

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

Docket UT-181051

Washington Utilities & Transportation Commission v. CenturyLink Communications, LLC

**RESPONSE OF PUBLIC COUNSEL TO CENTURYLINK
DATA REQUEST NO. 17**

Request No: 17
Directed to: Public Counsel
Date Received: February 18, 2022
Date Produced: March 7, 2022
Prepared by: Brian Rosen
Witnesses: Brian Rosen

DATA REQUEST NO. 17.

In response to CTL-13, you state that Mr. Rosen “is aware of several examples of failures like the one in question that have taken out an entire network for one carrier, and this is not the only event where all instances of a switch or other component failed due to configuration or software errors.” Identify by (a) date, (b) carrier, (c) location, and (d) description, each of the “several examples” of which Mr. Rosen is aware that form the basis of your response.

RESPONSE:

Brian Rosen has identified the following examples of failures similar to the CenturyLink outage at issue in this case:

1. AT&T outage
Date: April 13, 1998
Location: Nationwide
Description: The company reported that one of its switches was not able to upgrade software and sent error messages that overloaded other network switched. See LA Times article attached as Attachment A.
2. MCI Worldcom network outage
Date: August 10–20, 1999.
Location: Primarily East Coast US
Description: In this incident, there were 10 days of intermittent failures that affected 15 percent of MCI’s network and 30 percent of its customers due to problems with its frame relay network. The company upgraded software for frame relay switches made by Lucent Technologies. See New York Times article attached as Attachment B.
3. Fastly outage
Date: June 8, 2021
Location: Global

To: Adam Sherr, CenturyLink Communications, LLC
Re: Docket UT-181051
Public Counsel Response to CenturyLink DR 17
March 7, 2022

Description: This outage was caused by a software bug triggered by a valid customer configuration change. The outage was broad and severe and caused 85 percent of Fastly's network to return errors.

4. Softbank LTE (4G) outage

Date: December 6, 2018

Location: Japan

Description: This outage affected mobile phone services for SoftBank, Y!mobile, fixed line services called "Ouchi-no-Denwa", and a part of SoftBank Air. Services were not available from 1:39 p.m. to 6:04 p.m. (JST) on December 6, 2018, due to a network outage caused by Ericsson-made software errors related to its packet switches. The SoftBank Network Center detected the software malfunction in all of the packet switching machines manufactured by Ericson installed at the Tokyo Center and Osaka Center, covering its mobile customers nationwide.

After the incident, SoftBank received a report from Ericsson that the software has been in operation for nine months and the failure caused by the same software also occurred simultaneously in other telecom carriers across 11 countries, which installed the same Ericsson-made devices. The network returned to normal operation by adapting the older version of the software to all packet switching machines. See TechCrunch article attached as Attachment C.