

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Nebraska) Application No.C-4317/PI-175
Public Service Commission, on)
its own motion, to investigate a)
network service outage in) FINDINGS AND CONCLUSIONS
CenturyLink's service area and)
to resolve any remaining network)
reliability issues.) Entered: February 23, 2011

BY THE COMMISSION:

On June 28, 2010, a number of subscribers experienced an interruption of telecommunications services in the communities of Morrill, Mitchell, Scottsbluff, Gering, Minatare, Bayard, Kimball, Potter, Chappell, Lewellen, Oshkosh and Broadwater due to a card failure in a CenturyLink fiber terminal coupled with damage to fiber cable east of Bayard. These two unrelated events caused some service disruptions to CenturyLink subscribers, as well as subscribers of other wireless and wireline networks employing CenturyLink's facilities in their own networks serving the area.

The initial service outage report was provided to the Commission by telephone on June 28, 2010, more than two hours after the outage was identified and the report did not contain all the required information. CenturyLink electronically provided a further report to the Commission on Wednesday, June 30, 2011, approximately fifty-two (52) hours after the company discovered the interruption. CenturyLink reported the outage interrupted toll service to the entire CenturyLink service area in addition to limiting other telecommunications service from Baird and Broadwater including impacting 911 service.

On September 17, 2010, eighty-one (81) days after the outage, CenturyLink filed their final written outage report with the Commission describing the corrective action taken and reporting approximately 21,000 lines were toll isolated and were without broadband services. Based on the information provided to the Commission, we opened this investigation to gather additional information about this service outage and the affect it had on consumers and other carriers. A public hearing on this matter for hearing was held on January 20, 2011, in Scottsbluff, Nebraska, with a video connection to Lincoln, Nebraska. Commissioner Vap of the 5th District was appointed as the Hearing Officer and presided over the hearing at the Scottsbluff site.

CenturyLink presented two witnesses, Ms. Edie Ortega and Mr. Stan Waterman, which testified about the service disruption. Ms. Ortega acknowledged that the company did not transmit a verbal or written report to the Commission within the two hour timeframe required by the Commission. CenturyLink placed a call to the Commission later on the day of the outage on June 28, 2010. Approximately one month later, CenturyLink filed its first written report related to the service outage. The Commission staff indicated that more information was required. Accordingly, CenturyLink filed a supplemental report in September.

In response to questions from the Commission, Ms. Ortega testified that approximately 21,000 customers were impacted by the outage in a variety of ways. Ms. Ortega testified that they put some notification processes in place as a result of this outage. CenturyLink identified back-up people to make those notifications in the event that a customer-affecting service outage occurs again. Ms. Ortega testified that CenturyLink has a disaster recovery plan in place that identifies emergency service providers and key customers. Ms. Ortega added that this was one of the system failures they identified internally. In the future those individuals will be more promptly notified.

Mr. Waterman is the Supervisor Network Manager for CenturyLink in the Scottsbluff area. Mr. Waterman explained the events precipitating the service outage which occurred on June 28, 2010. Specifically, he testified that on June 26, 2010, CenturyLink experienced an alarm ticket and determined that the card in its private terminal was defective. But there were no service outages at that time because of the network redundancy. They couldn't immediately locate a replacement card. Subsequently, they found two spare cards located in the Scottsbluff location which they transported to Kimball, Nebraska. In addition, seven miles east of Bayard, because they had a large amount of moisture in the spring and summer, flash flooding caused a cable to be exposed and subsequently damaged due to a cave-in of large amounts of dirt, rock and concrete on the fiber. They experienced sporadic service after the replacement of the second card and after troubleshooting determined that they needed to bring another card to Kimball. Once that was replaced around 4:15 p.m. on June 28, 2010, the service was restored.

Mr. Waterman testified that CenturyLink has labeled all its cabinets so that each one of its technicians can more easily locate spare parts and equipment in the future.

Mr. Ray Richards, is the Communications Center Director responsible for the county 911 PSAP that is located in Gering. On the morning of June 28, 2010, around 9:00 a.m. the dispatchers on the floor advised Mr. Richards that they were having some problems with the phone systems. They have 16 lines that come into the communications center for administrative services and six lines that come in through the 911 system which is the operating system. This center dispatches for nine law enforcement and 12 fire departments. In all, the PSAP serves 52 agencies. They lost contact with Lincoln, Nebraska, for its NCIC services. They lost contact with the State Patrol. They were pretty much isolated for a period of time. Subsequently, they were able to contact a CenturyLink engineer in Las Vegas, Nevada. They didn't have contact with CenturyLink until a few weeks later when they had a meeting with the local representative. They were able to assess the system and discuss how communications could be improved so that they wouldn't happen this way again.

Mr. Mark Payne, a representative of Platte Valley Companies, testified on the impact of the outage on the banking and financial institutions his company operates throughout western Nebraska and eastern Wyoming. With the CenturyLink outage, the company lost all data circuits from CenturyLink to interlink all of their companies to their primary location in Scottsbluff. They were required to run shuttles to every location and shuttle workers into process data. It cost the Platte Valley companies a lot of time, personnel and expenses. The outage brought all of the debit card transactions off-line so that customers could not make electronic purchases or withdraw funds. The company's insurance and mortgage entities were also off-line. Overall, he testified, the outage disrupted commerce and created a hardship for local businesses.

Mr. Payne testified that they tried to contact CenturyLink. They were told there was an outage but were given no answers as to how long the outage would be and what was impacted.

Mr. Randy Meininger, the Mayor of Scottsbluff and an ambulance service operator, testified about the impact of the outage on emergency services. He testified that the 911 system was not functioning. They were required to go to the nursing home and set up radio communications with portable radio units. It was very difficult to get information pertaining to the outage. He estimated that approximately 40,000 consumers were affected by the outage.

Ms. Lisa Bewley testified on behalf of Regional Health Services. She was employed as the Vice President of Information

Technology at the hospital and the clinic. These entities experienced significant delays because of the service outage. They lost landline telephone communication and most of their cellular telephone usage. They did have twenty-three (23) cellular telephones from Viaero which they were able to use. They also lost phone, internet service to their critical access hospitals and the ability to track flights for their air-link helicopter. Because of the loss of internet, they were unable to transmit radiology images to their out-sourced radiology service provider in Denver. Their internal paging system was down which drastically delayed communications to physicians and patients. They lost the ability to use several web-based applications. Ms. Bewley testified that they would like to see more redundancy in these systems. She stated that the longer the failures, the more critical it becomes to the hospital.

Mr. Matt Larsen, a representative of Vistabeam, testified that their wireless internet service and telephone service was not affected by the CenturyLink outage. He stated that Vistabeam does not use CenturyLink for any connectivity to the internet.

O P I N I O N A N D F I N D I N G S

Communications services are essential to the operation of business and government economies as well as daily consumer needs. Reliable and secure telecommunications infrastructure is also vital in times of emergencies, protecting safety of life and property, and when natural disasters occur. The responsibilities of the Commission are provided in the Nebraska Telecommunications Regulation Act. Neb. Rev. Stat. § 86-128 (Reissue 2008) provides that the Commission must "preserve the integrity of a ubiquitous network . . . preserve and advance universal service . . . and ensure the delivery of essential and emergency telecommunications service."

While the Commission's quality of service jurisdiction extends mainly to the wireline voice communications services,¹ it is clear that other communications networks and modalities rely heavily on the wireline infrastructure of incumbent carriers in order to operate effectively and ubiquitously. The service outage which occurred in Morrill, Mitchell, Scottsbluff, Gering, Minatare, Bayard, Kimball, Potter, Chappell, Lewellen, Oshkosh and Broadwater on June 28, 2010, provides a stark example of how dependent we are on reliable telecommunications infrastructure.

On May 12, 2010, in response to a network outage in Windstream's service territory, the Commission opened a separate

¹ There are some exceptions where wireless carriers have applied for and received designation as eligible telecommunications carriers (ETCs) in Nebraska for the purpose of receiving universal service fund support.

investigation to study wireline vulnerabilities on a statewide basis.² That proceeding will take a holistic view with regard to industry best practices. We will continue to collect information from telecommunications providers and make modifications of general applicability. In this proceeding, the Commission's intent was to collect information from affected consumers, businesses, emergency management personnel and other carriers relative to this particular outage and determine what, if any, corrective action CenturyLink should make.

Building upon the testimony received at the January 20, 2010, public hearing the Commission finds it appropriate to obtain from CenturyLink the following information:

- 1) A written report detailing all corrective actions taken to prevent or lessen the impact of similar network disruptions in the future
- 2) A notification plan which describes the processes in place for notifying affected emergency and critical government personnel. The plan should describe its plan to notify PSAPs, local authorities and first responders in the event of a service outage. The plan should also describe its plan to timely notify the Commission and other governmental agencies in the event of a service outage;
- 3) A notification plan which describes which media outlets including radio stations will be notified when there is an outage which affects a community or significant portion of one or more of its exchanges;

The information described above is due no later than thirty (30) days from the entry date of this Order. The Commission will analyze the information provided and will schedule a conference with CenturyLink representatives to discuss the details of information provided.

This investigation will remain open until the Commission completes its review of the June 28, 2010, outage and the remedial actions taken by CenturyLink.

² See Docket C-4272/PI-169 *In the Matter of the Nebraska Public Service Commission, on its own motion, to investigate practices related to network reliability and requirements governing notification for service interruptions*, ORDER OPENING DOCKET (May 12, 2010).

O R D E R

IT IS THEREFORE ORDERED by the Nebraska Public Service Commission that the findings made herein be, and they are hereby, adopted.

MADE AND ENTERED at Lincoln, Nebraska, this 23rd day of February, 2011.

NEBRASKA PUBLIC SERVICE COMMISSION

COMMISSIONERS CONCURRING:

Chairman

ATTEST:

Executive Director

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- 3) A notification plan which describes which media outlets including radio stations will be notified when there is an outage which affects a community or significant portion of one or more of its exchanges;

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NEBRASKA PUBLIC SERVICE COMMISSION

COMMISSIONERS CONCURRING:

Anne Boyle
Gould & Vap

//s// Tim Schram

Tim Schram

Chairman

ATTEST:

Shirley J. [Signature]

Executive Director