COUNTY ADMINISTRATOR'S OFFICE

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C.H. HUCKELBERRY
County Administrator

July 23, 2019

Arizona Corporation Commission
Utilities Division
1200 W. Washington Street
Phoenix, Arizona 85007

Re: **Docket #T-01051B-19-0001**

Dear Chairman Burns and Commissioners:

As you know, Pima County and other Public Safety agencies suffered a failure of the CenturyLink provided Next Generation 9-11 Emergency Communication System. This failure occurred despite CenturyLink assurances and advertising that the 9-11 emergency network as being 99.999 percent available and there would be no more than five minutes of downtime. We find it unfathomable that both their primary and backup systems failed.

The State of Arizona entered into a contract with CenturyLink for emergency management 9-11 services and equipment and with the State of Arizona Cooperative Procurement Agreement, Pima County was encouraged to purchase this system and upgrades. After funding was paid by the State, Pima County was still responsible for $895,000 of cost and now pays $15,000 per month service charges. We find it unbelievable that in our contract, Subsection 7.1, Limitations of Liability, Page 3, it states, *"CenturyLink's liability for any loss or damage arising from errors in eruptions, defects, failures, malfunctions of this service or any part thereof caused by the negligence of CenturyLink will not exceed the greater of $50.00 or an amount equivalent to the pro rata charges for the service affected during the period of time that the service was fully or partially inoperative."* This contract language is totally unacceptable and we request the Commission open and conduct full hearings regarding this system failure of our emergency communication system contracted through CenturyLink at the encouragement the State of Arizona.

To date, we find CenturyLink's response unacceptable and grossly incomplete. More important is the fact that CenturyLink failed to take responsibility or inform the public of their

system failure through either a press release or public statement. As a result, Pima County Public Safety agencies absorbed the public scrutiny for this failure, which could lead to a breech in public trust when there was no fault on the part of Pima County Public Safety agencies.

While the letter from CenturyLink has no clear answer why this incident occurred, let alone a plan to prevent it from happening in the future. It is clear that public trust in the reliability of their vendor provided system is in doubt; and requires a thorough and complete factual examination, as well as an independent third-party verification of the cause; and in addition, certification by an independent third-party expert that there will not be any reoccurrence of either the primary or backup 9-11 emergency communication system in the future.

I would encourage the Commission to hold open public discussions regarding this event, outline solutions to prevent it from occurring again, and to provide third-party independent experts who can provide testimony and assurance that this problem will not occur again.

Sincerely,

C.H. Huckelberry
County Administrator

CHH/lab

Enclosure

c: The Honorable Chairman and Members, Pima County Board of Supervisors
The Honorable Mark Napier, Pima County Sheriff
Michael Ortega, City Manager, City of Tucson
John Voorhees, Assistant County Administrator
Jeff Guthrie, Director, Office of Emergency Management

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July 15, 2019

Via US Mail and Email

Elijah O. Abinah, Director
Utilities Division
Arizona Corporation Commission
EAbinah@azcc.gov
1200 West Washington Street
Phoenix, Arizona 85007

Re: Docket No. T-01051B-19-0001
Provided Pursuant to Protective Agreement

Dear Mr. Abinah:

This letter further responds to your correspondence dated July 10, 2019 regarding a 9-1-1 outage affecting Pima County on July 9, 2019, which we reported to the Commission on July 9, 2019 and includes additional details.

1) What was the initial cause of the outage?

CenturyLink currently understands from one of its vendors that a software process failure in one of the vendor-provided systems that support the Next Generation (NG) 911 solution we provide in Arizona may have created instability for the impacted Pima County PSAPs which led to the event. CenturyLink has partnered with the vendor to conduct twice-daily technical reviews in response to this incident.

July 15, 2019 Update: CenturyLink has received confirmation from one of its vendors that a software process failure in one of the vendor-provided systems that supports the Next Generation (NG) 911 solution we provide in Arizona created instability for the impacted Pima County PSAPs which led to the event. To be more specific, on 7/9/19 at 2:55 a.m. PST, CenturyLink's Hosted Customer Premise Equipment (CPE) Vendor (CPE Vendor) experienced a network issue on its CPE switch. This caused a software processing error which caused the CPE Vendor's servers to fail. Some servers were able to recover immediately and complete calls as expected; however, due to the software processing error, one server was unable to

automatically recover. This prevented five PSAPs, listed below in response to Question 3, from receiving 911 calls. Other PSAPs could receive 911 calls but could not transfer those calls.

2) How were communication paths between all parties affected.

CenturyLink continues to investigate how communication paths between all parties were affected and will provide additional detail as soon as we can.

July 15, 2019 Update: The CPE Vendor server was unable to resynchronize after a network event in their switch. The CPE Vendor servers dip into their database to set up/route new calls. Calls that were in progress or already set up were able to complete. Blocked calls occurred on attempted new call set-ups. Where PSAPs could receive 911 calls but not transfer them, the software did not identify calls as being ESInet-originated calls, which prevented them from being transferred.

3) Is CenturyLink aware of any failed 9-1-1/E911 calls? If so, provide details.

CenturyLink understands that five Public Safety Answering Points (PSAPs) experienced blocked calls: Pima County Sheriff - Ajo, University Of Arizona Police Department, Pima County Sheriff Department, Tucson Police Dept, and Tucson Fire Department. CenturyLink provided the available blocked call data to the impacted PSAPs so that they could ensure the safety of the callers involved, and will continue working with our vendors to do the analysis necessary to provide reliable details regarding failed 9-1-1 calls. We will update you with the results of our analysis as soon as we can.

4) Please explain the one hour and 37 minute time frame required to reboot.

During the event, CenturyLink and our vendors initially focused on troubleshooting the network to identify the issue. As we worked with our vendor through the troubleshooting process, a software process issue was identified and a server reboot sequence was initiated to ultimately clear the issue. CenturyLink's investigation is ongoing, and we will provide additional details after it is complete.

5) Are reboots done automatically or are they switched manually?

In this case, the server was manually rebooted.

6) When the services were rebooted how did CenturyLink test the restored 9-1-1/E911 lines to verify all paths were operational?

CenturyLink was actively engaged with the impacted PSAPs during the event and completed test calls with them to ensure services were restored.

7) What is the Company's plan to prevent and mitigate recurrence of this type of outage?

As noted above, CenturyLink's investigation is on-going. We will provide additional details about preventing and mitigating future reoccurrence of this type of event after the investigation is complete.

July 15, 2019 Update: Enhancements to the CPE Vendor 9-1-1 software are being evaluated by the vendor to improve the system's ability to successfully resynchronize following a network degradation. The CPE Vendor is also investigating enhancements to the software (1) to provide access to routing information while the server is in an unsynchronized state, and (2) to address the call transfer issue. CenturyLink and the CPE Vendor have also developed a remediation plan to more quickly detect and respond to a similar situation, including prioritizing rebooting the server.

Please let me know if you have any additional questions with respect to this matter.

Sincerely,

Tim Goodwin
Associate General Counsel

cc: Maureen Scott
Michael DiMaria
Tim Berg/Lauren Ferrigni