are currently 25 wire centers serving as the host for 72 remote wire centers, including Estes Park and Allenspark. The connections between the hosts and remotes are typically a single geographic pathway for telecommunications services. In these circumstances, if the connection between the host and remote is lost, 9-1-1 service is also lost. CenturyLink stated that it is planning to reduce the number of remote connections, thereby improving geographic diversity.<sup>2</sup> CenturyLink's plan includes building a physically redundant pathway for Estes Park. The Hearing Commissioner directs that CenturyLink file in this proceeding the schematics and other documentation showing the type and location of facilities for its planned geographically diverse connections for Estes Park and Allenspark wire centers. CenturyLink shall include the status of the build-out plan including the expected completion date. This information shall be filed no later than July 31, 2014.

8. CenturyLink provided a high level plan for constructing geographically diverse connections in other areas across the state over the next three years. The Hearing Commissioner directs CenturyLink to provide the 9-1-1 Task Force and the PSAPs an identification of all current geographically non-redundant 9-1-1 connections. This information shall be provided to the 9-1-1 Task Force and the PSAPs no later than May 1, 2014. It shall also be filed in this proceeding.

9. To assist the 9-1-1 Task Force, the PSAPs and CenturyLink, the Hearing Commissioner directs CenturyLink to file semi-annual updates to the information provided in this investigation, including: (a) the status of CenturyLink's three-year build out plan for deployment of physically diverse facilities which shall indicate start dates, completion dates, and

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<sup>2</sup> See Letter to Commissioner Patton, filed by CenturyLink on January 30, 2014 (modifying public response on wire center diversification and indicating update to Confidential Attachment 3-1).

explanations of why any expected completion dates were not met; and (b) updates to the information supplied in confidential attachments 1-1, 2-1, 3-1, 3-2, and 5-7. These filings shall be made in this proceeding on September 1st and March 1st of each year. The Hearing Commissioner encourages the 9-1-1 authorities and PSAPs to use this information to assess and address their unique physical redundancy issues in advance of an outage.

## 2. Contingency Plan Filings

10. Rule 2143(d), 4 *Code of Colorado Regulations* of the Commission's Rules Regulating Telecommunications Providers, Services, and Products 723-2, requires basic local exchange carriers, wireless carriers, other telecommunication providers, and BESPs, in cooperation with governing bodies, to have a 9-1-1 contingency plan updated and provided to the Commission by April 30th of each year. The current contingency plan on file with the Commission (2013) is insufficient in providing enough information to assist in the rerouting of 9-1-1 calls for some PSAPs.

11. The Hearing Commissioner recommends that the 9-1-1 Task Force review the current 2013 Contingency Plan and filing requirements contained in Rule 2143, and provide additional direction to the providers and BESPs. She directs Commission Staff to lead a subcommittee of the 9-1-1 Task Force in the development of an updated contingency plan that includes a backup answering center for each PSAP, contact information, and other data that would be useful to the BESP, service providers, the Commission, Authorities, and PSAPs in the event of a service outage. From the workshop and review of the 2013 Contingency Plan it is apparent that not all of the state's PSAPs have a contingency plan in place. She encourages each PSAP to take this opportunity to develop one. If the Commission Staff working with the subcommittee determines that updated rules are required to ensure contingency plans are filed

with sufficient information, the Commission Staff shall include any proposed rule changes in the rulemaking discussed below.

**3. Communication**

**a. E9-1-1 Outage Reporting**

12. The Hearing Commissioner directs Commission Staff to propose a rulemaking proceeding to update Commission rules relating to 9-1-1 outage reporting and contingency plans. This proposed rulemaking shall include draft rules that address E9-1-1 outages and ensure PSAPs and other 9-1-1 stakeholders receive comprehensive, timely, and actionable notifications including remedial fixes to network outages. In addition, the proposed rules may address changes to the contingency plans and the information contained in those plans as a result of the 9-1-1 Task Force subcommittee work. Commission Staff shall present this proposed rulemaking to the Commission no later than June 30, 2014.

**b. Communication with the Public**

13. Stakeholders at the Hearing Commissioner's site visits and during the workshop expressed concerns about communication with the public during 9-1-1 outages. The Hearing Commissioner recommends that the 9-1-1 Task Force elevate this vital issue at Task Force meetings and discuss the use of the Colorado 9-1-1 Resource Center in addressing this concern. Issues raised include plans for the public announcement of 9-1-1 outages and alternative numbers for emergency calls until 9-1-1 is restored, dialing 9-1-1 from a multi-line telephone system, and consumer education and outreach on signing up for reverse emergency notification.

**c. Communication Among the BESP, 9-1-1 Authorities, PSAPS, and the Commission**

14. At the workshop, CenturyLink explained its communication and answered questions raised by participants. The Hearing Commissioner recommends that CenturyLink

continue this dialogue 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 communications pathways.

## II. ORDER

### A. The Commission Orders That:

1. No later than July 31, 2014, Qwest Corporation, doing business as CenturyLink QC (CenturyLink) shall file in this proceeding schematics and documentation identifying the physically redundant 9-1-1 connections for Estes Park and Allenspark wire centers. In addition, CenturyLink shall include the current status of the build-out and the expected completion date.

2. On September 1st and March 1st of each year until otherwise ordered, CenturyLink shall file updates as discussed above to the three-year 9-1-1 geographic diversity build-out plan and updates to confidential attachments 1-1, 2-1, 3-1, 3-2, and 5-7.

3. Commission Staff is directed to lead a subcommittee of the 9-1-1 Task Force in the development of an updated contingency plan and requirements.

4. No later than June 30, 2014, Commission Staff is directed to propose a 9-1-1 rulemaking, as discussed above.

5. This Recommended Decision shall 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.

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

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

b) 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.

7. If exceptions to this Decision are filed, they shall 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

PAMELA J. PATTON

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Hearing Commissioner

ATTEST: A TRUE COPY

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

Doug Dean,  
Director